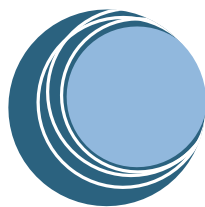# 2018–2019 CATALOG

CENTRAL OREGON
community college

2018–2019 ACADEMIC CALENDAR

	Fall term 2018	Winter term 2019	Spring term 2019	Summer term 2019
First day of classes	September 24	January 7	April 1	June 24
Tuition deadline and end 100% refund period*	October 5*	January 18*	April 12*	July 5*
Begin late registration ($30 fee)	October 8	January 22	April 15	July 8
Last day to change from audit or drop classes with no grade on transcript	November 9	February 22	May 17	August 9
Last day to drop classes, receive a "W" grade*	December 5	March 13	June 5	August 21
Holidays	November 12 Veterans Day (COCC closed) November 22-23 Thanksgiving (COCC closed) Dec. 24-28 Winter Break (COCC closed) Jan. 1 New Year's Day (COCC closed)	January 21 Martin Luther King Day (COCC closed)	May 27 Memorial Day (COCC closed)	July 4 Independence Day (COCC closed)
Final exams	December 10–14	March 18–22	June 10–14	Varies
Commencement			June 15	
Last day of term	December 16	March 24	June 16	September 1
Grades posted online	December 20	March 28	June 20	September 5

*These dates apply to full-term courses; proportional (or earlier) deadlines apply to part-term courses.

CAMPUSES

Bend Campus

541.383.7700
2600 NW College Way
Bend, Oregon 97703

Redmond Campus

541.504.2900
2030 SE College Loop
Redmond, Oregon 97756

Madras Campus

541.550.4100
1170 E Ashwood Road
Madras, Oregon 97741

Crook County Open Campus

541.447.9233
510 SE Lynn Blvd
Prineville, Oregon 97754

College Switchboard

541.383.7700

Website

cocc.edu

Email

welcome@cocc.edu

CATALOG PRODUCTION

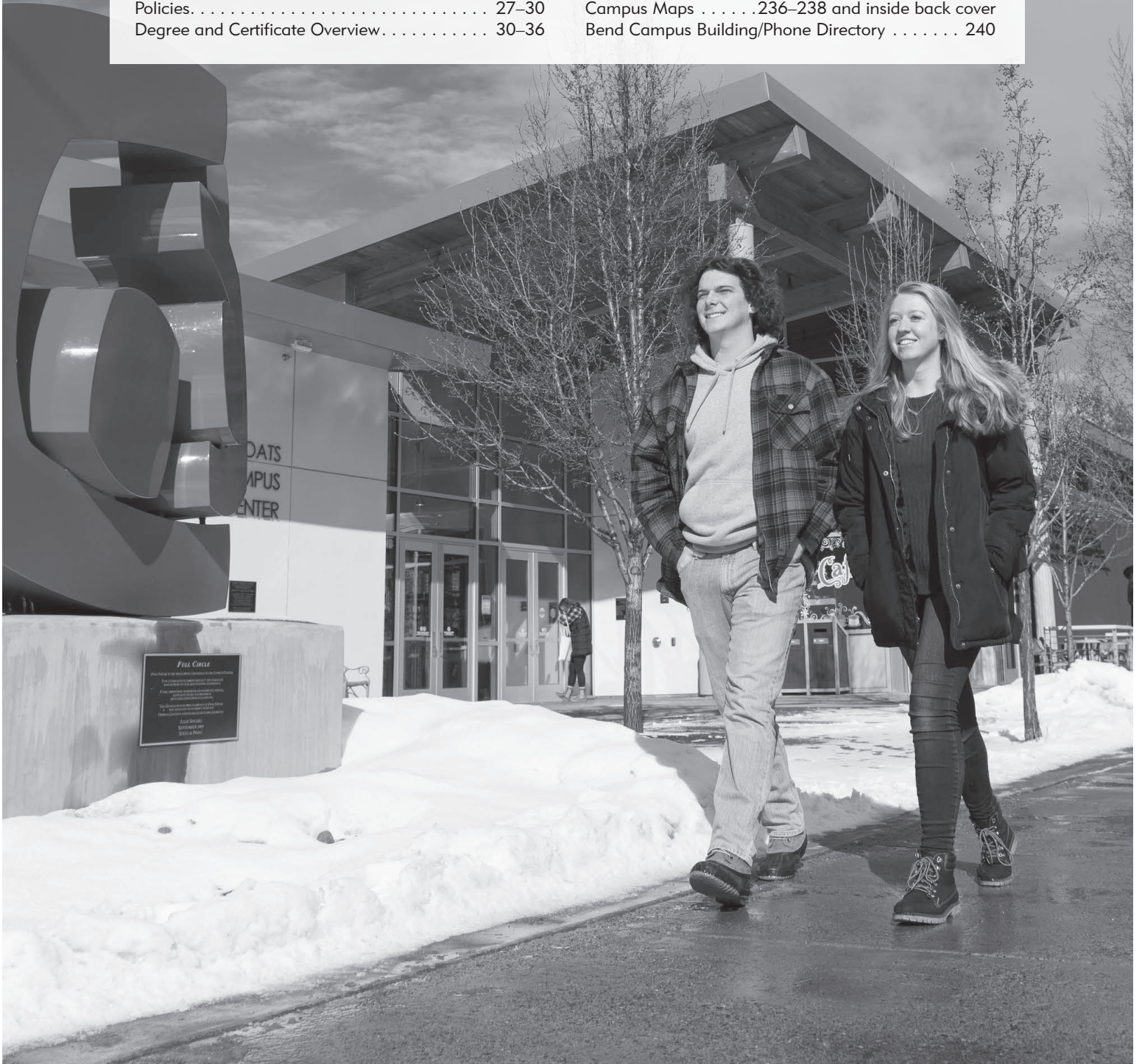### Coordinators

Vickery Viles
Erika Carman

Designer

Lora Szaraniec

CENTRAL OREGON COMMUNITY COLLEGE
2018–2019 Catalog

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ABOUT COCC

For nearly 70 years, Central Oregon Community College has served students from within the District, elsewhere in Oregon and throughout the United States, along with citizens of the COCC District, by offering a wide range of learning opportunities.

One of the principal attributes of COCC is its emphasis on quality instruction. This is complemented by small classes and the opportunity for all students to enjoy close, caring relationships with the College's faculty and staff.

HISTORY

Central Oregon Community College was founded in 1949 as part of the Bend School District. It is the longest standing community college in Oregon. The College District was formed in 1959 and officially established as the Central Oregon Area Education District by a vote of residents in 1962. The original Bend campus opened more than 50 years ago, in 1964.

Donald P. Pence served first as director of the College (from 1950 to 1957) and then as the first president (from 1957 to 1967). Dr. Frederick H. Boyle was president from 1967 through 1990. Dr. Robert L. Barber was the third president in the College's history and served through 2004. Dr. James E. Middleton served for 10 years, from 2004 to 2014. Dr. Shirley Metcalf, appointed first as interim president in 2014 and then into the permanent role in 2015, is the College's fifth president.

OUR DISTRICT

The Central Oregon Community College District encompasses all of Crook, Deschutes and Jefferson counties, as well as the southern part of Wasco and northern portions of Klamath and Lake counties. A seven-member board of directors governs the College, with members of that board elected from geographic zones in the District. The District covers a 10,000-square-mile area, making it larger than eight of the U.S. states.

OUR CAMPUSES

The College's main campus is located on the western edge of Bend, a city known for its natural beauty and proximity to diverse recreational opportunities. The 200-acre Bend campus offers quiet, peaceful surroundings for study and reflection. With its location on the western slope of Awbrey Butte, students have a spectacular view of the Oregon Cascade mountain range from nearly every point on the grounds. The campus contains 26 buildings with a total of 575,000 square feet. The newest building is the 330-bed Wickiup Residence Hall, which opened in September 2015.

On the 25-acre Redmond Campus, there are four buildings, housing administration, classrooms and a computer lab. The new Redmond Technology Education Center opened in Fall 2014, housing state-of-the-art facilities and programs.

In 2011, COCC opened new campuses in Madras and Prineville. The Madras Campus was funded by the 2009 bond measure and placed on land donated to COCC by the local Bean Foundation. The COCC Crook County Open Campus was funded jointly by the bond measure and a grant to Crook County from the U.S. Department of Commerce Broadband Technology Opportunity Program, and is on land donated by the County.

All campuses offer credit and non-credit courses and the necessary student services to help assure student success.

BOARD VISION AND GOALS

Mission Statement
Central Oregon Community College promotes student success and community enrichment by providing quality, accessible, lifelong educational opportunities.

Vision Statement
To achieve student success and community enrichment, COCC fosters student completion of academic goals, prepares students for employment, assists regional employers and promotes equitable achievement for the diverse students and communities we serve.

CORE THEMES

The Board has adopted five core themes that manifest the essential elements of COCC's mission. The core themes are:

Institutional Sustainability
Students will have the opportunity to be successful because the College has planned and invested appropriately to ensure sustainability of high quality programs, services and facilities that support student learning and educational achievement.

Transfer and Articulation
Students will have the academic achievement and skills necessary to transfer and articulate successfully to institutions of higher learning beyond the community college level.

Workforce Development
Students of Career and Technical Education (CTE) programs will be prepared for employment and advanced education through the acquisition of knowledge and skills necessary to meet current industry needs.

Basic Skills
Students will have academic achievements and basic learning skills necessary to participate effectively as engaged community and family members, and employees, and to succeed at the college level.

Lifelong Learning
Participants in lifelong learning will have access to learning opportunities in the areas of Enrichment, Professional Development, Technology and Wellness.

ACCREDITATION

Central Oregon Community College is accredited by the Northwest Commission on Colleges and Universities.

Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

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

Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

> Northwest Commission on Colleges and Universities
> 8060 165th Avenue N.E., Suite 100
> Redmond, WA 98052
> 425.558.4224
> nwccu.org

Accreditation was most recently reaffirmed in 2012. A copy of COCC's official accreditation documentation is on reserve and available for review in the Barber Library during regular library hours. Questions regarding accreditation should be addressed to the vice president for instruction.

OUR FACULTY

COCC has 130 full-time faculty members, 50 adjunct faculty (semi-permanent faculty on annual contracts) and approximately 150 part-time instructors per term. The College's faculty is a committed, professional group of educators, which provides stimulating and meaningful learning experiences for the College's students. Faculty members serve as advisors to individual students, assisting them in planning academic programs and schedules. All COCC faculty are required to have at least a master's degree or equivalent training. Within the institution, there is strong motivation for continuing professional improvement by all faculty and administrators. About 40 percent of the faculty have doctorates in their disciplines, which is a very high percentage for a community college.

OUR STUDENTS

Nearly 9,500 students enrolled in credit classes at COCC last year. Each quarter, approximately 2,000 full-time and 4,000 part-time students are enrolled. While more than half of the students are under the age of 24, another quarter are 35 and older. About 30 percent of the students enroll in career and technical education programs and take career-oriented courses of study. The remainder enroll in courses that form the freshman and sophomore years of a four-year college program. Students in such a program usually intend to transfer to another college or university for their junior and senior years.

THE COCC FOUNDATION

Education changes lives. For more than 60 years, Central Oregon Community College Foundation scholarships have enabled students to learn new skills, earn technical certificates, complete two-year associate's degrees and be prepared to pursue the remainder of their undergraduate studies at a college or university. Students can apply for an annual scholarship for the next academic year from December 15 – July 15.

The COCC Foundation is the oldest community college foundation in Oregon. Its assets have grown significantly over the years, from the first gift of $500 in 1955 to nearly $22 million today. In addition to scholarship support, the COCC Foundation also provides support in a variety of ways, from supporting departmental programs to providing support for the Nancy R. Chandler Visiting Scholar Program. For 2016-2017, the COCC Foundation offered more than 400 scholarships totaling $1.5 million. For more information, call 541.383.7225, or visit cocc.edu/foundation.

LEARNING OPTIONS

COCC offers credit transfer/lower division programs, career and technical education degrees and certificates as well as developmental courses. In addition, COCC offers Continuing Education options and Adult Basic Skills. Students also have the option of benefiting from our dual admissions program with Oregon State University – Cascades.

CREDIT OPTIONS: TRANSFER, CAREER AND TECHNICAL EDUCATION, AND INDIVIDUALIZED STUDY

Transfer
COCC offers several options to support students who intend to transfer their credits to earn a bachelor's degree at another college or university. The Associate of Arts Oregon Transfer (AAOT) provides students with several assurances when transferred to any Oregon public university. The Associate of Science (AS) degree prepares students to transfer either to a specific baccalaureate-granting college, to a specific major, or both. The Oregon Transfer Module (OTM), while not a full certificate or degree, is designed to transfer to Oregon community colleges and public universities; all credits will be applied toward general education requirements.

Career and Technical Education
The Associate of Applied Science degree, certificates of completion and short-term certificates of completion are designed to prepare students with technical skills so they can enter the workforce after graduation.

Individualized Study
COCC provides the Associate of General Studies for students who are not pursuing a specific transfer or career and technical program but wish to design a course of study to meet their individual needs.

CONTINUING EDUCATION

COCC's Continuing Education department offers innovative, high-quality, community-driven, affordable noncredit classes and events to adults throughout the District. Classes provide opportunities to stay current with job skills, engage in new interests and explore a range of activities.

Continuing Education classes are easy to access. There are no applications, no transcripts and no special qualifications to register. Students sign up and pay the class fee to enroll. For additional information visit cocc.edu/continuinged or call 541.383.7270.

PERSONAL ENRICHMENT
Enrichment courses encourage students to explore personal interests and learn new skills. Take classes for fun, business, health, recreation or personal growth—the choice is yours. Class schedules are mailed quarterly to households throughout the district. A complete up-to-date schedule and registration option is available online at cocc.edu/continuinged.

PROFESSIONAL DEVELOPMENT
A variety of high-quality professional education courses are available for those who want to stay competitive in their careers, study for industry certifications, meet continuing education requirements, or pursue entry-level career training. Professional development opportunities include accounting/bookkeeping, technology, project management, health care and wellness, landscaping, leadership and management. COCC can customize training so employees gain the specific knowledge they need to perform their job duties and contribute to a more productive and profitable business. Visit "Professional Development" at cocc.edu/continuinged for more information.

SMALL BUSINESS DEVELOPMENT CENTER
The Small Business Development Center (SBDC) at Central Oregon Community College is focused on helping build Oregon's best businesses. They offer no-cost one-to-one advising, business planning, educational workshops, market research and assistance in accessing capital for businesses. Seven experienced staff advisors are available to meet with businesses by appointment throughout the tri-county region. In addition, the SBDC offers:
- Business Start Up and Launch workshops
- Practical workshops on business planning and growth
- Small Business Management program
- Grow Oregon advising/services for larger traded-sector companies
- Capital access assistance
- Strategic market research
- International trade assistance
- Government contracting assistance
- Discounted programs for veterans

The goal of the SBDC at COCC is to have a positive impact on the growth and sustainability of Central Oregon businesses. For more information on these services and others, contact the SBDC at 541.383.7290, sbdc@cocc.edu or go to cocc.edu/sbdc.

YOUTH PROGRAMS AND YOUTHCAMP@COCC
COCC's Continuing Education department offers a number of classes and camps for youth under the age of 16. YouthCamp@COCC is the most recognized program offered with more than 30 camps per summer. Each of the four campuses hosts at least one camp for youth ages 10-14. In addition, classes are offered throughout the year for youth, or for youth and parents or guardians to enjoy together. With an eye toward the future, youth can explore potential career and college options by attending classes and camps on the COCC campuses.

Registration
Registration information is provided on the Continuing Education website at cocc.edu/continuinged and in the Continuing Education class schedule, which is published each term. Registrations are processed as received. Students may register by phone, mail, fax, online or in person.

Fees
Full payment of fees is required at the time of registration. Students may pay with Visa, MasterCard, Discover, check or cash.

Age Requirements
Anyone age 16 or older may attend Continuing Education classes or workshops. Youth under age 16 may attend classes and camps in the Youth Program as indicated in each course description.

BASIC SKILLS

ADULT BASIC SKILLS (ABS)
The Adult Basic Skills department is comprised of two programs, English Language Learning (ELL) and Adult Basic and Adult Secondary Education (ABE/ASE). The goal of these programs is that students will have academic achievements and basic skills necessary to participate effectively as engaged community, family members and employees, and to succeed in college.

The English Language Learning (ELL) program is designed for adults who need to learn the English language. Classes focus on speaking, understanding, reading and writing skill development.

The Adult Basic Education/Adult Secondary Education (ABE/ASE) program provides instruction in basic reading, writing, math, study skills and basic computer skills to prepare students for a variety of purposes including college and GED Exam preparation and employment. Classes include Basic Reading and Writing and Basic Math.

Students may attend day or evening sessions, depending on the location. Required orientation and registration sessions are held during the first week of each term. Call the ABS office at 541.504.2950 or see the website at cocc.edu/departments/adult-basic-skills for exact times and locations.

ELL classes are offered in Bend, Redmond and Madras. Basic Reading and Writing and Basic Math classes are offered in Bend, Redmond, Prineville, Madras and Warm Springs.

PRE-COLLEGE LEVEL CREDIT CLASSES
Credit Options
Several academic departments offer courses that prepare students for college-level courses that may count toward degree completion and may be transferrable to other institutions. These classes are frequently available online or in classrooms on the Bend, Madras, Prineville and Redmond campuses.

Check the current credit class schedule for convenient times and locations.

Credit Classes by Subject

CIS 010	Keyboarding
CIS 070	Introduction to Computers: Windows
MTH 010	Developmental Mathematics
MTH 020	Pre-Algebra
MTH 029	Fraction Review Workshop
MTH 058	Math Literacy I
MTH 060	Algebra I
MTH 065	Algebra II
MTH 095	Intermediate Algebra
MTH 098	Math Literacy II
WR 060	Rhetoric and Critical Thinking I
WR 065	Rhetoric and Critical Thinking II
WR 095	Basic Writing II

College Level Classes That May Also be of Interest
(these are not Pre-College)

HD 100CS	College Success
HD 100NT	Note Taking
HD 100OL	Exploring Online Learning
HD 100PM	Procrastination & Motivation
HD 100TM	Time Management
HD 100TT	Test Taking
HD 100VC	Values Clarification
HD 101	Study Strategies

PARTNERSHIPS

COCC routinely develops and supports partnerships with local, regional, statewide and industry organizations in order to achieve the College's mission. Several examples of learning options are listed below.

OREGON STATE UNIVERSITY – CASCADES
COCC and Oregon State University – Cascades have a partnership program called dual enrollment, which allows students to be admitted to and take courses from both institutions at the same time. This program provides advantages to students who intend to earn an OSU Cascades degree because they can take COCC courses toward their bachelor's degree at the community college tuition rate, and can start taking upper division OSU courses while finishing lower division requirements at COCC. In addition, COCC has several Associate of Science degrees designed to support a student transferring to OSU programs.

AREA HIGH SCHOOLS
Dual Credit/College Now
This program offers high school students the opportunity to earn college credit for certain courses they complete in their schools. High school courses are aligned with collegiate career and technical education and transfer course curricula and are taught by qualified high school teachers. Courses offered vary by high school and by term; students must be enrolled in their high school but do not have to be admitted to COCC, and must pay a $25/credit fee.

EXPANDED OPTIONS
Expanded options is an Oregon program that allows, under specific circumstances, high school students to enroll in COCC credit courses offered at a COCC campus at no charge to them for tuition, fees, supplies and books. Each high school determines eligibility and participation requirements. Students should consult their high school counselor or ASPIRE coordinator for more information.

ADMISSIONS

Central Oregon Community College is an open-door, equal-access institution. Enrollment Services is located in the Boyle Education Center. Services include admission, registration, student payment, financial aid, veterans' benefits, transcript evaluation, degree/certificate evaluation, student records, grades and transcript requests. Most services are also available at COCC's Redmond, Madras and Prineville Campuses.

COCC students can register for classes online and in person at specific dates during each term. Registration dates and times are available online and will be emailed to current students approximately three weeks prior to the beginning registration date. For a step-by-step guide to registration, see cocc.edu/getting-started.

ADMISSION CRITERIA

New Students
To qualify for admission, students must be 18 years of age or older, or possess a high school diploma or GED. Applications are available on the College website, cocc.edu, or at any campus. All new students (those who have never taken credit courses at COCC) are required to submit a $25 non-refundable application fee at the time of application. Applications will not be processed without this fee.

Students Returning After an Absence
Students who have attended COCC but have been absent for four quarters or more must submit a new application as early as possible in order to receive timely registration information. No application fee is required.

Transfer Students
First time COCC students transferring from another college or university must submit an application for admission and a $25 application fee. In addition, all official transcripts from previous institutions must be submitted prior to advising and/or registration.

Students not Seeking a Certificate or Degree
Many students take college credit courses at COCC, yet are not planning to earn a certificate or degree. Such students apply through the regular application process and are required to take the placement test prior to registration. Some students may be exempt from the placement test; see the College website for exemption criteria. Non-certificate/non-degree-seeking students are not required to participate in advising but are welcome to do so.

APPLICATION DATES

COCC accepts applications on a continuing basis. Prospective students are encouraged to apply early in order to receive early, new-student registration information. For new student advising and registration dates, check the College website, cocc.edu. The application deadline for each COCC term is the Wednesday before the start of courses. COCC reserves the right to close admission prior to the application deadline. Students are strongly encouraged to apply early.

RESIDENCY POLICY

Determination of residency for purposes of tuition will be made according to the following definitions. Students applying to COCC's nursing program must satisfy in-district residency requirements, as outlined in the nursing program application packet, prior to the application deadline.

In-District Residency
An individual who, for one full year prior to beginning taking credit classes has either: a) owned property (or if under the age of 24, whose parent/guardian owns property); or b) maintained a permanent and continuous residence in the district will be classified as an in-district resident. The COCC District consists of all of Deschutes, Crook and Jefferson counties, the northern portions of Klamath and Lake counties, and the Warm Springs Indian Reservation in Jefferson and Wasco counties.

Out-of-District (in-state) Residency
An individual who, for one full year prior to beginning taking credit classes has either: a) owned property (or if under the age of 24, whose parent/guardian owns property); or b) maintained a permanent and continuous residence in the state of Oregon (but outside the COCC District) will be classified as an out-of-district resident. The student will remain an out-of-district student for two calendar years after the term in which the student began courses; at that time, the student will convert to in-district residency.

Out-of-State Residency
(CA, ID, NV, WA residents see exemption below.) An individual who has not maintained a permanent and continuous residence in the state of Oregon during the year prior to the beginning of the first term of enrollment will be classified as an out-of-state resident. The student will remain an out-of-state student for two calendar years after the term in which the student began courses; at that time the student will convert to in-district residency.

Exemption
Per Oregon Administrative Rules, residents of California, Idaho, Nevada and Washington will be charged in-state (out-of-district) tuition.

Verification
Residency of each applicant for college credit courses is determined from information provided at the time of application. When there appears to be an inconsistency, the College staff may require documentation to verify residency.

Transferring to Another Oregon Institution
In-state residency classifications may be different at Oregon community colleges than at Oregon public universities and can affect tuition rates. Students are encouraged to check residency

classifications before beginning their education in Oregon to avoid surprises later.

Military Personnel

Military veterans who have been discharged from service under honorable conditions (and/or their qualifying dependents) will be assessed tuition as follows:

- Students who were in-district residents prior to military service will be charged the in-district tuition rate.
- Students who were in-state/out-of-district/border state residents prior to military service will be charged the non-resident veteran tuition rate.
- Students who were not Oregon residents prior to military service will be charged the non-resident veteran tuition rate. The non-resident veteran tuition rate is calculated as the in-district tuition rate plus 50 percent of the difference between COCC's in-district rate and out-of-district/border state rate.

In order to receive the non-resident veteran tuition rate, a student must submit a certificate of eligibility or DD214 to the COCC Veteran Certifying Official. Per the College's standard residency policy, a non-resident veteran student will be classified as an in-district resident after two years of enrollment.

Native American Students

Students who are enrolled members of federally recognized tribes of Oregon or of a Native American tribe that had traditional and customary tribal boundaries that included part of Oregon or which had ceded or reserved lands within the state of Oregon shall be charged in-state/out-of-district tuition regardless of their state of residence. Residents of the Confederated Tribes of Warm Springs are automatically charged in-district tuition. For a listing of eligible tribes, visit COCC's website at cocc.edu/departments/admissions/tuition-fees-payment/residency-policy. Note that out-of- state students must provide a copy of tribal enrollment documents prior to receiving in-state/out-of-district tuition.

Residency Appeals

Students may appeal their residency status by completing a residency petition, available through the Admissions and Records office. Residency petitions and supporting documentation must be submitted within 30 days of receipt of letter of admission or the Friday prior to the start of the term, whichever is sooner. Petitions received after the deadline will be considered for the following term. Any change in residency status will not be retroactive.

TUITION WAIVER FOR STUDENTS 65 YEARS OF AGE AND OLDER

Students 65 years of age and older are eligible for a tuition waiver for COCC credit classes based on the following conditions:
- The student must be an Oregon resident.
- The student must be 65 years of age or older at the beginning of the term in which the course is offered. COCC's academic calendar can be found at cocc.edu
- A current COCC application, and application fee payment

must be on file. The deadline to submit a new application is Wednesday prior to the start of term.

- The tuition waiver is valid for eight or fewer credits per term.
- The student is auditing the course(s).
- Space is available in the course(s). Student may add courses under this policy only during the first two weeks of the term; instructor permission is required.
- The student is responsible for all fees (application fee, student fees, course fees, etc.).
- No placement test is required for classes taken with the tuition waiver.
- Tuition Waiver forms will not be accepted after the tuition due date of the term.

Students requesting a tuition waiver must complete a Tuition Waiver and Registration Form (available online at cocc.edu or in the Admissions and Records office). At the time the Tuition Waiver and Registration Form is submitted, students must show photo identification that includes date of birth and an Oregon address. All fees must be paid in full by the tuition deadline in order to avoid late payment fees.

HIGH SCHOOL STUDENTS

Students who are still attending high school, but wish to take credit courses at COCC, have these options:

Special Admission/Concurrent Enrollment

High school students 15 years and older are eligible to register in up to 19 credits at COCC. High school students who register at COCC are fully responsible for complying with all the policies and procedures of the College as outlined in the Information for High School Students resource sent to each high school student upon admission. It may also be found online at cocc.edu/departments/admissions/getting-started/high-school. It is important to note that parents cannot access student records (grades, class schedule, attendance, etc.) without written permission from the student. Although members of the College staff can provide academic advising, they cannot interpret high school requirements or act in a supervisory role. The student is responsible for all tuition, fees, books and related expenses.

College Now

COCC works with area high schools to offer students the opportunity to earn college credit for certain career and technical education and general education transfer courses, which they complete at their schools. Courses offered vary by high school and are designed for high school juniors and seniors. The fee is $25 per college credit. General education transfer courses may be used to meet COCC certificate or degree requirements as well as for transfer to most Oregon community colleges and universities. Students should check with all colleges about their policies for transferring college credits earned in high school. For complete details and a listing of courses offered by high schools, contact the appropriate high school counselor, call COCC's College Now office at 541.504.2930, or visit the College Now webpage at cocc.edu/college-now.

Expanded Options

High school students have the opportunity to take credit courses at COCC with no charge to them for tuition, fees, supplies and books (transportation to and from COCC not included). Students interested in the Expanded Options program must submit an Intent to Enroll form to their high school counselor and meet the high school's participation requirements. Check with the high school counselor or ASPIRE coordinator for more information on eligibility requirements.

STUDENTS UNDER AGE 15

Students under the age of 15 must meet with the director of admissions/registrar or designee to assess readiness for college-level work prior to applying for admission. Students must meet minimum placement test scores, provide a statement of support from their school counselor and obtain permission from each instructor every term. If admission is approved, the student must submit a Special Admission form at the time of registration. See cocc.edu/departments/admissions/getting-started/high-school/concurrent-enrollment.aspx for complete details.

Students under age 15 who register at COCC are fully responsible for complying with all policies and procedures of the College. As such, parents cannot access student records (grades, class schedule, attendance, etc.) without written permission from the student. Although College staff members can provide academic advising, they cannot interpret high school requirements or act in a supervisory role.

PAYMENT

TUITION AND FEES

Tuition and fees are due by the second Friday of the term. Payment may be made online with Visa, Discover or MasterCard; or in person with cash, check, Visa, Discover or MasterCard. Students who cannot meet this deadline should apply for a tuition payment plan through Admissions and Records by the tuition deadline. A tuition payment plan does not relieve the student of an obligation to meet registration and/or withdrawal (drop) deadlines for refund purposes.

Payment of the stipulated tuition and fees entitles all registered credit students, full-time or part-time, to all services maintained by the College. These services include use of the Library, Tutoring Center, laboratories and equipment in connection with courses for which the students are registered, access to the student newspaper and admission to special events sponsored by the College. No reduction in tuition and fees is made for students who do not intend to use these services.

The College reserves the right to make changes in tuition and fees without notice; however, any changes made during a term will not become effective until the next term.

TUITION PAYMENT PLAN

A tuition payment plan is available in Admissions and Records at Boyle Education Center, for students registered in six or more credits. To initiate a payment plan, students must complete a contract and pay $30 plus one-third of tuition and fees by the tuition due date. The balance will be due by 5 p.m. on Friday of the seventh week of the term.A $50 late fee is charged for payments made after the deadline.

TUITION FOR CREDIT COURSES
FOR 2018-2019

Courses with unusually high costs may include fees higher than the normal rate.

In-district	$99 per credit hour
Non-resident Veteran	$118.75 per credit hour
Out-of-district/In-state	$138.50 per credit hour
Border state (CA, ID, NV and WA)	$138.50 per credit hour
Out-of-state	$283 per credit hour
International	$283 per credit hour
Audit	same as for credit

(CA, ID, NV and WA residents are charged out-of-district tuition)

Check the COCC credit class schedule for courses that require additional fees. There are program fees in the following areas: automotive, aviation, career planning, culinary, dental assisting, emergency medical services, forestry, health and human performance, health information technology, manufacturing, massage therapy, medical assisting, nursing, outdoor leadership, pharmacy technician, structural fire science, veterinary technician and all online courses.

Full time: For the purposes of financial aid, veterans, social security and other benefit programs, 12 credits is considered full-time.

Fees for Students Enrolled in Credit Courses

Student Activities fee $1.50 per credit
Technology fee $9 per credit
Green Energy fee 25¢ per credit
Online course fee (applies to online courses only) $10 per credit
Science lab fee $12 per course
Optional Mazama Gym user fee $20 per term
Late registration (after the second week of class) $30 per transaction
Late-late registration (after exam rosters are run) $50 per transaction
Late tuition and fee payment—each week after deadline $30
up to three weeks maximum $90

Fees for Other Courses

English Language Learning (ELL) classes $30
Adult Basic Skills classes $30

RETURNED CHECKS

If a payment is made with a check that is returned to the College due to insufficient funds, the student's account will be charged a $20 returned check fee. Additionally, the student will be prohibited from making payments using checks for one year.

COLLECTIONS POLICY

If a student fails to pay his/her tuition, fees, or other charges by the end of the term, the balance due amount may be turned over to the Oregon Department of Revenue (ODR) for collections. At that time, a collections fee will be applied to the student's account and the student may make payment(s) directly to the ODR or to the College. Once payment is received in full, the student will be allowed to register for courses and order official transcripts.

TUITION REFUNDS FOR CREDIT COURSES

To qualify for a refund, the student is responsible for initiating a course drop in Admissions and Records by 5 p.m. on the published deadline; see the inside front cover of this publication for drop deadlines or visit COCC's academic calendar - important dates by term at cocc.edu. Drop deadline dates are also posted on the student's "Student Detail Schedule," which is available by logging into the student's Bobcat Web Account. Any debt owed to the College will be processed against the refund first, with the net balance remitted to the student within a reasonable processing period.

Students may select a refund method via the Bobcat Web Account. Students select direct deposit into an existing bank account, direct deposit to a cashback Discover checking account, or paper check sent through postal mail to the mailing address on file at Central Oregon Community College. If a student does not select a refund method the refund will be processed by paper check.

Short-Term Course Refunds

To receive a tuition refund for courses which span two weeks or less in a term: the class must be dropped before the first day of class in order to be eligible for a 100% refund.

For courses which span more than two weeks but not more than seven weeks in the term: the class must be dropped no later than

three days after the class start date in order to be eligible for a 100% refund. Some specially priced courses do not follow this policy.

To qualify for a refund the student must assure that a drop is processed either by visiting or calling the Enrollment Services office at any campus by the deadline. The drop must be submitted Monday-Friday, excluding holidays. See the short term class refund and drop schedule online at cocc.edu in the academic calendar — important dates by term.

Full-Term Course Refunds

Tuition is refundable up to 5 p.m. on Friday of the second week of the term, (1 p.m. during Summer term). No portion of the tuition and fees is refundable after this date. Students who fail to drop a course by this deadline will be responsible for full payment.

Students with federal financial aid may owe a repayment if they completely withdraw from courses. See the Financial Aid section for details.

Petitions

In cases of exceptional circumstance, students can request an exception to a published academic policy by submitting the Student Petition form. Such policies may include but are not limited to late drop or withdrawal, late add, refund/waiver of tuition/fees after the published deadline, refund/waiver of late payment or late registration fees, changing to or from an audit and course substitution and/or transfer policies. Students must submit the form and include documentary evidence to support the request if applicable. Each case is decided upon its own merits and the decision of the petition committee is final and not subject to appeal, unless there is information pertinent to the outcome which was not submitted at the time of the initial request. Convenience or lack of familiarity with published policy does not constitute sufficient justification for a petition. The Student Petition form, including instructions on how to complete it, is available at any COCC campus or can be found online at cocc.edu. Please call 541.383.7500 for more information.

FINANCIAL AID

Central Oregon Community College makes every effort to ensure that students with financial need have access to its programs and courses of study. Students with general questions may find their answers on the Financial Aid web page at cocc.edu/financial-aid. For more specific questions, contact the Financial Aid office located in the Boyle Education Center. Students are encouraged to submit their Free Application for Federal Student Aid (FAFSA) or Oregon Student Aid Application (ORSAA) as soon after October 1 as possible to be considered for maximum eligibility. Students who are not eligible to complete the FAFSA may apply for the ORSAA. A completed ORSAA is required for the Oregon Opportunity Grant, Oregon Promise Grant and certain OSAC Scholarships. Apply for the ORSAA each year beginning October 1. The federal school code for COCC is 003188.

WHO MAY BE CONSIDERED FOR FINANCIAL AID?

In order to comply with general federal eligibility provisions at COCC, students must:
- be U.S. citizens or eligible non-citizens with appropriate documentation;
- have a high school diploma, a GED certificate or complete a home school program at a secondary level;
- be enrolled as certificate-seeking or degree-seeking students with declared majors at COCC;
- maintain satisfactory academic progress;
- certify that they are not in default on a federal student loan and that they do not owe money on a federal student grant;
- and be registered with the Selective Service, if required.

In order to receive aid from COCC, students must complete the application materials, including the FAFSA or ORSAA each year, be eligible according to applicable criteria and be enrolled in and attend credit classes at COCC.

HOW STUDENT AID IS DISTRIBUTED

On the second Friday of each term, referred to as the "census date," enrollment is frozen and financial aid is applied to the student's account based on enrollment level. Aid is applied first to tuition, fees, authorized bookstore charges and room/board for on-campus students. Any remaining funds are refunded to the student. Work-study earnings are paid each month through the College's normal payroll process.

SATISFACTORY ACADEMIC PROGRESS

Financial Aid Academic Eligibility Standard
To maintain eligibility for financial aid, a student must comply with the following standards. Failure to meet any of the standard requirements may result in denial of federal financial aid at COCC.

Financial aid applicants must have a cumulative GPA of 2.0 and a cumulative completion rate of 66.67 percent of their calculated credits at the end of each term. The term "calculated credits" is defined as credits for which a student has received a financial aid disbursement and/or attempted hours if the student did not receive financial aid. It also includes transfer credit hours that are submitted for evaluation. If a student fails to meet these eligibility standards, an automatic WARNING status (see below) is enforced. Grades of A, B, C, D and P only will be evidence of successful completion of coursework for purposes of calculating institutional percentage completion rates.

Aid eligibility is limited to 150 percent of a student's program credit length (approximately 135 credits for two-year degree and 75 for one-year certificate) even if a certificate/degree is not earned. As soon as it is clear that a student cannot graduate within this period, he/she becomes ineligible for aid. Change of major or program may not be sufficient reason to extend the credit limit. Students pursuing more than one program at COCC will need to submit an appeal and documentation of its necessity if the maximum limit is reached.

Measurement Point/Times Standard Applied
The financial aid academic eligibility standard will be evaluated at the end of each term for financial aid applicants. Eligibility for receipt of financial aid can be denied at any measurement point if the standard is not met.

Good Standing Status
Financial aid applicants who meet a cumulative GPA of 2.0 and a cumulative completion rate of 66.67 percent of their calculated credits at the time of evaluation are considered to be in GOOD STANDING and are otherwise eligible for aid.

Warning Status
When a student in GOOD STANDING fails to meet the eligibility standards for either completion rate and/or GPA, an automatic WARNING status is enforced. If a student in WARNING status fails to meet the cumulative minimum standards for another term, he/she becomes ineligible for aid.

Failed Status
A student in WARNING status who has failed to meet the cumulative minimums at the end of the next evaluation period will not be eligible for aid. This includes grants, work study, loans and institutional awards.

Reinstatement of Aid Eligibility
A student may apply for a redetermination of eligibility through the APPEAL process. A student may submit an appeal for reinstatement on the basis of mitigating circumstances or after successfully rehabilitating the cumulative 2.0 GPA or better and completion rate of 66.67 percent.

Appeal Procedures
Appeals are made through the Financial Aid office, on the official appeal form and will require the following: an explanation and documentation regarding why the student failed to make

Satisfactory Academic Progress (SAP) and a statement and documentation as to what has changed in the student's situation that would allow the student to meet SAP in future terms. Appeals are referred to an Appeal Committee. If an appeal is approved, aid eligibility will be restored beginning with the current term and not retroactively. Students will typically be allowed one appeal after failing SAP requirements but additional appeals may be approved on a case-by-case basis.

Current COCC students will typically be allowed to petition for one program change. If approved, the student will be given 1.5 times the amount of remaining credits to finish the requirements for the new program.

Returning students who are seeking a new certificate or degree or who are continuing work on the original course of study will be reviewed on a case by case basis, with consideration given to prior academic history.

Probation Status

Successful appeals will allow a student to be placed in PROBATION status. Students must meet the conditions outlined in the appeal decision. If a student is unable to meet these conditions, the student will be ineligible for aid until the cumulative GPA is at least 2.0 and the cumulative completion rate is at least 66.67 percent.

Transfer Student Requirements

Coursework taken at another institution will count toward the 150 percent maximum calculated credits as well as the cumulative completion rate. If the limit is exceeded, the student must submit an appeal to determine aid eligibility. GPAs from other schools are not considered in COCC's financial aid satisfactory progress policy. Only credits that apply toward the program will count toward maximum calculated credits in the appeal process.

Consortium Agreements

Students enrolled in more than one institution under consortium agreements are subject to the home institution's SAP and Title IV return policies.

Repeat Coursework

Repeat coursework will be allowed for courses designed to be repeated according to institutional academic policy and procedures. All other course work will be limited to one time payment for retaking previously passed coursework.

Developmental Coursework

Students will be allowed an additional 45 calculated credits of developmental coursework. Developmental coursework is defined as WR, MTH and CIS courses under 100 level. However, developmental credits at or above the level that meet program requirements for which a student is currently seeking will not be excluded from attempted credits.

WITHDRAWAL PENALTY/ REPAYMENT REQUIREMENTS

Students who receive federal financial aid and who:

- subsequently completely withdraw, stop attending or are expelled, or
- are enrolled in a combination of module and full-term classes and drop or stop attending all full-term classes

may be subject to a repayment of unearned financial aid. A Title IV return calculation determines, based on withdrawal date, the amount of federal aid that the student has earned. The amount of federal aid earned, under the federal aid return policy, may be less than tuition and other charges. This means that upon withdrawal, a student may owe COCC tuition and other charges in excess of net student aid. The student is responsible for payment of charges not covered by student aid. Withdrawal from classes after the tuition due date may affect completion rates that are required for Satisfactory Academic Progress.

At the time of complete withdrawal, students can request an estimated Title IV refund/repayment calculation from the Financial Aid office.

APPLICATION PROCEDURE

The Free Application for Federal Student Aid (FAFSA) or Oregon Student Aid Application (ORSAA) may be submitted as early as October 1 for the upcoming Summer, Fall, Winter and Spring award year. Students are encouraged to apply as soon as possible because some funding is limited. Students apply on the web at fafsa.gov. A paper FAFSA is available in pdf format at the same website.

The COCC Financial Aid office can provide additional and detailed information about various financial aid programs. For further information, students should:
- go to the website: cocc.edu/financial-aid;
- send an email to: coccfinaid@cocc.edu;
- send a letter to: COCC Financial Aid, 2600 NW College Way, Bend, OR 97703; or
- telephone: 541.383.7260

Students should include their name and COCC ID number in all correspondence to the Financial Aid office.

WHAT TYPES OF AID ARE AVAILABLE?

Financial aid is money awarded to students to help them pay for tuition, fees, books, room and board, and transportation while they are working on a certificate or degree. There are four types of financial aid programs available: scholarships, grants, loans and work-study. These funds come from various sources. Program details, including eligibility criteria and dollar amounts, may differ from the following descriptions if applicable laws or regulations governing such programs change after printing of this material.

SCHOLARSHIPS

COCC has three primary types of scholarship programs: COCC Foundation scholarships are based primarily on financial need. Merit scholarships and private scholarships encourage academic excellence and personal achievement.

Central Oregon Community College Foundation Scholarships
The Central Oregon Community College Foundation is comprised of a board of directors, administrative staff members and a group of interested and concerned private citizens from throughout the College District who donate their time and money to help COCC's students and to improve College programs. Each year, the COCC Foundation raises funds to finance a number of scholarships. A scholarship application is required. Applications are submitted online on the College's website beginning in mid-December for the upcoming academic year.

Eligibility is determined by the COCC Scholarship Selection Committee and may be based on need, academic achievement, residency or other donor-specific criteria. The COCC Foundation Scholarship is not available for Summer term.

Merit Scholarships
Merit scholarships are awarded on the basis of academic excellence to seniors graduating with a minimum 3.0 cumulative grade-point average from in-district high schools. This scholarship may be renewed at COCC for second-year students with a minimum 3.0 cumulative grade-point average and completion of 6 credits per term totaling 18 credits during their first year.

Private Scholarships
For a list of available scholarships and scholarship search engines visit: cocc.edu/financial-aid or contact the Financial Aid office. High school seniors are encouraged to explore scholarship opportunities with the help of their high school counselors.

GRANTS

Grants are awarded on the basis of financial need. Grants do not have to be repaid and are another type of gift aid. Student financial aid packages include grant funds whenever student eligibility and funding levels permit. Funding for the grant programs administered at COCC comes from the Department of Education and the state of Oregon.

Federal Pell Grant (limited to 18 quarters)
The Federal Pell Grant program was established to provide financial aid for eligible undergraduate students with financial need. Eligibility for other federal aid is determined after the Pell Grant is taken into consideration. Grant awards in 2017-2018 ranged from $606 to $5,920 annually depending on financial eligibility and enrollment. Students with a prior bachelor's degree are not eligible. Students may apply for the Federal Pell Grant by completing the FAFSA.

Federal Supplemental Education Opportunity Grant (FSEOG)
FSEOG awards are federally funded. COCC is responsible for selecting eligible students and determining the amount of the award. The FSEOG is for undergraduates with exceptional financial need and gives priority to students who receive Federal Pell Grants. Annual FSEOG awards were $600 in 2017-2018 depending on federal funding allocations. Students may apply for the FSEOG award by completing the FAFSA.

Oregon Opportunity Grant (OOG)
The state of Oregon provides funds for this grant program. Eligibility is based on financial need as defined by the Oregon Student Access Commission using the FAFSA information and is limited to 12 cumulative quarters. Students must have a minimum of one-year legal residency in Oregon and be enrolled in at least six credit hours each term. Students with a prior bachelor's degree are not eligible. Students enrolled in a course of study leading to a degree in theology, divinity or religious education are not eligible. Oregon Opportunity Grant awards are set by the state of Oregon. The Oregon Opportunity Grant is not available for Summer term. Annual OOG awards were $2,250 in 2017-2018. Students may apply for the OOG by completing the FAFSA.

Oregon Promise Grant
This award provides funding for students who graduated (or the equivalent) from an Oregon high school no more than six months prior to attending and pursuing a certificate or degree at one of Oregon's 17 community colleges. The bill funds grants at a minimum of $1,000 for each full time community college student awarded, and it is to be administered by the Office of Student Access and Completion (OSAC) under the Oregon Higher Education Coordinating Commission (HECC). Annual Oregon Promise maximum pre-$50 per-term copay awards were $3,420. Students may apply for the Oregon Promise by completing the application at oregonstudentaid.gov and submitting the FAFSA.

LOANS

Note: Students are encouraged to borrow only the amount needed to cover essential educational expenses. Loan entrance and exit counseling are required for student loan borrowers.

FEDERAL DIRECT LOAN PROGRAMS (DL)
To be eligible for a federal Direct Loan, students must be enrolled in at least six credit hours and must not be in default on a prior loan or owe a grant repayment. All loans must be repaid. Students must sign a promissory note (a legal agreement to repay) with the Department of Education before any loan money can be disbursed. The promissory note contains detailed information about the terms, responsibilities and repayment of the loan. Because students must repay educational loans, this kind of assistance is generally referred to as self-help aid. Federal Direct loans are accessed through the normal financial aid process. For details, go to cocc.edu/financial-aid.

Three specific types of Federal Direct Loans are available:

- **Federal Direct Subsidized Loan Program**
  The Direct Subsidized Loan provides fixed interest (currently 4.45%) federal loans through the Department of Education. Maximum annual loan limits are based on financial need, but cannot exceed $3,500 for freshmen and students in certificate programs and $4,500 for sophomores. Effective July 1, 2013,

new Direct Subsidized Loan borrowers are limited to borrowing up to 150 percent of the length of their current academic program. Loan repayment begins six months after a student ceases to be enrolled at least half time. Monthly payment amount and length of repayment depend on the cumulative amount borrowed, but will be set up with an initial 10-year repayment.

- **Federal Direct Unsubsidized Loan Program**
  The Direct Unsubsidized Loan provides fixed interest (currently 4.45%) federal loans through the Department of Education. The Direct Unsubsidized Loan is available to students who do not qualify for some or all of the need-based Direct Subsidized Loan. Awards cannot exceed $3,500 for freshmen and students in certificate programs and $4,500 for sophomores for an academic year. In addition, dependent students as defined by the Department of Education are eligible to borrow up to $2,000 in Direct Unsubsidized Loans and independent students, up to an additional $6,000. Student borrowers will be responsible for payment of the interest that accrues on these loans while they are in school and during periods of deferment. Loan repayment begins six months after a student ceases to be enrolled at least half time. Monthly payment amount and length of repayment depend on the cumulative amount borrowed, but will be set up with an initial 10-year repayment.

- **Federal Direct PLUS Loan**
  The Direct PLUS Loan is a non-need based, loan to parents. Loans may range up to the published cost of attendance for the institution minus other student aid. A loan origination fee of 4.264% is deducted at the time of disbursement. The annual interest rate is currently fixed at 7.0%. Parent borrowers will also be evaluated for adverse credit history. For more information on the Direct PLUS visit studentaid.gov.

WORK-STUDY AND STUDENT EMPLOYMENT

Many students help finance their education by securing part-time employment either on or off campus. Since students work in order to receive funds from employment, this kind of assistance is considered a form of self-help aid.

COCC Career Services maintains a list of off-campus job opportunities for students seeking employment outside the Federal Work-Study program. Search "student employment" at cocc.edu for more information.

Federal Work-Study (FWS)
This program provides employment opportunities to students who apply for financial aid and are eligible for the Federal Work-Study program. Availability is based on federal fund limits. In addition to providing income, students may acquire work experience in jobs related to their academic interests. Annual FWS awards were $4,200 in 2017-2018.

Students cannot be placed in a work-study job until they receive a financial aid award that includes work-study. Students will not receive any Federal Work-Study funds until they are actually placed and working in a work-study job. Due to the need to match job requirements with student skills, the College cannot guarantee employment to all eligible FWS recipients.

At COCC, work-study jobs provide experience in a variety of fields including physical education, library work, the sciences, health service and office work. Community service jobs are also available. For more information, visit cocc.edu/financial-aid.

VETERANS EDUCATION BENEFITS

Students who believe they may be eligible for veterans educational benefits, such as a veteran or a widow or dependent of a 100% disabled or deceased veteran, should contact a veterans certifying official at 541.383.7264.

All veteran students at COCC must meet the same academic standards as other students to remain in good standing. However, to remain eligible for educational benefits, veterans and other students eligible for these benefits must comply with the following additional requirements:

Notification of Enrollment Changes
It is the responsibility of the registered veteran to notify the veterans certifying official when any changes are made to their schedule (add or drop classes). Failure to do so may result in incorrect payments to the student. Overpayments must be repaid.

Program of Study
To be eligible for veterans educational benefits, students must be enrolled in a degree or certificate program offered by COCC and approved by the state approving agency. Only courses required for that degree or certificate program may be certified for benefit payment.

Transfer of Credits
Veterans who enter as transfer students, or who have completed any college-level coursework, are required to have all official transcripts forwarded to Admissions and Records for evaluation. Certification will not continue past the first term if transcripts from all other sources (including military transcripts) have not been received by COCC.

Credit Hour Requirements
To receive full-time pay, students must take a minimum of 12 credit hours per term; for three-quarter time pay, students must take nine to 11 credit hours per term; and to receive half-time pay, students must take six to eight credit hours per term. Chapter 33 students have different requirements.

Satisfactory Academic Progress
Students using VA educational benefits at COCC must earn at least a 2.0 GPA each term to maintain good standing. The terms of COCC's Academic Warning Policy for all students, including those using VA educational benefits, are outlined in the catalog. Academic warnings are reported to the VA each term. If a student using VA educational benefits receives a Fourth Academic Warning, their benefits will be terminated at COCC and they will not be eligible for reinstatement for one calendar year, in accordance with the Academic Warning Policy. *Please note: students receiving federal financial aid are also bound*

by the Satisfactory Academic Progress (SAP) policy upheld by COCC's Financial Aid office.

Institutional Responsibility
COCC is responsible for reporting to the VA if the student is no longer pursuing his or her educational objectives as certified.

Veteran Tuition Rates
In accordance with Section 417 of Public Law 114-315, and 38 U.S.C. 3679(c) as amended, the qualifying students shall be charged a non-resident rate as outlined in the Residency Policy. This rate complies with Oregon legislation and the U.S. Department of Veterans Affairs requirements of 38 U.S.C. 3679(c) as amended. Qualifying students include:

- A Veteran using educational assistance under either chapter 30 (Montgomery GI Bill® – Active Duty Program) or chapter 33 (Post-9/11 GI Bill®), of title 38, United States Code, who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.

- (GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). For more information see the GI Bill Trademark terms of use.)

- Anyone using transferred Post-9/11 GI Bill® benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active duty service of 90 days or more.

- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.

- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence).

- Anyone using transferred Post-9/11 GI Bill® benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.

- Anyone who is eligible for and using educational assistance under chapter 35 (Dependents' Educational Assistance Program).

REGISTRATION & CLASS PREPARATION

PLACEMENT

All COCC students taking credit classes must provide writing and math placement information to COCC before they can register for classes. Students may meet the placement requirement in one of the following ways:

- Take the placement test: COCC uses the College Board's ACCUPLACER. This test uses a computer-based format with unlimited time and immediate scores. The placement test assesses academic skills and helps place the student into the right level of courses and may meet a program/course prerequisite. Placement scores are valid for two years.

- Complete a college level reading, writing and math course with a "C" or better at another regionally accredited college and have submitted transcripts prior to advising and registration.

- Provide placement scores/placement from another college within the last two years and have submitted a copy of the placement prior to advising and registration

- Completed the Smarter Balanced Assessment within the last two years and scored a 3 or 4 in writing and/or math

- Have an associate, bachelor's or higher-level college degree.

Students are not required to show placement if they are planning to take only HD 110 Career Planning, HD 190 Latino Leadership, studio art, world language, computer skills, music performance or HHP activity courses.

Students auditing courses using the 65+ tuition waiver are not required to take the placement test.

Visit the COCC website, cocc.edu, for more information about the placement process, how to prepare, how to schedule a placement testing appointment and other important placement information.

ADVISING

Once placement is provided, all certificate- and degree-seeking students meet with an academic advisor. For new students, dates and times of group advising options are available on the COCC website. Current students should contact their advisor directly to schedule an advising appointment. Students can confirm the name of their advisor by contacting CAP Services (located in Cascades Hall) or by logging in to their Bobcat Web Account. All students who participate in group advising sessions will be emailed the name of an individual academic advisor, based on the major stated on their admission application, shortly after the start of each term. Students can change their advisor by contacting CAP Services at 541.383.7200.

Note: Current students may choose to be self-advised, which means that the advising requirement is waived and students are responsible for choosing their courses and making sure that those courses fit their degree goal. To apply for and review the requirements for receiving self-advising status, visit the COCC advising website.

REGISTRATION

After submitting an application for admission, providing placement and meeting with an advisor (if degree-seeking), students may register for courses based on the dates and times listed on the COCC website. The registration schedule for credit students is based on enrollment status and number of credits earned at COCC. Degree-seeking students who have attended credit classes at COCC in Fall, Winter or Spring terms are eligible for priority registration. Transfer credits may meet some program requirements but are not counted toward "earned credits" for registration purposes. Students may view the priority registration schedule at cocc.edu/departments/admissions/register-for-classes. Students wishing to pursue a cohort program without a selection process must meet the basic prerequisite competencies and will be placed in the program according to seat availability on a first-come, first-served basis according to the priority registration schedule.

Student registrations are complete only when courses are entered into COCC's online student information system.. A student may not register if a debt is owed to the College. Students must be registered in order to attend class. Students may not take more than 19 credit hours per term without permission from Admissions and Records.

Students will be withdrawn from a course if they have not completed the prerequisite course(s) with a "C" grade or better from a prior term.

ADDING AND AUDITING COURSES/ WAIT LISTS

Courses may be added until 7 a.m. on the first day of the first class session. After this time, an instructor's permission is required to add a course. Students may add courses via their Bobcat Web Account (with electronic instructor approval) or in person at the Boyle Education Center, or at the Redmond, Madras and Prineville Campuses.

Students may not begin attendance in a new class after the first week of the term.

Note that students may not register for two sections of the same course. If students wish to register for courses that overlap in time, they must receive permission from both course instructors.

Auditing Courses
Full-term courses may be changed to/from audit through the seventh week of the term. Such changes must be done in person or by contacting Admissions and Records. Audited courses do not apply toward financial aid. *Note: different deadlines exist for*

short-term courses; contact Admissions and Records at 541.383.7500 or welcome@cocc.edu, for details.

Wait Lists
Students who are on a wait list for a course will automatically be registered into the course if a seat becomes available. The automated wait list registration process turns off at 5 p.m. the Friday prior to term start. (For information on short term classes, please contact Admissions and Records.) Students will receive a message in their COCC email account notifying them they have been registered for the course and are now responsible for applicable tuition/fees. Students who are not automatically registered in the course and remain on the wait list can take a registration form to the first class session. If a seat is available, the instructor must sign the registration form. The student submits the form in person to Admissions and Records up to two business days after signature, to enroll in the class. Following that time, the form is no longer valid. Alternatively, the instructor can submit electronic instructor approval so the student can add the class via the student's Bobcat Web Account.

ATTENDANCE/ ADMINISTRATIVE WITHDRAWAL

In order to assure that all available class seats are filled with students–both registered students and students from the waiting lists–COCC enforces an attendance policy during the first week of the term.

To maintain enrollment in each class, the student must attend the first class meeting and 100 percent of the first week's class and lab meetings. Students in online classes must complete the attendance requirement outlined in the syllabus. For classes that do not span the entire term the student must attend the first class session. Students who do not do so, will be administratively withdrawn from that class by the instructor at the time class roll is taken. If this results in a tuition refund, the refund will be processed within three weeks. If students are unable to attend a session within the first week due to extenuating circumstances, they must contact the instructor by phone, email or in person prior to the first class meeting if they wish to avoid administrative withdrawal. Allowing students to remain in the course is solely at the discretion of the instructor.

The College is not responsible for liabilities associated with the administrative withdrawal of students.

The administrative withdrawal policy does not relieve students from full responsibility for officially dropping a course within the given deadline to not incur tuition charges and to not receive a grade for the course.

DROPPING COURSES/ COMPLETE WITHDRAWAL

Students registered in courses are considered to be in attendance. Students who stop attending class but do not drop the class will receive a grade for that course and will owe all tuition and fees. This grade will be a permanent part of the student's academic record.

To drop one or more courses, students should complete the drop section on a registration form and submit it in person at the Boyle Education Center or at the Redmond, Madras or Prineville Campuses. Or students may call Admissions and Records, 541.383.7500, to drop a course over the phone.

Short-Term Courses
- For a refund or credit for courses which span two weeks or less in a term: the class must be dropped before the first day of class.
- For a refund or credit for courses which span more than two weeks but not more than seven weeks in a term: the class must be dropped no later than three days after the class start date.

Full-Term Courses
Students may drop a course during the first two weeks of the term and receive a full refund, and no grade will appear on the student's transcript. Between the third week and the end of the seventh week of the term, students can drop a course; no refund is available, but no grade will appear on the transcript. No withdrawals will be accepted after this time or after a course has ended. Students who wish to withdraw from a full-term course between the eighth week of the term and the Wednesday before finals week must receive instructor approval. A "W" will appear on their transcript and no refund is available. Students should communicate with the instructor and refer to the course syllabus to determine the conditions under which a "W" can be granted. See the academic calendar on COCC's website for specific dates.

Complete Withdrawal
Students receiving federal financial aid may owe a repayment if they completely withdraw from courses. See the Financial Aid section for details.

Withdrawing Due to Active Military Duty
Active duty, guard and reserve military personnel (Army, Navy, Air Force, Marines and Coast Guard) who are enrolled at Central Oregon Community College and whose academic progress is interrupted due to deployment or activation mid-term may withdraw without tuition penalty. A student currently in a course will not be charged for the course and the registration will be voided with no indication on the transcript. Students must submit a copy of their military duty assignment orders verifying deployment or activation along with their request to withdraw from the course to Admissions & Records. Copies of the orders must also be submitted to the COCC VA Certifying Officer if any military benefits are being used. If the service member intends to return to school, the person will be readmitted with the same academic status as when last attended. This policy does not apply to retired military personnel or dependents.

Cancelled Classes
The College reserves the right to cancel or postpone a class. However, every effort will be made to cancel the class well in advance of the intended start date allowing students to reschedule or make other arrangements. Students registered in classes that are cancelled will be notified via their COCC email account and issued a full refund.

STUDENT RESOURCES

Central Oregon Community College offers a variety of academic and support services designed to foster student success. All prospective students are encouraged to contact Admissions and Records, 541.383.7500, or cocc.edu, for information and assistance in planning their education at COCC.

ACADEMIC ADVISING (CAP SERVICES)
Academic advising at COCC is provided by both CAP Services (Career services, Academic advising and Personal counseling) and by full time faculty members in each department. The purpose of academic advising is to guide students toward achieving their educational goals and to help students become self-reliant in understanding College policies and practices. Various advising requirements are in place to support this purpose.

Prior to registering for classes, new certificate- and degree-seeking (CDS) students and students who have not attended for more than a year participate in small-group advising sessions. After the first advising session, students are assigned an advisor in their declared major and emailed the advisor's contact information. Students are required to meet with their advisor to develop long-range academic and career plans before the next term's registration. All CDS students are required to meet with an advisor prior to registration if they participated in a group advising session the previous term, or as determined by the advisor and at least once a year.

COCC provides an online tool, GradTracks, to help students and their academic advisor track progress toward graduation. GradTracks allows students to see how completed courses are applied toward their certificate or degree and identifies requirements and courses still needed to graduate. Students can also explore other certificate and degree options. Students can access GradTracks by logging on to their Bobcat Web Account and selecting the Student Services & Financial Aid Tab; clicking on the GradTracks link and again on the GradTracks button. Students must be taking credit classes in order to view information in GradTracks.

Students are responsible for monitoring their advising requirement and for completing the advising steps in a timely manner. COCC recommends that students plan their advising appointments well in advance of the opening of registration. Students who want to find their assigned advisor's name and contact information and see if they have an advising requirement for an upcoming term, should look in their Bobcat Web Account. To do so, go to cocc.edu and select "Student Login." After logging in, select "Student Services and Financial Aid," then "Registration," and then the "Can I Register for Credit Classes?" page.

Students may request a specific advisor or a change in advisors if they change their major. Students not seeking a certificate or degree are not required to meet with an advisor, but are welcome to meet with a CAP Services advisor. Contact CAP Services at 541.383.7200 in Cascades Hall for advising options.

ASSOCIATED STUDENTS OF COCC (ASCOCC)

ASCOCC provides students with numerous opportunities for governance, advocacy and social programming. The council is responsible for allocating student fees, appointing students to campus governing committees, advocating for the entire student body and providing diverse social and educational programs and services. The ASCOCC council offers a limited number of paid positions each year.

Contact ASCOCC at 541.383.7595 or visit the website, cocc.edu/ascocc, to find out about current activities and how to get more involved with the student council.

BOBCAT WEB ACCOUNT

COCC students will use their online Bobcat Web Account to access account information including balances, financial aid, registration, degree requirements, personal contact information, etc.

BOOKSTORE

The Campus Bookstore, located in Newberry Hall on the Bend campus, sells textbooks, class materials, educational and personal supplies, gifts, convenience food and beverages. Textbooks can be ordered 24 hours a day at bookstore.cocc.edu. For more information about the Bookstore, call 541.383.7570 or visit its website, listed below.

Redmond Campus Bookstore (Building 1, Room 111) sells textbooks, class materials and educational supplies. Please visit bookstore.cocc.edu for hours or call 541.504.2929.

THE BROADSIDE STUDENT NEWSPAPER

The Broadside is a student-run newspaper serving COCC and the larger community. The staff publishes a minimum of 16 issues per school year with a circulation of 1,000 to campus and other locations around Central Oregon. The newspaper provides a forum for student free speech as well as a focus on college news, features and sports. The newspaper's website, thebroadsideonline.com, offers advertising opportunities and ongoing, updated year-round news information.

Each year *The Broadside* offers dozens of student employment opportunities in reporting, editing, design and layout, multi-media communications, photography and journalism leadership. All students are welcome to apply for the paid positions. For more information, call *The Broadside* advisor, 541.383.7252, or email *The Broadside* editor-in-chief at broadsidemail@cocc.edu.

CAMPUS PUBLIC SAFETY

The COCC department of Campus Public Safety (CPS) provides 24/7 patrol and response services with state-certified public safety officers. Officers respond to calls for assistance, crime reports, traffic accidents, safety escorts, policy violations, medical emergencies and also enforce parking, traffic and policy regulations. The department provides information on crime prevention and personal safety. Crime statistics and annual reports are available on the COCC website cocc.edu/public-safety or by calling the CPS office. Please report all incidents to the department at the numbers below. Active emergencies should be reported first to 9-1-1, then call the appropriate number: Campus Public Safety can be reached 24 hours each day, 7 days per week at 541.383.7272 or ext. 7272 from campus phones.

All students who park on campus must register their vehicles and display registration decals. Parking, traffic and other regulations may be found in the Parking and Traffic Regulations handbook available, along with registration decals, in the Boyle Education Center at either the Campus Public Safety office or in the Information Office. There is no charge for parking permits. Certain parking areas on campus are reserved for guests, carpool commuters, staff and vehicles displaying valid disabled parking decals.

Appropriate emergency preparedness and response to critical incidents on campus is a cornerstone of the College's safety program. Posted in classrooms are emergency incident response directions and phone numbers. Emergency assistance phones and towers are located throughout the campus and connect persons directly with the Campus Public Safety department 24/7.

Prevention training opportunities are offered throughout the year to provide students and staff with information on active violence, emergency preparedness, self-defense and more. These programs are advertised through email communications, ASCOCC and other media. The College's emergency preparedness and response plans and directions are located on the Public Safety webpage at cocc.edu/public-safety.

CAP SERVICES (CAREER SERVICES, ACADEMIC ADVISING, PERSONAL COUNSELING)

CAP Services offers a variety of student services to support COCC students in setting and meeting their educational goals. CAP Services is located in Cascades Hall on the Bend Campus. Various services are offered on all four COCC campuses. Call CAP Services for more information about each of these services, 541.383.7200, or go online, cocc.edu/cap.

CAREER SERVICES (CAP SERVICES)

COCC Career Services assists students with career planning and exploration, developing job search skills and finding full-time and part-time employment (including work-study placement). Local employers can use these services to recruit students and graduates with the specialized knowledge and skills needed in today's workplace. Career Services is part of CAP Services, located in Cascades Hall and offers personal appointments, print-based and web-based resources and workshops open to COCC students and alumni. Call CAP Services, 541.383.7200, or visit cocc.edu/cap for more information.

CLUB SPORT/INTRAMURAL AND RECREATION PROGRAMS

The COCC Club Sport/Intramural and Recreation programs offer a wide range of traditional and nontraditional sports and recreational activities along with special events and tournaments for people of all interests and abilities. The spacious Mazama complex features top-flight sports and recreation facilities.

COCC Club Sports provide opportunities for competition, skill development, leadership and recreation. Clubs are organized by students with guidance from coaches, students, faculty, staff and community members. Current clubs include alpine ski racing, baseball, basketball, bowling, cycling, golf, Nordic skiing, rugby, soccer (indoor and outdoor), swimming, volleyball, running and triathlon.

Organized intramural activities are available at convenient times for COCC students, faculty and staff. The emphasis is on having fun, making friends and staying fit. Some activities feature friendly competition while others are purely recreational. Activities include basketball, bench-press tournaments, cycling (recreational and races), indoor soccer, day hikes, dodgeball tournaments, flag football, golf tournaments, running events, soccer (outdoor), softball (coed), swimming, table tennis, tennis and volleyball.

COCC promotes lifetime fitness for everyone. Facilities are available for drop-in use throughout the week for a small per-term user fee. Informal recreational activities and organized sports are available to all students. Passes for local recreation facilities are available to students at no cost (swimming, ice skating and bowling). Call 541.383.7794 or visit online at cocc.edu/student-life for more information.

CLUBS
ASCOCC offers many opportunities for students to participate in campus clubs. Clubs must involve at least four current COCC students, have a faculty or staff advisor and create a budget. Those having questions or ideas about forming a student club or participating in an existing club can contact ASCOCC at 541.383.7595 or visit its website at cocc.edu/ascocc for more information.

COMPUTER LABS
COCC offers a variety of computing resources to students registered in its credit classes or Community Learning classes.

Drop-in computers are located on the Bend campus in the Barber Library, Pioneer Hall, Boyle Education Center and on the Redmond Campus in Building 3 and the Redmond Technology Education Center. Additionally, the COCC Madras and Prineville Campuses have computer labs that are scheduled for classes and drop-in use. There are computer labs specific to Math, Networking, Computer-Aided Drafting and Design, Science and Geographic Information Systems on the Bend campus and additional computer classrooms located on all campuses. All drop-in computer labs are staffed by student workers who offer assistance logging into student accounts and answering general questions.

Computers at COCC use the Windows operating system and most Microsoft Office programs along with class-specific programs. Drop-in labs are equipped with black-and-white and color laser printers, flatbed scanners and adaptive workstations. All non-classroom printing has a pay-to-print fee. Payment is made by using a COCC student ID card or a COCC print card purchased in one of the computer labs.

COPY CENTER AND MAIL SERVICES
The Copy Center, located in the Bookstore (Newberry Hall) on the Bend campus, is a full-service copy center. Services include black and white as well as color copies, binding and general mail services including UPS. For more information about the Copy Center and/or Mail Services, call 541.383.7579.

COUNSELING (CAP SERVICES)
Professional counselors are available at no charge to help COCC students identify and resolve personal issues. Counselors can help with stress management, depression, test anxiety, eating disorders, substance abuse, relationship issues or any other problems that may affect college success. All students who are enrolled in at least one credit or in Adult Basic Skills/English Language Learning courses are eligible to receive short-term counseling at no charge. For more information about personal counseling, visit cocc.edu/cap. Counseling appointments are confidential and can be made through CAP Services (Career services, Academic advising and Personal counseling) in Cascades Hall or at 541.383.7200.

EMAIL ACCOUNT
COCC provides qualifying COCC students with an email account via Microsoft Office 365. COCC's primary means of communicating with students is through their COCC email account. This includes billing statements, registration and wait list information and important announcements. Students are expected to regularly check their COCC email account.

To access your Office 365 email account, visit the COCC homepage at cocc.edu and click the "Student Login" button in the upper right-hand corner. Next, click the "COCC Email LOGIN NOW" button, to access the login page and Cloud 365 information page.

Students can find their username and password at cocc.edu by clicking on the "Student Login" button in the upper right-hand corner, then the "Bobcat Web Account" button. Once logged in, select the "Personal Information" link followed by the "View Email Address(es)" link. If a COCC email address has been assigned, it will be displayed on this page, along with a comment, which includes the initial password for campus computers, email and Blackboard. Passwords are case sensitive. If you need help with your password, see cocc.edu/home/student-email-login.aspx

FOOD SERVICE AND CATERING
Quality food service is available across campus, with the Bend campus dining services available in Coats Campus Center. For details on locations, prices and options, visit the Food Service website at coccdining.com or contact Melissa Miller, the Food Service Director, melissa.miller@sodexo.com.

HEALTH INSURANCE
Central Oregon Community College does not offer student health insurance. At the same time, the College does not require students to have health insurance coverage in order to enroll in courses or to participate in related activities and events.

Students are responsible for their own health insurance coverage. The College does not have a student health clinic on campus. Limited health services are available for free or at a reduced cost in the local community. Links to health resources in the community are available on the Student Health Insurance webpage cocc.edu/student-life and choosing the Student Resources link.

HOUSING – ON CAMPUS

COCC's new Wickiup Residence Hall houses 330 students each year in a coed, academically focused, on-campus housing environment. Centrally located near Barber Library, Mazama Gym and the Coats Campus Center, the Wickiup Residence Hall offers four-person suites with either two double bedrooms or four single bedrooms. Each suite includes a common living space, shower and bathroom shared by suitemates. Amenities include local cable, WiFi network access, laundry room, community kitchen, study lounges and recreational facilities along with a full meal plan. Contact the Housing and Residence Life office at 541.383.7545, or visit cocc.edu/housing for more information.

Space in the Wickiup Residence Hall is limited. Students seeking accommodations are encouraged to submit a Housing Application at their earliest convenience. All paperwork and deadline dates are available online. Upon completing a Housing Application, students must be prepared to pay a housing application fee; to guarantee a space in the hall, students will need to sign a Housing Agreement and pay a security deposit as well as down payment. The room and board rates for the 2018-19 academic year (Fall, Winter, Spring) are:

	Basic 9 meals per week/ $400 flex cash per term	Standard 14 meals per week/ $200 flex cash per term	Preferred 19 meals per week/ $100 flex cash per term
DOUBLE ROOM per term	$3,590	$3,717	$3,844
TOTAL Fall, Winter, Spring	$10,770	$11,151	$11,532
SINGLE ROOM per term	$4,536	$4,663	$4,790
TOTAL Fall, Winter, Spring	$13,608	$13,989	$14,370

HOUSING – OFF CAMPUS

Availability of off-campus housing varies from season to season and year to year. The office of Student Life accepts postings electronically on its website from the community for off-campus housing opportunities. Available housing options include apartments for rent, rooms for rent in homes and homes for rent.

To view current submissions visit cocc.edu/student-life and search under student resources. This website also provides other community resources that may be helpful in locating off-campus housing. The College provides this information as a service to students; however, it does not assume responsibility for screening rentals.

LATIN@ PROGRAMS

The Latin@ Program assists in the recruitment, retention and academic success of immigrant and native Latino students. The program coordinator assists students to meet their educational goals and contribute to the campus community. The coordinator advises the Latin@ Club with planning and implementation of relevant educational programs and social activities.

For more information, in English or Spanish, contact the Latin@ program coordinator at 541.318.3726. The Latin@ Program website can be found through cocc.edu/multicultural.

¡AVANZA! (Moving Forward!) Latino College Preparation Program: The goal of ¡AVANZA! is to encourage Latino/a youth to graduate from high school and to pursue higher education, and ultimately, to obtain a rewarding career and contribute to their communities. The program offers a dynamic curriculum that integrates leadership, college preparation and culturally relevant themes for the Latino/a students.

For more information, contact the ¡AVANZA! Program Coordinator at 541.318.3717. The ¡AVANZA! Program website can be found through cocc.edu/multicultural.

LIBRARY

COCC's three-story, 72,000-square-foot Barber Library opened in March 1998 and serves the students, faculty and staff of all Central Oregon Community College campuses.

The Barber Library collection features hundreds of thousands of full text research articles from more than 100 scholarly electronic resources and databases, a local collection of about 70,000 print and AV materials, subscriptions to thousands of streaming videos and access to millions of items, including e-books, via the Orbis Cascades Alliance consortium. COCC students, faculty and staff are also able to check out technology like laptops, iPads, cameras and Kindles. The Library is a selective depository for U.S. federal documents.

Current, credit-enrolled COCC students, faculty and staff can access the Library's electronic resources 24/7 from off campus locations. Besides the rich collection of information resources, research help is available to all patrons in person, on the phone, by email and by chat. Barber Library has an active instructional program for the development of information literacy skills, including the offering of credit courses, information literacy sessions via other courses and research support services such as Book-A-Librarian.

COCC is a member in the Orbis Cascade Alliance, a consortium of academic libraries in the Northwest that provides services such as Summit borrowing and database licensing opportunities. Current, credit-enrolled students, faculty and staff of COCC may search for and place requests on more than 30 million Summit items accessible via the Library's main webpage, cocc.edu/library. Materials are delivered for pickup at the Library circulation desk or COCC campus of their choice within a few working days.

The Library's information commons has 40+ computers and wireless access is available throughout the building for students, faculty and staff, as well as community patrons and campus visitors. Group study rooms, designated quiet study areas and comfortable seating provide students plenty of options for the perfect study space.

Each year the Barber Library hosts art exhibitions in the Rotunda Gallery, as well as a few literary events.

MULTICULTURAL ACTIVITIES

The office of Multicultural Activities promotes the development of a respectful and inclusive campus community by sponsoring cultural events and educational programs.

The Multicultural Center, located in Room 217, Coats Campus Center, fosters cross-cultural understanding and respect by providing a welcoming setting for learning, sharing and connection. For more information, contact the director of multicultural activities at 541.383.7412 or visit the Multicultural Activities website at cocc.edu/multicultural.

NATIVE AMERICAN PROGRAM

The Native American Program focuses on the recruitment and retention of Native American students. The program coordinator offers students individualized assistance as they navigate academic and administrative aspects of student life. As the advisor to the First Nations Student Union, the coordinator supports club members as they volunteer in the community, plan educational and social events and organize the annual Salmon Bake.

For more information, contact the Native American program coordinator at 541.318.3782. The Native American Program website can be found through cocc.edu/multicultural.

NETWORK ACCOUNT

The student network account is a free account that permits students to connect to the College's computer network system. Once logged on to COCC computers, users will find their personal folder (identified with their name) on the desktop. Each folder contains 200 MB of space students can use for storage. Students are responsible for reading and adhering to COCC's Acceptable Use of Technology Resources policy. Go to cocc.edu and search acceptable use technology policy.

PUBLIC TRANSPORTATION

In addition to the free campus shuttle bus, Cascades East Transit (CET) offers local transit service throughout the region for the general public. For more information visit cascadeseasttransit.com.

COCC offers a discount bus pass program. Students can purchase a monthly regional or a monthly community connector pass at a discounted rate. Passes may be purchased at the Information Desk located in Boyle Education Center and Coats Campus Center on the Bend Campus. Passes are also available at the Redmond, Madras and Prineville campuses. For more information about the discount program, please call Student Life at 541.383.7590.

SERVICES FOR STUDENTS WITH DISABILITIES

COCC strives to make available to all students the opportunity for an excellent and rewarding education. The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 provide federal guidelines which help the College ensure equal access to students with qualifying, documented disabilities at all of its campuses and Community Learning locations. COCC is committed to making physical facilities and instructional programs accessible to all students. Awareness of students' needs and goals helps to create an atmosphere in which learning and growth can occur. Faculty and staff are encouraged to refer students for consultation and determination of eligibility. For more information, visit the Services for Students with Disabilities website at cocc.edu/departments/disability-services or drop in to the office at the Barber Library.

SHUTTLE BUS

A free campus shuttle services the Bend campus. The 12-person bus features two bike racks and automatic snow chains. Shuttle maps with pick-up and drop-off times are available in the Boyle Education Center, Campus Services office, Coats Campus Center.

STUDENT LIFE

Participation in campus activities beyond the classroom is encouraged in order to complement college academic programs and to enhance the educational experiences of students. Through exposure to and participation in intellectual, vocational, cultural, recreational and social programs, students may explore their potential as individuals and develop meaningful relationships with others. For more information, contact the office of Student Life in the Coats Campus Center, 541.383.7590 or visit cocc.edu/student-life.

STUDY ABROAD

The College seeks to provide opportunities for students to study abroad while earning COCC transfer credit. For specific offerings, search study abroad at cocc.edu. Current programs include:

- Fall Quarter in Barcelona. Students experience Spanish life, language and culture while living and studying in bilingual Barcelona, the heart of Catalonia. Students live in shared apartments among other international students, while enjoying a seaside temperate climate in the home of Gaudi's fanciful art and architecture.

- Other programs may be announced through our partnership program for study abroad, the Oregon International Educators' Consortium. Please check the COCC website for updates.

For questions about COCC's Study Abroad program, contact Sara Henson, 541.330.4357, shenson@cocc.edu.

TUTORING AND TESTING CENTER

A popular student support service, the Tutoring and Testing Center is located in the lower level of the Barber Library. Math tutoring is in the Barber Library, Grandview Hall and on the northern campuses. Science tutoring occurs in the Science Hall in Bend and on the Redmond campus. The Writing Center is on the first floor of the Library, and writing tutors are located on all four campuses. World Languages tutoring is in Ochoco Hall. Tutoring schedules and hours of operation are on the department's website at cocc.edu/departments/tutoring-and-testing. Proctored testing is available at the Bend campus, and to a more limited degree on the Redmond, Madras and Prineville campuses.

Tutoring

Tutoring services are free to COCC students for the courses in which they are currently enrolled. Drop-in tutoring is available for math, writing, sciences, world languages, business administration, computer science and the social sciences, as well as Career and Technical Education subjects. Tutoring is conducted on both an individual and a group basis. Tutor-led study groups are also an option for science and calculus classes. Resources include printed materials, textbooks, computers and graphing calculators. Science tutoring is held primarily in the Science building, room 130. The Writing Center encourages

students to bring in their writing assignments for one-on-one help with any stage of the writing process. Online tutoring is available through the Western eTutoring Consortium and accessed via the department's website.

Testing

The COCC Testing Center is a regional testing center serving a diverse constituency of students and community members. A charter member of the Consortium of College Testing (ncta-testing.org/cctc) and a certified PearsonVUE (pearsonvue.com), Certiport and CLEP site, the Testing Center's mission is to provide opportunities for Central Oregonians to obtain academic, professional and standardized testing locally. GED testing for the region is also available via the PearsonVUE Testing Center on the Redmond campus in Building 1 and in the Bend campus testing center. For a current list of tests offered, visit the COCC Tutoring and Testing Center's website. For more information about tutoring and testing services, contact the Tutoring and Testing Center at 541.383.7539 or visit cocc.edu/departments/tutoring-and-testing.

TRANSCRIPTS

Transcripts must be requested by students via their secure Bobcat Web Account, in person in the Admissions and Records office, or in writing. Transcripts may be requested in advance and held until after grades or degrees are posted. The transcript processing fee must be paid before transcripts are mailed. No transcript requests will be processed during the first week of each term.

Processing Fees

Online request	$7 per transcript
In-person, faxed or mailed request	$7 per transcript
(processed 7-10 working days)	
Rush or faxed paper transcript	$5 additional

COCC reserves the right to withhold transcripts from students who are in debt to the institution. For OSU-Cascades dual admit students, official transcripts will be available between COCC and OSU-Cascades at no charge to the student.

Notice
The student services and activities descriptions in this catalog are valid for this academic year. Student services and activities are evaluated yearly to assess student needs and available College resources.

ACADEMIC INFORMATION

This section provides details concerning what each student needs to know about the College's academic expectations. For answers to specific questions about College policies, please contact Enrollment Services at welcome@cocc.edu or 541.383.7500.

GRADING POLICY

End-of-term grades are available via the student's Bobcat Web Account only and will not be mailed or given out over the phone.

Only the grades in the following list may be assigned. All courses graded with a P, NP, W, X, I and IP do not apply to GPA.

To calculate GPA, multiply the number of credits for each course by the grade points for the grade received in that course (grade points listed below). Add these numbers together and divide by the total number of graded credits for that term (include "F" grades and exclude P, NP, W, X, I and IP grades).

Grade points

A	4.0	outstanding performance
A−	3.7	superior
B+	3.3	excellent
B	3.0	very good
B−	2.7	good
C+	2.3	better than satisfactory
C	2.0	satisfactory
D	1.0	passing

Note: Courses in which "D" grades are earned may not be used in the AAOT or to fulfill foundational requirements in other certificate or degree programs and may have limitations in specific certificate or degree programs. "D" grades are not considered passing for prerequisite courses.

F	0	not passing
P		pass: not computed in GPA, applies toward percentage of credits completed, may be awarded only in authorized classes
NP		no pass: not computed in GPA, may be awarded only in authorized classes
W		withdraw: not computed in GPA, must be assigned by Records Office
IP		course in progress
I		incomplete: not computed in GPA, will convert to "F" if requirements of the Incomplete Grade Contract are not met by the end of the following term
X		audit: not computed in GPA, does not meet graduation requirements; not eligible for financial aid

Pass (P)/No Pass (NP)

"Pass" is interpreted as a "C" or better. The "pass/no pass" option is used for certain courses where it is deemed inappropriate to use the regular grading system. Credits are awarded but not calculated in GPA.

Challenge Course Pass/No Pass
All challenge examinations will be graded on the "pass/no pass" basis. The standard for a "P" in challenge courses is performance at the level of a grade of "B-" or better. Credits are awarded but not calculated in GPA.

Withdrawal (W)
Students who withdraw from full-term courses between the eighth week of the term and the Wednesday before finals week will receive a "W" on their transcript. For classes shorter than one quarter, proportional times will be used. Note: Permission of the instructor is required to withdraw from the course. A "W" is not computed in a student's GPA.

In Progress (IP)
This notation is made on a transcript if the course ends after the normal grading period. At the end of the course, a grade will be entered.

Incomplete (I)
An Incomplete (I) grade is assigned when a student successfully completes approximately 75 percent of course requirements, but for reasons acceptable to the instructor, the student is unable to complete remaining requirements during the given term. An "I" grade is not a substitution for a failing grade, but indicates that there is a reasonable expectation that the student will pass the course. An incomplete grade will not count toward academic warning, but it may affect Financial Aid and Satisfactory Academic Progress.

Students may request an Incomplete (I) grade by contacting the instructor prior to the end of the term. Students must complete the remaining requirements within one quarter after the end of the original course (Summer term excluded) unless the instructor designates a later completion date. Instructors will submit a grade change to the Admissions and Records office within one week of the student completing the course requirements; if no grade is submitted, it is assumed the student did not complete the requirements and the "I" grade will convert to an "F." Note that if the student has earned a different grade without completion of these requirements, the instructor has the option to submit that letter grade instead.

Students and instructors are strongly encouraged to complete an Incomplete Grade Contract in order to outline remaining requirements. Please see "Incomplete Grade Contract" on COCC's website for more information.

Audit (X)
Students who want the experience of taking a particular class but do not want to receive college credit may register as audit students in any of the College's courses. Audit students are not required to meet specific course requirements but should participate fully in class activities. If students wish to audit a class, they must indicate so at the time of registration and note the following:
- "X" appears on the transcript.
- "X" is not calculated into a student's GPA.
- Tuition is the same as classes taken for credit.

- Audited courses do not meet graduation or transfer requirements and are not eligible for financial aid.
- A student may convert "audit" status to "regular" status, and vice versa, before the end of the seventh week of the term for full-term classes.

GRADING ON ATTENDANCE

With the exception of the College's administrative withdrawal policy, the individual instructor or department determines grading on attendance in class and/or participation. Instructors requiring attendance in class and/or participation toward the overall grade will outline expectations and procedures in their respective syllabi.

MIDTERM GRADE REPORTS

Midway through each term, instructors have the option to file grades of "D" and "F" or "NP" for those students whose performance indicates it, including those who are not regularly attending class. It is entirely at the instructor's discretion to submit or not submit a midterm grade report. If an instructor submits a midterm grade, the student will be sent an email at his/her college email address.

Students must take responsibility for withdrawing if they do not wish to continue in a class.

DEAN'S LIST

Students enrolled in 12 or more graded credits who receive a term GPA of 3.60 or better will have a Dean's List notation on their official transcript each term that the GPA is earned. The Dean's List will also be published each term.

GRADE CHANGES

The responsibility of assigning grades at COCC is entirely the instructor's. A student who disputes the final grade (A–F, P, NP) in a course should meet with the instructor to review the grade. If not satisfied, the student may meet with the department chair, who can further review the grade with the instructor. If the student believes that the grade is arbitrary or capricious, the student has recourse through the College's grade appeal procedure found in the Academic Procedures Manual on the COCC website.

Students who wish a change of grade to or from "W" or "X" must submit a petition directly to Admissions and Records. Requests for grade changes are considered only within one year of the grade being awarded.

REPEAT GRADE POLICY

As a general rule if a student takes the same course twice, whether at COCC or another institution, only one course may be used to satisfy certificate or degree requirements.

INSTITUTIONAL REPEAT POLICY

If a student repeats a course and both courses were taken at COCC, the most recent course will be calculated in the cumulative GPA and applied toward degree requirements. The original course and grade will remain on the transcript, with an "R" indicating it was later repeated. The original course grade will not be used in the GPA calculation for that term or the cumulative GPA calculation. Students may repeat a course as many times as they wish; however, only the original/first course's grade will be excluded from the term and cumulative GPA and only the most recent course will be used toward graduation requirements. There is no limit to the number of courses a student may repeat, unless otherwise stated in specific program requirements.

TRANSFER REPEAT POLICY

If a student has repeat courses transferred from another institution, the College will use the following criteria to determine which course applies to needed requirements:

- The most recent COCC course with a grade "C" or better.
- If both courses came from other institutions, the transfer course with the best grade will be selected.
- Some degrees and certificates have specific policies on permissible age of transfer courses. Please refer to the applicable program description.

Courses in music or theater performance, studio art, Cooperative Work Experience and HHP activity classes may be repeated for credit. The grades and credits for such courses will be recorded on the transcript and totaled cumulatively. In some cases, there may be a limit to the number of total credits allowed from those courses when used toward a certificate or degree. There is no limit to the number of courses a student may repeat. If students wish to use the grade repeat policy for music or theater performance, studio art, Cooperative Work Experience and HHP activity classes, they must complete a student petition and submit it to the Admissions and Records office; the course repeat policy will automatically happen for all other coursework.

ACADEMIC WARNING POLICY

Students are considered to be in good academic standing if they earn a minimum 2.0 GPA each term. Certificate- and degree-seeking students not meeting this requirement receive an academic warning. All students on academic warning will be sent an email to their COCC email address specific to their situation the day after grades are processed; it is the student's responsibility to monitor their academic standing and complete academic warning requirements in a timely manner.

Academic warning descriptions and requirements are as follows:

FIRST ACADEMIC WARNING

When students earn less than a 2.0 term GPA, they are placed on First Academic Warning. At this stage, students are strongly encouraged to meet with their advisor prior to registration.

SECOND ACADEMIC WARNING

When students earn less than a 2.0 term GPA for two consecutive terms, they are placed on Second Academic

Warning. At this stage, students are required to meet with an academic advisor and complete the Second Academic Warning worksheet. The worksheet must be submitted to Admissions and Records no later than 5 p.m., on Monday of the second week of the following term. If students are preregistered and fail to complete these steps, their registrations will be voided and a full tuition and fees refund issued. (Bookstore expenses may not be refundable.) Second academic warning students will be prevented from registering for one calendar year or until such time as they complete the Second Academic Warning worksheet.

THIRD ACADEMIC WARNING

When students earn less than a 2.0 term GPA for three consecutive terms, they are placed on Third Academic Warning. In order to attend classes, students must complete the Academic Reinstatement petition with their advisor and submit the petition to Admissions and Records no later than 5 p.m., on Monday of the second week of the following term. The Academic Reinstatement Committee will review completed petitions no later than Wednesday of that week. The Committee has three options:

- Approve the petition as is: Students continue attending classes, following the requirements of the petition. If students fail to follow the academic plan or requirements, their registration in classes may be voided and their petition is considered "denied."
- Approve the petition with revisions: If students fail to follow the revised academic plan or requirements, their registration in classes may be voided and their petition is considered "denied."
- Deny the petition: If denied, students will not be allowed to continue or register for classes; any current registrations will be voided and a full-tuition/fee refund will be issued. (Bookstore expenses may not be refundable.) Students may petition for reinstatement the following term or cease to attend classes for one calendar year. After one year, students may re-enroll and begin classes as if no academic warnings existed (grades on students' transcripts remain the same).

All petitions are final and are not subject to appeal unless there is information pertinent to the outcome that was not submitted at the time of the initial request.

Note: All students on Third Academic Warning are required to participate in an activity (or activities) specifically chosen to address why they received three academic warnings. Depending on circumstances, this could be attending a study skills class or workshop; meeting with a personal counselor to talk about time management, stress management, depression or other personal situations; attending a career counseling workshop or class; or other option recommended by the advisor. If students do not follow through with this activity or activities, they will be dropped from that term's classes. Financial aid recipients will need to pay back a prorated amount of their funding. See the Financial Aid withdrawal penalty policy.

If students are preregistered and fail to complete the petition, their registrations will be voided and a full tuition and fees refund issued, except books. Third Academic Warning students will be prevented from registering for one calendar year or until such time as their Academic Reinstatement petition is approved.

FOURTH ACADEMIC WARNING
When students earn below a 2.0 term GPA for four consecutive terms, they receive a Fourth Academic Warning and are blocked from all registration in credit classes for one calendar year. After one year, students may re-enroll and start their academic record as if no academic warnings existed. The students' transcript, however, will remain the same.

Note:
1. *Students who do not have an assigned advisor may request one through CAP Services or Admissions and Records.*
2. *Students on academic warning may not be self-advised, and students who were self-advised must meet with an advisor.*

TRANSFER CREDIT ARTICULATION

In keeping with the philosophy that college-level knowledge can be validated and documented in various ways, Central Oregon Community College recognizes many educational experiences for credit. A guiding principle of our transfer credit practice is that acceptable transfer credit is applied in the same manner as is COCC credit.

Transfer credits earned at another regionally accredited institution generally will be accepted as they apply to COCC degree requirements. Students who wish to use previous college credits toward a COCC degree should order official transcripts from the previous college. COCC will articulate the transcript toward the certificate or degree listed on the student's admission application. The articulation will be viewable on GradTracks, COCC's online degree audit tool.

Limits on college credit transfer are:
- Subject matter may not duplicate that for which credit has previously been awarded in transfer or at COCC.
- Credit awarded by another institution for life experience is not transferrable to COCC.
- Courses which espouse a particular religious view normally do not equate to COCC courses.
- In some cases, science credits more than five years old may not be applicable to specific programs.
- Transfer credit is only considered for courses where a grade (of A, B, C, D, pass, satisfactory) and credit has been awarded. Note that a "D" will not be accepted for the AAOT degree, foundational requirements and for some programs. (See individual program requirements.)
- Students working toward a COCC degree must complete a minimum of 24 COCC credits. Certificate-seeking students must complete a minimum of 18 COCC credits. Challenge, Advanced Placement (AP), College Level Examination Program (CLEP) and Credit for Prior Certification (CPC) credits do not meet this requirement.

Noncollegiate and Nonaccredited Institutions
COCC will evaluate records for Career and Technical Education students from noncollegiate and nonaccredited institutions (such as business and trade schools) under the following guidelines:
- Only coursework that is technical in nature and certificate–or degree–applicable will be evaluated.
- Coursework will be evaluated by the appropriate Career and Technical Education program director.

- Sufficient documentation (transcripts, certificates, course descriptions, etc.) must be submitted to enable an informed review. Documentation must be received directly from the originating institution or program. The American Council on Education (ACE) guides will assist in evaluating the credentials. In some cases, COCC faculty will be consulted for evaluation of a particular credential.
- Material must be equivalent to regular credit courses offered at COCC. Credit is not considered based on what the student "knows," but on the content of, and recorded achievement in, the course itself.
- Material may not duplicate that for which credit has previously been awarded in transfer or at COCC.

Advanced Placement Exams (AP)
Credit will normally be awarded following approved guidelines from COCC academic departments. Typically, credit is considered only when it is equivalent to regular course offerings at COCC and when it is not duplicated.

Advanced Placement (AP) will be evaluated at COCC as listed below.

AP Biology, score 4+	BI 101, 102 and 103
AP Calculus AB, score 3	MTH 251
AP Calculus AB, score 4+	MTH 251, 252
AP Calculus BC, score 3	MTH 251, 252
AP Calculus BC, score 4+	MTH 251, 252, 253
AP Chemistry, score 4+	CH 221, 222, 223
AP Comparative Government score 4+	PS 204
AP Comp Science A, score 4+	CS 161
AP Comp Science AB, score 3	CS 161
AP Comp Science AB, score 4+	CS 161, 162
AP Drawing score 4+	4 credits, discipline studies arts and letters
AP Environmental Science score 3+	4 credits, discipline studies, lab science
AP European History, score 3+	HST 101, 102
AP French Language, score 3	FR 101, 102, 103
AP French Language, score 4	FR 103, 201, 202
AP French Language, score 5	FR 201, 202, 203
AP German Language, score 3	GER 101, 102, 103
AP German Language, score 4	GER 103, 201, 202
AP German Language, score 5	GER 201, 202, 203
AP Human Geography score 3+	GEOG 107
AP Comparative Government score 4+	PS 204
AP Language and Composition, score 3+	WR 121
AP Lit and Comp, score 3+	4 credits in one of: ENG 104, 105, 106, 107, 108, 109 (No writing credits earned with Literature and Comp tests)
AP Microeconomics, score 3+	EC 201
AP Macroeconomics, score 3+	EC 202
AP Physics 1: Algebra Based, score of 4+	4 credits, PH 201
AP Physics 2: Algebra Based, score of 4+	4 credits, PH 202
BOTH AP Physics 1 & AP Physics 2: Algebra Based, score of 4+	12 credits, PH 201, 202 & 203
AP Psych, score 3+	4 credits, psychology prefix, discipline studies list
AP Spanish Language, score 3	SPAN 101, 102, 103
AP Spanish Language, score 4	SPAN 103, 201, 202
AP Spanish Language, score 5	SPAN 201, 202, 203
AP Statistics, score 4+	MTH 243
AP Studio Art 2D score 4+	4 credits, discipline studies arts and letters
AP Studio Art 3D score 4+	4 credits, discipline studies arts and letters
AP US Government, score 3-5	PS 201
AP US History, score 4+	HST 201
AP World History, score 4+	8 credits, history electives (not discipline studies)

International Baccalaureate (IB)
COCC recognizes International Baccalaureate (IB) achievement by awarding credit to students who score 5 or above on Standard or High-level IB exams. A grid outlining how credit will be awarded is maintained on the COCC website. Credit is applied to a student's record after the student has been admitted to COCC

and official transcripts or score reports have been received by the Admissions and Records office.

CREDIT FOR PRIOR LEARNING

Credit for Prior Learning (CPL) is defined as credit obtained through evidence-based assessment of learning that occurs outside of traditional college-level coursework that includes these types of assessments at COCC:
- ACE Credit Recommendation (Military Service, noncollegiate learning)
- College Level Examination Program (CLEP)
- Credit for Prior Industry Certifications
- Institutional Challenge Exams and Courses

ACE Credit Recommendations
The American Council on Education (ACE) is a college credit recommendation service that evaluates workforce training and makes suggestions for academic credit. In most cases COCC will accept the recommendations in the National Guide. To be considered for college credit students must submit official ACE transcripts.

The ACE guidelines will be used when considering military credit for courses (not occupations) documented on the DD-214 and/or other official training documents. Typically, credit is considered only when it is equivalent to regular course offerings at COCC, when it is not duplicated and when it is applicable to a student's degree requirements.

College Level Examination Program (CLEP)
CLEP exams will be evaluated at COCC as listed below. The following scores are listed as minimum:

CLEP Accounting, score 70+	business elective
CLEP American Literature, score 50+	ENG 253, 254
CLEP Biology, score 50+	BI 101, 102, 103
CLEP Calculus with Elem. Function, score 50+	MTH 251
CLEP Calculus with Elem. Function, score 60+	MTH 251, 252
CLEP Chemistry, score 50+	CH 221, 222, 223
CLEP College Algebra, score 50+	MTH 111
CLEP College Mathematics, score 50+	MTH 105
CLEP English Composition	no credit
CLEP English Literature, score 50+	ENG 204, 205
CLEP Foreign Language, (no more than 12 credits per language)	
French: score 50+	FR 101, 102, 103
French: score 59+	FR 201, 202, 203
German: score 50+	GER 101, 102, 103
German: score 60+	GER 201, 202, 203
Spanish: score 50+	SPAN 101, 102, 103
Spanish: score 60+	SPAN 201, 202, 203
CLEP General Exam in Natural Sciences, score 50+	9 non-lab science credits for "additional courses" or electives
CLEP General Math	no credit
CLEP Humanities, score 50+	8 credits, discipline studies arts and letters
CLEP Intro Business Law, score 70+	business elective
CLEP Macroeconomics, score 50+	EC 202
CLEP Microeconomics, score 50+	EC 201
CLEP Principles of Management, score 70+	business elective
CLEP Principles of Marketing, score 70+	business elective
CLEP Sociology, score 50+	SOC 201
CLEP US History I, score 50+	HST 201
CLEP US History II, score 50+	HST 202
CLEP Western Civ I, score 50+	HST 101
CLEP Western Civ II, score 50+	HST 103
CLEP both Western Civ I and II, scores of 50+	HST 101, 102, 103

Students may arrange to take the CLEP tests at the COCC Tutoring Center, 541.383.7539.

Credit for Prior Certification (CPC)
Students in Career and Technical Education programs may receive credit for prior certification if they have completed a course, training or other program that is taught to state, national or other officially recognized standards. Credit is not awarded for other life experiences. Students interested in receiving credit for prior certification must submit official copies of prior certifications to the Program Director, along with a Credit for Prior Certification request form. Once approved, students will then forward the documentation to the Transcript and Degree Evaluation department in Admissions and Records. If credit can be awarded, the student must pay a $40/course fee prior to having credits transcribed.

Credits will be posted at the top of the student's transcript in a section titled "Credit for Prior Certification" so as to not be confused with regular COCC coursework. COCC's transcription of credit does not guarantee that the credit will be accepted by another higher education institution. Each institution establishes its own credit for prior certification policy and will evaluate prior certification based on that policy.

Credits transcripted for prior certification may not be used to acquire full-time status or to meet eligibility requirements for any other purpose, such as financial aid, veteran benefits or scholarships. For Career and Technical Education programs, a maximum of 24 credits for prior certification will be awarded for associate degrees; 12 credits for certificates. Credit for prior certification does not apply toward the minimum 24 COCC credits required to complete a COCC degree; 18 COCC credits for a certificate.

Challenge Courses
Students that have knowledge and experience similar to a particular course may challenge a course and receive credit for that course. Course challenges are subject to the following:
- Students cannot challenge courses at a lower level than ones in which they have already demonstrated competency, nor at a lower level than ones in which the student has already registered.
- Students may not challenge courses which they have already taken.
- Students may not challenge courses in which experiencing the course itself is essential.
- Challenged courses do not apply toward meeting residency requirements for a certificate or degree.
- Challenged courses do not count in determining financial aid eligibility.

In order to assess whether or not the student has a reasonable chance of successfully challenging a course, a student must receive permission from a faculty member in the subject area and the department chair prior to challenging a course. If approved, the student and department complete the Challenge Petition form. This must be completed by the end of the second week of the term. The challenge paper or final must be completed prior to the end of the term.

Challenged courses are charged the regular tuition rate payable at the time the completed petition is processed through Enrollment Services in Admissions and Records. It is the student's responsibility to schedule challenge examinations with the

instructor. The exam may be rescheduled, only at the instructor's discretion, in extraordinary circumstances. A grade of Pass or No Pass is assigned, where a Pass is earned for performance equivalent to a grade of "B-" or better. Students may not rechallenge a course if they do not pass the first attempt. Go to cocc.edu/policies/general-policy-manual/academic and read "Course Challenge" section for complete details.

Computer Competency Requirement
Some COCC associate degrees (AS, AAS and AGS) require students to demonstrate basic computer skills prior to graduation. To meet this requirement, students must successfully complete CIS 120 Computer Concepts, or pass Key Applications and either LivingOnLine or Computer Fundamentals of the IC3 exams.

The IC3 exams may be taken at the COCC Tutoring and Testing Center or any authorized Certiport Testing Center. Locally, appointments can be made through the Tutoring and Testing Center located in the lower level of the Barber Library. A $35 fee is charged for each test; one free retake is included in the $35 fee. If a student needs to retake the exam a third time, another $35 fee is charged.

Passing two of three exams does not provide students with course credit; instead, a notation is placed on the student's record so that the testing may be used to meet degree requirements. By successfully passing all three exams students are eligible to receive 4 credits for CIS 120. To have the 4 credits applied to certificate degree requirements, students must present proof that they have received certification by passing all three exams and follow the Credit for Prior Certification procedures. Students will be charged $40 to have the credits transcribed.

Note: CIS courses may be required in some AS or AAS programs and the competency test will not substitute for that requirement. See individual program descriptions for details.

INTERNATIONAL CREDENTIALS

International credentials will be evaluated using the following principles:
- Coursework must be completed at a nationally recognized, university-level institution and must be at a level of achievement comparable to COCC's A, B, C and D grades. Note that a "D" will not be accepted for the AAOT degree, foundational requirements and for some programs. See individual program descriptions. The applicability of such transfer credit will be evaluated as is credit from U.S. institutions.
- NAFSA: Association of International Educators and American Association of College Registrars and Admissions Officers (AACRAO) guidelines will be used in evaluating the credentials.
- The student will pay for costs associated with international transcript evaluations.

It is the responsibility of each student with transcripts from foreign universities to have the transcript translated (if necessary) and evaluated for acceptance toward a COCC certificate or degree. The student must use a member of the National Association of Credential Evaluation Services. Details on foreign transcript evaluation are available at the COCC Admissions and Records office, Boyle Education Center. English taught outside the United States may not meet COCC's English composition requirement. Degrees from foreign countries do not waive the general education or writing competency requirements.

GRADUATION

COCC will automatically award certificates or degrees upon completion of the requirements in the student's declared program of study. No application is necessary. Students will be notified of their progress as they approach completion and again after the certificate or degree has been awarded. Students use GradTracks, an online degree evaluation tool, to track their progress to completion and must be sure their academic record accurately represents the catalog/planning year and certificate or degree they are pursuing.

Students who wish to be awarded a certificate or degree that is not their declared program of study must complete the Application for Degree no earlier than their final term. The application is located online at cocc.edu/departments/admissions/graduation-and-honors.

COCC provides advising toward its certificates and degrees; however, students are ultimately responsible for being informed about degree requirements and for selecting appropriate classes.

Graduation Requirements
A certificate or degree is awarded when it meets the appropriate course requirements listed in this catalog and the student has met the following guidelines:

☐ Complete the minimum number of credits required for the degree.

☐ Earn a minimum 2.0 cumulative grade-point average at COCC.

☐ Owe no debt to the College.

☐ Complete at least 24 degree-applicable residency credits for an associate's degree; 18 certificate-applicable residency credits for a certificate.

☐ Meet at least one of the following criteria:
1. Students have three years to complete their program under the catalog in which they began or any subsequent catalog.
   a. The student's default catalog year is the year the student is admitted to COCC and the student may graduate under that default catalog year or either of the next two catalog years.
   b. If the student has a break in enrollment for four consecutive terms, the student must reapply to COCC and the default catalog year will now be the year the student is readmitted.
   c. The student's choice of catalog years is limited to two catalog years prior to the student's year of graduation. If the student does not graduate within three catalog years of student's admittance, the default catalog year will be updated yearly to the subsequent catalog year.

2. The student transfers back to COCC other college credit and meets degree requirements listed in the current college catalog or the previous two catalog years.

When a student's completion of degree requirements coincides with the last term attended, the degree will be posted in that term. When the student uses transfer credit after an absence from the College, the degree will be posted in the term in which the degree evaluation is successfully completed and when it has been determined that all degree requirements have been met.

Multiple/Concurrent Degrees
Students applying for multiple or concurrent degrees must meet the degree requirements outlined above and as listed for each degree on the following pages. For each additional degree, students must complete at least 15 COCC credits that are different from those used for the other degree(s) and are applicable to the additional degree requested and must complete the Application for Degree no earlier than their final term.

Graduation Honor Roll
Honors will be listed on the transcripts of COCC graduates based on the following cumulative GPA from the end of the term prior to the student's graduation:
    3.60–3.74   honors
    3.75–3.89   high honors
    3.90–4.00   highest honors

Graduates participating in commencement exercises will receive honor cords. Graduates with a 4.00 cumulative GPA will have an asterisk by their name in the annual commencement program.

Commencement
A commencement ceremony is held once each year in June, following the end of Spring term. All students who have met requirements for a two-year Associate Degree or a one-year Certificate of Completion (36 credits or more) are eligible to participate in commencement if they have earned or will earn that certificate or degree in the past Fall, Winter or Spring, or the coming Summer. (Only candidates for Summer graduation who demonstrate a realistic plan to complete all requirements by the end of Summer term are eligible). Students wishing to participate in the commencement ceremony must submit participation confirmation in their Bobcat Web Account when made available.

TRANSFERRING CREDITS TO A FOUR-YEAR UNIVERSITY

As a general rule, Oregon public universities will accept up to 124 lower-division quarter hours of transferrable college credit. It is ultimately the responsibility of the students to know and meet the course requirements of the four-year college or university to which they wish to transfer. Students may obtain assistance from academic advisors.

Grades of A, B or C earned in transfer courses (numbered 100-299) are generally accepted by other colleges; other grades may have limited transferability. COCC has also made arrangements with select programs at four-year colleges and universities for the transfer of certain Career and Technical Education (CTE) courses.

Students seeking a Bachelor of Arts or a Bachelor of Science degree should be aware of world language and other degree or major-specific requirements.

POLICIES

STUDENT EDUCATIONAL RECORDS AND DIRECTORY INFORMATION

Admissions & Records maintains all official academic records of enrolled students including, but not limited to, transcripts, registration forms, transfer credits and degree evaluations. For record-keeping purposes, the College considers web registration as part of a student's official record. Financial Aid maintains all student aid and scholarship records.

Central Oregon Community College follows the Federal Health Education and Welfare Guidelines for the Family Education Rights and Privacy Act of 1974–Pell-Buckley Amendment (FERPA), which gives students attending post-secondary institutions the right to inspect their educational records. Those rights are:

1. The right to inspect and review their education records within 45 days of the day COCC receives a request for access.

   Students must contact the registrar at 541.383.7500 or welcome@cocc.edu and submit a written request that specifies the specific records they wish to inspect. The registrar will make arrangements and notify the student of the time and place where the records may be inspected.

   The College reserves the right to withhold transcripts from students who are in debt to the institution. Students have the right to discuss the matter with a representative empowered to resolve such disputes.

2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. Students should write the registrar, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, COCC will notify and advise the student of the decision and of his or her right to a hearing regarding the request for amendment. The College also will provide additional information regarding the hearing procedures.

3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

   One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by COCC in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom COCC has contracted (such as an attorney, auditor or collection agent); a person serving on the Board of Directors; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing

his or her tasks. A school official has legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by COCC to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:
Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue SW
Washington, DC 20202-5901

DIRECTORY/RELEASE OF INFORMATION

The College does not publish a student directory. Requests for directory information must clearly state the student's name.

Central Oregon Community College considers the following information to be directory information and may release it if requested on an individual basis:
• student's full name
• terms of attendance (not daily attendance)
• major field of study
• full- or part-time enrollment status
• degrees, certificates and honors awarded
• address and telephone number
• email address
• participation in officially recognized activities and sports
• most recent previous school attended
• class standing (freshman or sophomore status)

Students who do not wish the above information to be released by the College must submit a signed statement requesting that this information be withheld. Contact Admissions and Records for the necessary form and additional information. The request to withhold information remains in effect until the student submits a signed statement indicating that directory information may be released. Students should keep the College notified of current addresses and telephone numbers. Students can update this information through their Bobcat Web Account.

Information such as grades, progress in coursework, financial aid status and class schedule will not be released, except as authorized by law. If students wish to have this information released to parent/guardians, employers or other non-college entities, students must submit a Release of Information form to Admissions and Records in the Boyle Education Center. The release is valid until the student requests in writing to have it revoked.

RELEASE OF DIRECTORY INFORMATION FOR MILITARY RECRUITING PURPOSES

Under the Solomon Amendment Interim Rule to implement the National Defense Authorization Act of 1995 and of 1996, and the Omnibus Consolidated Appropriations Act, 1997, schools receiving Title IV funding must provide military access

to directory information for students 17 years of age or older. For purposes of the act, directory information is defined as name, address, telephone listing, date and place of birth, level of education, degrees received and the educational institution in which the student was most recently enrolled. Students who have formally requested COCC to withhold all directory information from third parties will not be included.

SOCIAL SECURITY NUMBER/ INFORMATION CONSENT

The College adheres to the following policy statement:
"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. Providing your social security number means that you consent to use of the number in the manner described."

Oregon Administrative Rules (OAR) 589-004-0400 authorizes Central Oregon Community College to ask students to provide their social security numbers. The numbers will be used by the college for reporting, research and record keeping. The numbers will also be provided by the college to D4A (Data for Analysis), which 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 College to support the progress of students and their success in the workplace and other education programs.

D4A or the College may provide a student's 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 go on 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 the student by the College.

State and federal law protects the privacy of student records. The social security number will be used only for the purposes listed above. However, there may be times when solicitation and disclosure of a student's social security number is mandated by federal law.

PHOTO/VIDEO CONSENT

COCC assumes consent of students and staff to use their likeness in photos and/or videos, unless otherwise requested.

STUDENT CONCERNS PROCESS

COCC has a college concerns procedure designed to provide employees, students and community members a way to appeal decisions made within the College. Contact Student Life at 541.383.7590 for a copy of the procedure, or view it online at cocc.edu/student-life and clicking on the Student Policies link.

CONCERNS REGARDING GENDER DISCRIMINATION, SEXUAL HARASSMENT, OR MISCONDUCT, DATING VIOLENCE, DOMESTIC VIOLENCE AND STALKING

Students or employees who believe they have experienced or witnessed discrimination, sexual harassment, or misconduct, dating violence, domestic violence, or stalking are encouraged to report this information to the College's EEO/Title IX Officer, 541.383.7216 or the Director of Student Life, 541.383.7592. These staff can provide assistance and resources and discuss possible responses for the situation. Do not wait to report concerns until the situation becomes too serious (i.e. severe, pervasive or persistent). Off-campus harassment, misconduct or violence by members of the College community should be brought promptly to the attention of the College staff listed above.

NO RETALIATION STATEMENT
No one at the College may reprimand, discriminate or otherwise retaliate against an individual for initiating an inquiry or complaint in good faith, nor against other individuals who share information related to the complaint.

TITLE IX STATEMENT

Title IX protects people from discrimination based on sex in education programs and activities. This includes conduct such as: gender discrimination (includes males, females, transgender, gender identity, etc.), sexual harassment, sexual assault, stalking, intimate partner/relationship violence, bullying and cyberbullying, retaliation, the failure to provide equal opportunity in athletics and discrimination based on pregnancy. Persons having questions about Title IX should contact the Title IX Officer at 541.383.7218.

STUDENT RIGHTS AND RESPONSIBILITIES

In order to provide for the maximum safety, convenience and well-being of the total College community, certain standards of behavior have been established at COCC. Upon admission to the College, all students accept an unqualified commitment to adhere to such standards and to conduct themselves in a manner appropriate to an educational environment, one which reflects respect for themselves and the College. Such actions as academic dishonesty, abuse of property, harassment, any violation of federal or state law, possession of alcoholic beverages and possession of illegal drugs are in violation of the College's standards and are cause for disciplinary action. The disciplinary action taken by the College covers a range of possibilities up to and including dismissal from college. A comprehensive Student Rights and Responsibilities guide is available online at cocc.edu/student-life and clicking on the Student Policies link.

ALCOHOL AND DRUG POLICY

In compliance with the Drug-Free Workplace Act of 1988 (Public Law 100-690, Title V, Subtitle D) and the Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226), it shall be the policy of Central Oregon Community College to maintain a drug-free campus for all employees and students. It is the responsibility of the College to notify students and staff of college policy. In accordance with this intent, the following policy is in effect:

DRUG-FREE CAMPUS
The unlawful possession, use or distribution of illicit drugs and alcohol is prohibited on the College campus, in all College facilities or as part of any College-sponsored activity. Violators of this policy will be prosecuted to the full extent of state and federal law and, in addition, there are specific consequences for employees and for students which are stated in the College Drug-Free Campus Procedures.

Employees and students can find assistance, abuse prevention resources and health risks information associated with the use of illicit drugs and the abuse of alcohol and warning signals, online at cocc.edu/student-life.

NONDISCRIMINATION POLICY

The goal of Central Oregon Community College is to provide an atmosphere that encourages our faculty, staff and students to realize their full potential. In support of this goal, it is the policy of Central Oregon Community College that there will be no discrimination or harassment on the basis of age, disability, sex, marital status, national origin, ethnicity, color, race, religion, sexual orientation, gender identity, genetic information, citizenship status, veteran status or any other classes protected under Federal and State statues in any education program, activities or employment. Persons having questions about equal opportunity and non-discrimination should contact the Equal Employment Officer c/o COCC's Human Resources office at 541.383.7216.

Faculty, staff and students are protected from discrimination and harassment under Title VII of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972. Persons attending classes or events who need accommodation for a specific disability should contact the office of Services for Students with Disabilities at 541.383.7583. Persons needing physical accommodation for a College special event should

POLICIES

contact the ADA Coordinator at 541.383.7775. Further inquiries may be directed to the Affirmative Action Officer, c/o COCC's Human Resources office at 541.383.7216.

SMOKING POLICY

Smoking is banned in all of the buildings of Central Oregon Community College. Smoking or the use of smokeless tobacco is limited to campus parking lots unless otherwise noted. Use in parking lots adjacent to buildings must be 25 feet away from any portion of the building. During high fire danger periods, smoking will be banned completely.

STUDENT RIGHT-TO-KNOW ACT

In order for students to make more informed decisions about attending college, Central Oregon Community College makes the following information available in accordance with the federal Student Right-to-Know Act and related regulations:
- General Institutional Information: services for disabled students, cost of attendance and additional program costs, student diversity, students' rights under the Family Education Rights and Privacy Act (FERPA), student concerns procedure, copyright infringement, net price calculator, non-discrimination policy and annual student demographic information.
- Financial Aid Information: withdrawal and refund policy and associated financial aid implications, return of financial aid due to withdrawal, types of aid, how to apply for aid, how aid is disbursed, rights and responsibilities of students receiving aid, financial aid penalties for drug law violations, work-study terms and conditions, satisfactory academic progress criteria, study abroad financial aid opportunities and loan repayment options.
- Student loan information: initial loan counseling for students, exit loan counseling for students, deferment options for Peace Corp and related service organizations.
- Academic information: academic warning standards, accreditation, articulation agreements, degree options, academic programs, adult basic skills programs, campus academic facilities, faculty and staff contact information, transfer credit policy, international baccalaureate credit and out-of-state academic student complaint procedure.
- Health and Safety Information: campus crime report/safety, alcohol/drug policy, drug and alcohol abuse prevention information, emergency procedures, sex offender information, vaccination policies, mandatory reporting-child protection policy.
- Student outcomes: graduation and transfer rates, retention rates, graduate employment status.

Student Right-To-Know information is available on the College's website at cocc.edu/srtk.

DEGREE AND CERTIFICATE OVERVIEW

Central Oregon Community College offers a variety of transfer and Career and Technical Education (CTE) certificate and degree options, which allow students to choose their program based on their educational goals.

TRANSFER/BACHELOR DEGREE PREPARATION

Students wishing to attend COCC and use credits earned toward a bachelor's degree have several options that range from completing individual courses to completing an associate degree designed for transfer.

ASSOCIATE OF ARTS, OREGON TRANSFER (AAOT)
Intended for students who will earn a bachelor's degree. All public Oregon universities have agreed to accept all credits included in the AAOT, to waive lower division general education requirements and to allow junior standing. AAOT programs offer specific "focus areas" that provide a suggested course of study for students interested in pursuing a bachelor's degree in certain disciplines.

ASSOCIATE OF SCIENCE (AS)
The AS is intended for students interested in pursuing a bachelor's degree at a specific institution, or in a specific major (generally in engineering, science or business), or both. The student can either use a pre-designed AS degree or work closely with their advisor to include their transfer requirements in the AS template, and submits the plan to Admissions and Records office. Since requirements at other institutions can change, students are encouraged to monitor their course selection against the catalog of their destination college.

OREGON TRANSFER MODULE (OTM)
While not a full certificate or degree, the transfer module guarantees that another Oregon community college or public university will accept all module credits toward their general education requirements.

Articulation Agreements
COCC partners with several colleges and universities to offer a seamless transfer among institutions for certain majors. Refer to degree requirements for articulation possibilities.

Transfer Without a Degree
Students may select individual courses at COCC and transfer them to a college or university. Students who will not complete a degree at COCC are encouraged to research degree requirements for the college at which they will earn their bachelor's degree and select courses accordingly. The Oregon public universities have equivalency guides to aid in selecting equivalent courses. Every college will have a policy on transfer credit that can usually be located on the destination college's website, often under the admissions information for transfer

students. A COCC faculty advisor or a CAP Services advisor can assist students with locating this information.

CAREER AND TECHNICAL EDUCATION (CTE)

COCC's Career and Technical Education programs prepare students to enter the workforce in a specific field. CTE programs provide hands-on training in a variety of technical areas with the goal of giving students the skills needed for various technical jobs (examples include dental assisting, automotive technology and health information technology).

ASSOCIATE OF APPLIED SCIENCE (AAS)
Intended for students who want earn a college degree, gain technical skills in a specific area and get a job after graduation. Some degrees have AAS Options, which reflect transcripted specializations within the base degree.

CERTIFICATE OF COMPLETION
Similar to the AAS but smaller in scale, certificates provide hands-on training for employment. Many certificates of completion allow students to stop at a variety of points, gain employment in the field and return at a later date for more advanced training. Certificates can be related to an AAS degree, which means all the certificate credits are included in the degree, or they can be independent of a degree.

SHORT-TERM CERTIFICATE OF COMPLETION
Short term certificates are a cluster of courses from within a certificate or AAS degree which reflect a technical skill or skills associated with the occupation or job for which the parent program provides training.

INDIVIDUALIZED STUDY

EXPLORATORY
Students may also elect to be an exploratory student at the beginning of their academic career at COCC. This provides students the opportunity to explore different programs and majors before deciding on a program or degree. Students may choose the Associate of Arts Oregon Transfer (AAOT) exploratory option, which allows room to explore different subjects while completing general education classes. Or, students may choose the Associate of General Studies (AGS) option, which allows students to self-design a program to meet their needs.

ASSOCIATE OF GENERAL STUDIES (AGS)
For students not pursuing specific transfer or career and technical programs, the AGS degree is intended to allow students to design a course of study to meet their individual needs.

LENGTH OF PROGRAM

The time to completion of COCC programs varies according to many factors such as: continuous enrollment, Summer term registration, full time/part time status, course availability, course sequencing and placement. In addition, some programs have prerequisites that must be completed prior to progression into core classes which may extend time to completion, depending on the above factors. Students who have completed prerequisites, or are pursuing a program that does not have prerequisites, and attend full-time (averaging a minimum of 15 credits a term) can generally complete an associate degree in two years, a certificate of completion in one year (though the size of certificates vary) or a short-term certificate of completion in less than one year. Students should work with their academic advisor and review their GradTracks plan to determine their estimated time to completion.

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

The Associate of Applied Science degree trains students in specific technical areas to prepare for immediate employment upon graduation.

Advantages
- The AAS degree provides students with the hands-on technical skills needed for employment or certification/licensure in a variety of career areas.
- The AAS degree is generally a two-year degree option for full-time students. Some AAS degrees have certificates or shot-term certificates contained within them that can be earned along the way.

Considerations
- The degree is not intended to transfer, though most general education and some Career and Technical Education (CTE) courses may be eligible for transfer.
- Certification obtained through the completion of career and technical programs does not imply or guarantee reciprocity or job attainment in another state or in another country.

See individual program pages for AAS degree requirements. Students must have a minimum cumulative GPA of 2.0.

OREGON TRANSFER MODULE (OTM)

The Oregon Transfer Module is designed for students who plan to transfer to an Oregon community college or public university. Composed of 45 credits in writing, math, speech, social sciences, sciences, arts and letters, and electives, it is similar to many institutions' freshman year requirements.

Advantages
- Completion of the OTM guarantees that another Oregon community college or public university will accept all credits toward the institution's general education requirements and depending on courses chosen, may meet some lower-division major requirements.
- The Oregon Transfer Module provides students with documentation of completion of a standard set of commonly accepted courses.

Considerations
- Depending on the institution, students may be required to take additional general education courses. Students transferring to an Oregon public university should review any world language and specialty course requirements of the transfer institution. The OTM is not designed to be an endpoint, but rather a tool toward degree completion. The OTM is not a degree or certificate but can be noted on a transcript to confirm completion of a subset of general education courses common among Oregon's colleges and universities.

All courses must be completed with a "C" or better. Students must have a minimum cumulative GPA of 2.0.

GENERAL EDUCATION/FOUNDATIONAL REQUIREMENTS
The following course numbers cannot be used in foundational requirements: X80, X88, X99, or 298.

Writing
Two college-level English Composition courses

Oral Communication
SP 111

Mathematics
MTH 105 (or higher)

GENERAL EDUCATION/DISCIPLINE STUDIES
See the Discipline Studies list for options.

Arts and Letters
Choose three (3) courses from the Discipline Studies list.

Science/Math/Computer Science
Choose three (3) courses from the Discipline Studies list, including at least one biological science with a lab.

Social Science
Choose three (3) courses from the Discipline Studies list.

ELECTIVES
As required to bring overall credits to 45 credits. Courses must be from COCC's Discipline Studies list.

ASSOCIATE OF ARTS OREGON TRANSFER DEGREE (AAOT)

The Associate of Arts Oregon Transfer (AAOT) degree conforms to the state of Oregon guidelines and therefore allows students to transfer to an Oregon public university (some Oregon private colleges and some out-of-state universities) having met all lower-division general education requirements. With appropriate planning, all lower-division major requirements may also be met. Students should work closely with an advisor to select the best degree option and to review specific transfer requirements.

The AAOT degree is not associated with a major, and is awarded as "Associate of Arts/Oregon Transfer." However, COCC provides specific focus areas (psychology, geology, etc.) within the degree that can assist students with selecting courses that align with the student's intended program of study and the degree requirements of the baccalaureate institution to which the student plans to transfer.

Advantages
- Fulfills the lower-division (freshman/sophomore) general education requirements for baccalaureate degrees at all Oregon public universities.
- Allows student to transfer with junior standing for registration purposes.

Colleges which accept the COCC AAOT degree besides Oregon's public universities include: Concordia College (OR), George Fox College (OR), Linfield College (OR), Marylhurst College (OR), Pacific University (OR), University of Portland (OR), Warner Pacific College (OR) and Willamette University (OR), Evergreen State College (WA), Pacific Lutheran University (WA) and Washington State University (WA).

Considerations
- No formal agreements exist for this degree to meet general education requirements at out-of-state colleges, although courses for COCC's AAOT degree parallel many of them.
- Students transferring to an Oregon public university should review any world language and specialty course requirements of the transfer institution.
- The AAOT does not guarantee that two additional years will suffice to earn a baccalaureate degree nor give students junior standing in their majors. Students must still meet their transfer institution's admission requirements.
- Students may transfer prior to receiving an AAOT degree. However, they risk losing credits that are normally accepted within the degree or may fall short on the transfer institution's general education requirements.

All courses must be completed with a "C" or better. Students must have a minimum cumulative GPA of 2.0 and must complete a total of 90 credits at the time the AAOT is awarded. Individual courses may only be used to fulfill one requirement (except the Cultural Literacy requirement). Both Foundational requirements and Discipline Studies courses listed below must be a minimum of three (3) credits except for HHP which may be any number of credits. All elective courses may be any number of credits.

GENERAL EDUCATION/FOUNDATIONAL REQUIREMENTS
The following course numbers cannot be used in foundational requirements: X80, X88, X99, or 298.

Writing (minimum of 8 credits)
WR 121 and either WR 122 or WR 227

Oral Communication
SP 111 or SP 114 or SP 115 or SP 218 or SP 219

Mathematics
MTH 105 (or higher)

Health (3 credits with HHP or HHPA prefix)
Identical HHPA activity courses (1 credit) can only be counted once in this section.

GENERAL EDUCATION/DISCIPLINE STUDIES
One course must be designated as Cultural Literacy.

Arts and Letters
At least three (3) courses from at least two (2) prefixes.

Social Science
At least four (4) courses from at least two (2) prefixes.

Science/Math/Computer Science
At least four (4) courses from at least two (2) prefixes including at least three (3) laboratory courses in biological and/or physical science.

ELECTIVES
Choose any course numbered 100 or above that brings the total credits to 90 quarter hours. This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable.

ASSOCIATE OF SCIENCE DEGREE (AS)

The Associate of Science (AS) degree is designed to prepare students to transfer to a specific four-year college or university, to a specific major, or both. In Oregon there are two types of Associate of Science degrees: the Associate of Science Oregon Transfer and the Associate of Science degrees approved by COCC. Students must have a minimum cumulative GPA of 2.0.

ASSOCIATE OF SCIENCE OREGON TRANSFER (ASOT)

Unlike the AAOT degree, the ASOT includes courses that institutional representatives recommend as preparation for specific majors. Please note that the degree does not guarantee completion of lower division major requirements for the major and that course, class standing and GPA requirements for specific majors are not necessarily satisfied. Students should always check with the receiving institutions to ensure they have the most current transfer and degree information. COCC currently offers Associate of Science Oregon Transfer degrees in Business and Computer Science.

Advantages
• Students can meet all or most general education and/or major requirements for a specific transfer college or university if appropriate courses are chosen.

Considerations
• The ASOT degree can limit a student's flexibility in choosing both the major and the transfer college.
• The ASOT degree does not assure junior standing at Oregon transfer universities and does not guarantee that a student will meet all lower-division general education and major requirements.

ASSOCIATE OF SCIENCE (AS)

COCC is approved by the state to offer AS degrees to prepare students to transfer to a specific baccalaureate program. Classes are identified to assist students in transitioning to upper division programs. Unlike the Associate of Arts Oregon Transfer or Associate of Science Oregon Transfer degrees, this degree has no guarantee on how it will be treated by receiving institutions. Students should always check with receiving institutions to ensure they have the most current transfer and degree information. COCC offers two types of AS degrees.

An AS degree that is of broad interest to students, and is approved and maintained in the catalog. COCC currently offers Associate of Science degrees with a focus in the following areas: Agricultural Science/Oregon State University, Aviation/Oregon Institute of Technology, Cyber Security/OIT, Engineering/Oregon State University, Fire Service Administration/Eastern Oregon University, Forestry/Oregon State University, General Transfer/Oregon State University, Medical Imaging/Oregon Institute of Technology, Natural Resources/Oregon State University, Outdoor Leadership/Oregon State University.

1. An AS degree that is intended to meet the specific needs for an individual student, and is approved for an individual student. The student and advisor work closely together to tailor the courses to meet the transfer institution's lower-division general education and major requirements.

Advantages
• Students can meet all or most general education and/or major requirements for a specific transfer college or university if appropriate courses are chosen.
• The AS degree works well for students in more technical majors (e.g., science, business, engineering), but can also be designed for other majors.

Considerations
• The AS degree can limit a student's flexibility in choosing both the major and the transfer college.
• The AS degree does not assure junior standing at Oregon transfer universities and does not guarantee that a student will meet all lower-division general education and major requirements.
• This degree is awarded as "Associate of Science" on the transcript and diploma without reference to a major.

GENERAL EDUCATION/FOUNDATIONAL REQUIREMENTS

The following course numbers cannot be used in foundational requirements: X80, X88, X99, or 298.

All courses must be completed with a "C" or better.

Writing (minimum of 8 credits)
WR 121 and either WR 122 or WR 227

Oral Communication
(If required by destination college)

Mathematics
MTH 105 (or higher)

Health
(If required by destination college)

Digital Literacy
(If required by destination college)

GENERAL EDUCATION/DISCIPLINE STUDIES

See the Discipline Studies list for options.

Arts and Letters
Choose two (2) courses from the Discipline Studies list.

Social Science
Choose two (2) courses from the Discipline Studies list.

Science/Math/Computer Science
Choose two (2) courses from the Discipline Studies list.

PROGRAM REQUIREMENTS

If AS degree is targeted toward a specific major.

ELECTIVES

Choose enough elective credits to reach a minimum total of 90 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any world language and specialty course requirements of the transfer institution.

ASSOCIATE OF GENERAL STUDIES DEGREE (AGS)

For students who are not pursuing specific transfer or Career and Technical Education (CTE) programs, the Associate of General Studies (AGS) degree provides an alternative to pursue a broad general education and accomplish personal educational goals. It is important for a student to work closely with an advisor in designing a course plan for this degree. Students must have a minimum cumulative GPA of 2.0.

Advantages
- The AGS awards a degree for completion of college-level coursework in core skills and general education and allows students flexibility to customize more than half of the degree's required number of credits. It can be used to enhance employment, meet sponsoring agency requirements and/or meet unusual baccalaureate requirements.

Considerations
- The AGS degree is not transferrable as a whole and does not meet certification requirements for any Career and Technical Education (CTE) area.
- The AGS degree does not guarantee that a student will meet all lower-division general education and major requirements; however, with careful academic advising and in consideration of transfer institution requirements, the AGS degree may be designed to do so.

GENERAL EDUCATION/FOUNDATIONAL REQUIREMENTS
The following course numbers cannot be used in foundational requirements: X80, X88, X99, or 298.

Courses must be completed with a "C" or better.

Writing (minimum of 8 credits)
WR 121 and either WR 122 or WR 227

Oral Communication
SP 111 or SP 114 or SP 115 or SP 218 or SP 219

Mathematics (minimum of 3 credits)
MTH 020 (or higher)

Health
4 credits of HHP prefix with a maximum of one (1) activity course (HHP 185XX).

Digital Literacy
CIS 120 or pass competency exam

GENERAL EDUCATION/DISCIPLINE STUDIES
See the Discipline Studies list for options. One of the courses must be a Cultural Literacy course, designated with an asterisk (*).

Arts and Letters
Choose one (1) course from the Discipline Studies list.

Social Science
Choose one (1) course from the Discipline Studies list.

Physical/Biological Lab Science
Choose one (1) course from the Discipline Studies list. Course must be a lab science.

Cultural Literacy
Choose one (1) course from the Discipline Studies list. Course must be a cultural literacy as denoted with an asterisk (*).

ELECTIVES
Choose enough elective credits to reach a minimum total of 90 overall degree credits. Cannot include reading, writing or math classes below the 100 level.

TRANSFER DEGREE OUTCOMES

COCC is committed to a curriculum that promotes the transfer or career success of our students. To this end, COCC identifies student learning outcomes for courses, programs and degrees. The following outcomes apply to COCC's transfer degrees listed below.

- Associate of Arts Oregon Transfer
- Associate of Science Oregon Transfer
- Associate of Science
- Associate of General Studies

Arts and Letters

As a result of taking General Education Arts and Letters* courses, a student should be able to:
- Interpret and engage in the Arts and Letters, making use of the creative process to enrich the quality of life; and
- Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

*"Arts and Letters" refers to works of art, whether written, crafted, or performed and documents of historical or cultural significance.

Cultural Literacy

As a result of taking a designated Cultural Literacy course, a student should be able to:
- Identify and analyze complex practices, values and beliefs, and the culturally and historically defined meanings of difference.

Health

As a result of taking General Education Health courses, a student should be able to:
- Explain the relationship between human behavior and health.

Mathematics

As a result of taking General Education Mathematics courses, a student should be able to:
- Use appropriate mathematics to solve problems; and
- Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate and communicate the results.

Science/Math/Computer Science

As a result of taking General Education Science/Math/Computer Science courses, a student should be able to:
- Gather, comprehend and communicate scientific and technical information in order to explore ideas, models and solutions and generate further questions;
- Apply scientific and technical modes of inquiry, individually and collaboratively, to critically evaluate existing or alternative explanations, solve problems and make evidence-based decisions in an ethical manner; and
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

Social Science

As a result of taking General Education Social Science courses, a student should be able to:
- Apply analytical skills to social phenomena in order to understand human behavior and
- Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

Speech/Oral Communication

As a result of taking General Education Speech/Oral Communication courses, a student should be able to:
- Engage in ethical communication processes that accomplish goals; and
- Respond to the needs of diverse audiences and contexts and
- Build and manage relationships.

Writing and Information Literacy

As a result of completing the General Education Writing sequence, a student should be able to:
- Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences;
- Recognize and articulate the need for information, and then locate, evaluate, and ethically utilize that information to communicate effectively; and
- Demonstrate appropriate reasoning in response to complex issues.

Information Literacy outcomes and criteria will be embedded in the Writing Foundational Requirements courses.

CAREER AND TECHNICAL COURSES

Students may use up to 12 credits of Career and Technical Education (CTE) courses to meet elective credit requirements for the Associate of Arts Oregon Transfer (AAOT) and Associate of Science (AS) degree. Career and Technical Education (CTE) courses are numbered 100 and higher from the list below. Note that they are generally not accepted by baccalaureate institutions unless used within the AAOT degree.

AH 100 Introduction to Health Occupations
AH 111 Medical Terminology I
AH 112 Medical Terminology II
AUT All courses
AV All courses
BAK All courses
CIS All courses except CIS 275 and CIS 276
CUL All courses
DA All courses
EMT All courses
FOR 130 Chainsaw Use and Maintenance
GEOG 211 Computer Cartography
GEOG 265 Geographic Information Systems
GEOG 266 Arc GIS
GEOG 267 Geodatabase Design
GEOG 273 Spatial Data Collection
GEOG 280 Co-op Work Experience GIS
GEOG 284 GIS Customization
GEOG 285 Data Conversion/Documentation
GEOG 286 Remote Sensing
GEOG 287 Analysis of Spatial Data
HIT All courses
LMT All courses
MA All courses
MFG All courses
NUR All courses
OA All courses
SFS All courses
VT All courses
WF All courses

HUMAN RELATIONS LIST

AH 115 Cultural Responsiveness in Allied Health (3 credits)
ANTH 103 Cultural Anthropology (4 credits)
BA 178 Customer Service (3 credits)
BA 206 Management Fundamentals I (4 credits)
BA 285 Business Human Relations (3 credits)
ED 176 Social, Emotional and Mental Health in ECE (3 credits)
ED 219 Multicultural Issues in Education Settings (3 credits)
ED 224 Anti-Bias Curriculum in Education (4 credits)
FOR 211 Supervision and Leadership (3 credits)
GEOG 107 Cultural Geography (4 credits)
HM 130 Hospitality Industry Supervision & Principles of Leadership (3 credits)
HS 101 Orientation to Human Services (3 credits)
HS 162 Effective Helping Skills I (4 credits)
HS 208 Multicultural Issues Human Services (4 credits)
PSY 101 Applied Psychology (3 credits)
PSY 215 Developmental Psychology (4 credits)
PSY 216 Social Psychology (4 credits)
PSY 228 Positive Psychology (4 credits)
SOC 201 Introduction to Sociology (4 credits)
SP 218 Interpersonal Communication (3 credits)

DISCIPLINE STUDIES LIST

The following COCC courses have been approved by the College's Curriculum Committee for use as General Education Discipline Studies courses for the AAOT, AS, AAS and AGS degrees. *Counts as a cultural literacy course.*

Arts and Letters Discipline Studies course options

AH 205 Medical Ethics (3 credits)
*ARH 201, 202, 203 Art History I, II, III (4 credits each)
*ARH 206 Modern Art History (4 credits)
*ARH 207 Native American Art History (4 credits)
*ARH 208 Art History: Non-Western (4 credits)
ART 101 Introduction to the Visual Arts (4 credits)
ART 115 Basic Design: 2-D (3 credits)
ART 116 Basic Design: Color (3 credits)
ART 117 Basic Design: 3-D (3 credits)
ART 131, 132, 133 Drawing I, II, III (3 credits each)
*CHN 141 Chinese Culture Through Film (4 credits)
*CHN 201, 202, 203 Second Year Mandarin Chinese I, II, III (4 credits each)
ED 112 Children's Literature Across the Curriculum (3 credits)
ENG 104 Introduction to Literature: Fiction (4 credits)
ENG 105 Introduction to Literature: Drama (4 credits)
ENG 106 Introduction to Literature: Poetry (4 credits)
*ENG 107 Western World Literature: Ancient (4 credits)
*ENG 108 Western World Literature: Middle Ages (4 credits)
*ENG 109 Western World Literature: Modern (4 credits)
ENG 201, 202 Shakespeare (4 credits each)
*ENG 204, 205 Survey of British Literature I, II (4 credits each)
ENG 212 Autobiography (4 credits)
*ENG 221 Introduction to Children's Literature (4 credits)
ENG 232C Topics in American Literature: Contemporary Fiction (4 credits)
*ENG 250 Introduction to Folklore and Mythology (4 credits)
*ENG 253, 254 Survey of American Literature I, II (4 credits each)
ENG 256 Folklore and U.S. Popular Culture (4 credits)
*ENG 260 Introduction to Women Writers (4 credits)
FA 101 Introduction to Film (3 credits)
FA 125 World Cinema (4 credits)
FA 257 Literature into Film (4 credits)
*FR 201, 202, 203 Second Year French I, II, III (4 credits each)
*FR 211, 212, 213 French Conversation & Culture I, II, III (3 credits each)
*GER 201, 202, 203 Second Year German I, II, III (4 credits each)
HUM 106 British Life & Culture (3 credits)
*HUM 210 Culture and Literature of Asia (4 credits)
*HUM 211 Culture and Literature of Africa (4 credits)
*HUM 212 Culture and Literature of the Americas (4 credits)
*HUM 213 Culture and Literature of the Middle East (4 credits)
*HUM 230 Immigrant Experience in American Literature (4 credits)
*HUM 240 Native American Literature & Culture (4 credits)
*HUM 255 Cultural Diversity in Contemporary American Literature (4 credits)
*HUM 256 Introduction to African-American Literature (4 credits)
HUM 261 Popular Culture: Science Fiction (4 credits)
*HUM 262 Popular Culture: The American Western (4 credits)
HUM 263 Popular Culture: Detective Stories (4 credits)
HUM 264 Popular Culture: Spy Thriller (4 credits)
HUM 265 Popular Culture: Noir Film and Fiction (4 credits)
HUM 266 Popular Culture: Travel Literature (4 credits)
HUM 268 Digital Games Culture (4 credits)
HUM 269 Graphic Novels (4 credits)
*IT 201, 202, 203 Second Year Italian I, II, III (4 credits)
*KIK 201, 202, 203 Second Year Kiksht I, II, III (4 credits each)
MUS 101 Music Fundamentals (3 credits)
MUS 111, 112, 113 Music Theory IA, IB, IC (3 credits each)
MUS 201, 202, 203 Understanding Music (3 credits each)
*MUS 205 Introduction to Jazz History (3 credits)
MUS 207 History of Rock Music (3 credits)
MUS 211, 212, 213 Music Theory IIA, IIB, IIC (3 credits each)
PHL 170 Philosophy of Love and Sex (3 credits)

PHL 200 Fundamentals of Philosophy (4 credits)
PHL 201 Problems of Philosophy - Epistemology (3 credits)
PHL 202 Problems of Philosophy - Ethics (3 credits)
PHL 203 Problems of Philosophy - Logic (3 credits)
*SP 115 Introduction to Intercultural Communication (4 credits)
SP 230 Introduction to the Rhetoric of Film (3 credits)
SP 234 Introduction to Visual Rhetoric (3 credits)
*SP 241 Media, Communication, Society (4 credits)
SP 255 Free Expression and Public Assembly (3 credits)
*SPAN 201, 202, 203 Second Year Spanish I, II, III (4 credits each)
*SPAN 211, 212, 213 Spanish Conversation and Culture I, II, III (3 credits each)
TA 141, 142, 143 Acting I, II, III (3 credits each)
TA 200 Introduction to Theater (3 credits)
TA 207 Readings in Theater (3 credits)
WR 240 Introduction to Creative Writing: Nonfiction (4 credits)
WR 241 Introduction to Creative Writing: Fiction (4 credits)
WR 242 Introduction to Creative Writing: Poetry (4 credits)
WR 243 Introduction to Creative Writing: Scriptwriting (4 credits)
*WS 101 Introduction to Women's and Gender Studies (4 credits)

Science/Math/Computer Science Discipline Studies course options, all lab courses, plus the following

ANTH 235 Evolution of Human Sexuality (4 credits)
ANTH 237 Forensic Anthropology (4 credits)
CS 160 Computer Science Orientation (4 credits)
CS 161, 162 Computer Science I, II (4 credits each)
ENGR 201 Electrical Fundamentals (3 credits)
FN 225 Human Nutrition (4 credits)
FOR 230A Map, Compass and GPS (3 credits)
FOR 240A Forest Ecology (3 credits)
FOR 240B Wildlife Ecology (3 credits)
FOR 241A Field Dendrology (3 credits)
FOR 251 Recreational Resource Management (3 credits)
FOR 260 Conservation of Natural Resources (3 credits)
FW 251 Wildlife Conservation (3 credits)
GEOG 265 Geographic Information Systems (4 credits)
HHP 240 Science of Nutrition (3 credits)
HHP 259 Care and Prevention of Athletic Injury (3 credits)
HHP 260 Anatomical Kinesiology (4 credits)
HHP 261 Exercise Physiology (4 credits)
HHP 262 Exercise Testing and Prescription (3 credits)
HS 224 Psychopharmacology (4 credits)
MTH 105 Math in Society (4 credits)
MTH 111 College Algebra (4 credits)
MTH 112 Trigonometry (4 credits)
MTH 113 Topics in Precalculus (4 credits)
MTH 211, 212, 213 Fundamentals Elementary Math I, II, III (4 credits each)
MTH 231 Discrete Mathematics I (4 credits)
MTH 241 Calculus for Management/Social Science (4 credits)
MTH 243 Introduction to Methods of Probability & Statistics I (4 credits)
MTH 244 Introduction to Methods of Probability & Statistics II (4 credits)
MTH 245 Math for Mgmt/Social Science (4 credits)
MTH 251, 252, 253 Calculus I, II, III (4 credits)
MTH 254, 255 Vector Calculus I, II (4 credits)
MTH 256 Applied Differential Equations (4 credits)
Science Lab Courses
ANTH 234 Biological Anthropology (4 credits)
BI 101 General Biology: Cells & Genes (4 credits)
BI 102 General Biology: Evolution (4 credits)
BI 103 General Biology: Ecology (4 credits)
BI 202 General Botany (4 credits)

DISCIPLINE STUDIES COURSES *(continued)*

BI 211 Principles of Biology I (5 credits)
BI 212 Biology of Plants II (5 credits)
BI 213 Biology of Animals III (5 credits)
BI 231, 232, 233 Human Anatomy & Physiology I, II, III (4 credits each)
BI 234 Microbiology (4 credits)
CH 104, 105, 106 Introduction to Chemistry I, II, III (5 credits each)
CH 221, 222, 223 General Chemistry I, II, III (5 credits each)
G 148 Volcanoes and Earthquakes (4 credits)
G 162CV Geology of Cascade Volcanoes (3 credits)
G 201, 202, 203 Geology I, II, III (4 credits each)
G 207 Geology of the Pacific Northwest (4 credits)
GEOG 278 Physical Geography:Landforms and Water (4 credits)
GEOG 279 Physical Geography: Weather and Climate (4 credits)
GS 104 Physical Science: Physics (4 credits)
GS 105 Physical Science: Chemistry (4 credits)
GS 106 Physical Science: Geology (4 credits)
GS 107 Physical Science: Astronomy (4 credits)
GS 108 Physical Science: Oceanography (4 credits)
PH 201, 202, 203 General Physics I, II, III (5 credits each)
PH 211, 212, 213 General Physics I, II, III (5 credits each)
PSY 204 Research Methods (4 credits)
PSY 213 Introduction to Physiological Psychology (4 credits)
PSY 227 Animal Behavior (4 credits)

Social Sciences Discipline Studies course options

ANTH 102 Archaeology (4 credits)
*ANTH 103 Cultural Anthropology (4 credits)
*ANTH 202 Archaeology of Oregon (4 credits)
*ANTH 240 Language and Culture (4 credits)
*ANTH 250 Food and Culture (4 credits)
*ANTH 254 Magic, Witchcraft and Religion (4 credits)
*ANTH 283 Introduction to Medical Anthropology (4 credits)
*ANTH 295 Gender & Sexuality in an Anthropological Perspective (4 credits)
*CHN 140 Contemporary Chinese Cultures (4 credits)
CJ 100 Survey of the Criminal Justice System (3 credits)
CJ 101 Introduction to Criminology (4 credits)
CJ 110 Law Enforcement (3 credits)
CJ 120 Judicial Process (3 credits)
CJ 153 Ethical Issues in Criminal Justice (3 credits)
CJ 201 Introduction to Juvenile Justice (3 credits)
CJ 210, 211 Criminal Investigation I, II (3 credits each)
CJ 214 Crime, Justice and Diversity (4 credits)
CJ 220 Introduction to Substantive Law (3 credits)
CJ 222 Search and Seizure (3 credits)
CJ 230 Juvenile Corrections (3 credits)
CJ 234 The World of Violent Criminals (3 credits)
CJ 243 Drugs and Crime in Society (3 credits)
CJ 250 Domestic Terrorism and Emergency Management (4 credits)
CJ 253 Corrections (4 credits)
EC 101 Contemporary Economic Issues (4 credits)
EC 201 Microeconomics (4 credits)
EC 202 Macroeconomics (4 credits)
EC 230 International Economics (4 credits)
EC 285 Intro to Political Economy (4 credits)
ED 152 Family, School and Community Relationships in ECE (3 credits)
*ED 216 Purpose, Structure and Function of Education in a Democracy
 (3 credits)
*ED 219 Multicultural Issues in Education Settings (3 credits)
*ES 101 Intro to Ethnic Studies (4 credits)
*ES 211 Introduction to Native American Studies (4 credits)
*ES 212 Introduction to African American Studies (4 credits)
*ES 213 Introduction to Chicano/Latino Studies (4 credits)
*ES 214 Introduction to Asian/Pacific Islander American Studies (4 credits)
GEOG 106 Economic Geography (4 credits)

*GEOG 107 Cultural Geography (4 credits)
GEOG 190 Environmental Geography (4 credits)
GEOG 198 Field Geography of Central Oregon (3 credits)
*GEOG 201, 202 World Regional Geography I, II (4 credits each)
GEOG 207 Geography of Oregon (3 credits)
GEOG 290 Environmental Problems (3 credits)
GEOG 295 Wilderness and Society (4 credits)
HHP 100 Introduction to Public Health (4 credits)
HHP 210 Introduction to the Health Care System (3 credits)
*HHP 248 Health Psychology (4 credits)
HHP 267 Wellness Coaching Fundamentals (3 credits)
HHP 268 Sustainable Food and Nutrition (4 credits)
HHP 270 Sport & Exercise Psychology (3 credits)
HS 101 Orientation to Human Services (3 credits)
HS 206 Group Counseling Skills for Human Services (4 credits)
*HS 208 Multicultural Issues in Human Services (4 credits)
HS 209 Introduction to Psychological Trauma (4 credits)
*HST 101 History of Western Civilization (4 credits)
*HST 102 Europe: From the Middle Ages to Enlightenment (700-1700 C.E.)
 (4 credits)
*HST 103 Europe: Revolution & War (1789 – Present) (4 credits)
*HST 104 Ancient Societies (Pre-history–500 C.E.) (4 credits)
*HST 105 The Expansion of World Religions (500–1700) (4 credits)
*HST 106 Modern World History: Industrialization, Nations and War
 (1800–Present) (4 credits)
*HST 201 Early America: History of the United States (Pre-history–1820)
 (4 credits)
*HST 202 19th and early 20th Century United States History
 (1820–1920) (4 credits)
*HST 203 20th and early 21st Century United States History
 (1920–the Present) (4 credits)
*HST 204 History of the Civil War (4 credits)
*HST 207 History of the American West (4 credits)
*HST 218 Native American History (4 credits)
*HST 225 US Women's History (4 credits)
*HST 235 Sexuality in 20th Century Europe (4 credits)
*HST 242 History of the Pacific Northwest (4 credits)
*HST 258 Colonial Latin American History (4 credits)
*HST 259 Modern Latin American History (4 credits)
*HST 260 History of Islamic Civilizations (4 credits)
*HST 270 20th Century European History (4 credits)
*HST 290, 291, 292 East Asian History (4 credits each)
OL 244 Psychology of Risk and Adventure (3 credits)
PS 201 Introduction to US Government and Politics (4 credits)
PS 203 State/Local Government (3 credits)
PS 204 Introduction to Comparative Politics (4 credits)
PS 205 Introduction to International Relations (4 credits)
PS 206 Introduction to Political Thought (4 credits)
PS 207 Politics of the Middle East (4 credits)
PS 250 Terrorism and the American Public (4 credits)
*PSY 101 Applied Psychology (3 credits)
PSY 201 Mind and Brain (4 credits)
*PSY 202 Mind and Society (4 credits)
*PSY 215 Developmental Psychology (4 credits)
*PSY 216 Social Psychology (4 credits)
*PSY 219 Abnormal Psychology (4 credits)
*PSY 228 Positive Psychology (4 credits)
*PSY 233 Psychology of Violence and Aggression (4 credits)
*SOC 201 Introduction to Sociology (4 credits)
SOC 208 Sport & Society (4 credits)
SOC 211 Social Deviance (4 credits)
*SOC 212 Race, Class and Gender (4 credits)
SOC 215 Social Issues and Social Movements (4 credits)
*SOC 219 Sociology of Religion (4 credits)
SOC 222 Sociology of Family (4 credits)
*SOC 250 Sociology of Popular Cultures (4 credits)

TRANSFER AND CAREER & TECHNICAL EDUCATION (CTE) PROGRAMS AT A GLANCE

Here is a quick-reference listing of the college transfer and Career and Technical Education (CTE) programs (certificates and Associate of Applied Science degrees) available at Central Oregon Community College.

KEY D=Degree, C=Cetificate, S=Short Term Certificate

DISCIPLINE	DESCRIPTION	CTE	TRANSFER
Anthropology	Anthropology		D
Art	Art		D
Automotive Technology	Automotive Management, Automotive Technology in Electronics and Diagnostics, Master Technician, Electrical Technician Basic and Advanced, Engine Performance Technician, Basic Skills with Engine Performance or Welding, Clean Energy Diesel Technician, Controller Systems Technician Level 1 and 2, Drive-Train Technician, Heating and AC Technician, Hybrid Electric Vehicles Technician 1 and 2, Under-Car Technician	D/C/S	
Aviation	Professional Pilot Airplane, Professional Pilot Helicopter, Unmanned Aerial Systems Operations, Aviation Technology and Management	D	D
Biology	Biological Sciences, Dental Hygiene, Pre-Dentistry, Pre-Medicine, Pre-Veterinary		D
Business Administration	General Business, Accounting, Management, Small Business/Entrepreneurship, Accounting Clerk, Entrepreneurship, Marketing Communications, Office Assistant, Retail Management	D/C	D
Cascade Culinary Institute	Baking and Pastry Arts, Culinary Arts, Hospitality Management	D/C	
Chemistry	Chemistry		D
Communication	Communication/Journalism		D
Computer & Information Systems	Computer & Information Systems, Computer Aided Drafting, Desktop Support, Networking, Web Development, Computer Science, Cybersecurity	D/C/S	D
Criminal Justice	Criminal Justice, Juvenile Corrections	D/C	D
Dental Assisting	Dental Assisting	C	
Economics	Economics		D
Education	Early Childhood Education, Elementary and Secondary Education, Child Family & Community Studies, Developmentally Appropriate Learning Environments	D/S	D
Emergency Medical Services	Paramedicine	D	
Engineering and Physics	Engineering, Physics		D
Exercise Science	Exercise Science-Kinesiology, Health/Wellness Coaching, Pre-Physical Therapy		D
Forest Resource Technology/Forestry	Forest Resources Technology, Agriculture Science, Forestry, Natural Resources, Advanced Forest Concepts, Conservation of Natural Resources, Forest Ecology, Forest Measurements, Forest Protection, Mapping Cartography	D/S	D
General	General Transfer to Oregon State University (Cascades or Corvallis)		D
Geographic Information Systems	Geographic Information Systems	D/C	
Geography	Geography		D
Geology	Geology		D
Health Information Technology	Health Information Technology, Coding Competency, Insurance, Medical Billing Specialist, Medical Office Specialist	D/C/S	
History	History		D
Human Services	Human Services, Addiction Studies and Human Services	D/C	D

DISCIPLINE	DESCRIPTION	CTE	TRANSFER
Humanities/Film	English/Literature, Humanities, Liberal Arts/Liberal Studies		D
Manufacturing Technology	Manufacturing Technology, CNC Machining, Industrial Maintenance, Manual Machining, Manufacturing Technology I & II, Quality Assurance, Welding	D/C/S	
Massage Therapy	Massage Therapy	D/C	
Mathematics	Mathematics		D
Medical Assistant	Medical Assistant	C	
Music	Music		D
Nursing	Nursing, Nursing (RN), Practical Nursing, Nursing Assistant	D/C	D
Outdoor Leadership	Outdoor Leadership		D
Pharmacy Technician	Pharmacy Technician	C	
Political Science	Political Science		D
Psychology	Psychology		D
Public Health	Public Health		D
Sociology	Pre-Law, Sociology		D
Structural Fire Science	Structural Fire Science, Fire Service Administration	D	D
Veterinary Technician	Veterinary Technician	D	
Wildland Fire/Fuels Management	Wildland Fire/Fuels Management, Wildland Fire Suppression, Wildland Firefighter Type II	D/C/S	
World Languages	World Languages		D

PROGRAM DESCRIPTIONS

ANTHROPOLOGY
Anthropology
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Anthropology is the study of humans, including biological and cultural origins as well as past and present human behavior and societies. The study of anthropology includes the fields of archaeology, biological anthropology, linguistic anthropology and cultural anthropology. The Associate of Arts Oregon Transfer (AAOT) degree with a focus in anthropology is designed for students who wish to pursue bachelor's degree with this major. Bachelor degree graduates may work in fields such as public service, conservation and heritage management, museum studies, and social work; those who enter graduate school may work in law, medicine and science, teaching, or research.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix[1]   3

Mathematics
MTH 105   Math in Society (or higher)   4
Recommend: MTH 105

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: ANTH 102, ANTH 103, ANTH 240

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science.
Recommend: ANTH 234

Electives   39
General Electives

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES
In general, very few bachelor's degrees in Anthropology have specific science requirements. However, if the interest is primarily archaeological, then Geology would fulfill the lab requirements. If the interest is primarily in physical anthropology, then select a Biology sequence or the Human Anatomy and Physiology sequence.

In choosing electives, consider two years of a world language since many BA degrees (including many anthropology programs) require two years or equivalent of a world language. Some anthropology degrees may also require an upper-division statistics course. Taking MTH 243 Introduction to Probability and Statistics I and MTH 244 Introduction to Probability and Statistics 2 is good preparation for the upper-division requirement. Either of these could count toward the non-lab requirement in the science/math/computer science general education requirement.

ART
Art
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The Associate of Arts Oregon Transfer (AAOT) with a focus in art includes courses that are commonly required for this major and meets lower division general education requirements at all Oregon public universities. COCC's art curriculum includes courses in art history, drawing, 2D basic design, 3D design, painting, sculpture, ceramics, jewelry and metalwork, digital and darkroom photography and watercolor.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/ Foundational
Health
3 credits with HHP or HHPA prefix[1]   3

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/ Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses chosen from at least two prefixes
Recommend two of the following: ARH 201 Art History: Western: Prehistory to Early Byzantine, ARH 202 Art History: Western: Early Medieval to Late Renaissance and ARH 203 Art History: Western: Early Baroque to Late 20th Century plus one additional course from COCC's Discipline Studies list with an ART prefix.

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Plus enough additional electives to reach the minimum of 90 credits for the AAOT.
Recommend: ART 115 Basic Design: 2-D, ART 116 Basic Design: Color, ART 117 Basic Design: 3-D and ART 131 Drawing I.

                                                    Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES
Two years of a world language is recommended. Successful transfer to an upper-division arts school or program is usually based not only on transcripts, but also on the student's portfolio. Students seeking transfer to an accredited art school in Oregon or elsewhere are encouraged to work closely with their advisors to build that portfolio.

AUTOMOTIVE TECHNOLOGY
Automotive Management
Associate of Applied Science

PROGRAM DESCRIPTION
The Automotive Technology program emphasizes educating students as multi-skilled workers with the ability to complete a wide variety of tasks within the automotive technology service and repair setting. Coursework includes technical skills in computer applications, electrical, electronic, mechanical, hydraulic and network systems, both in theory as well as hands-on training. A self-paced method of instruction is offered for the entry-level courses. Communication skills are also highly emphasized throughout each program. The Associate of Applied Science degree enables students to enter the transportation industry as an automotive technician and/or middle management.

ACCREDITATION
National Automotive Technicians Education Foundation (NATEF)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee
- All advanced AUT courses (AUT 260 Diesel Performance II and above) have a $200 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.

- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 112	Basic Engine Performance I	1
AUT 113	Basic Engine Performance II	1
AUT 114	Welding for the Auto Trade	3
AUT 115	College Success for Auto Tech	2
AUT 201	Automotive Engines	4
AUT 202	Manual Drive Trains I	3
AUT 203	Manual Drive Trains II	3
AUT 204	Steering and Suspension	3
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 208	Automotive Brakes	3
AUT 216A	CWE Automotive A[1]	4
AUT 251	Automatic Transmissions I	3
AUT 253	Automotive Air Conditioning	3
AUT 256	Automatic Transmissions II	2
BA 101	Intro to Business	4
BA 111	Applied Accounting I	3
BA 178	Customer Service	3
BA 206	Management Fundamentals I	4
BA 223	Marketing Principles I	4
BA 280	Co-op Work Experience Business	3
BA 286	Managing Business Processes	4
or BA 250	Entrepreneurship	

Other Courses

CIS 120	Computer Concepts (or Computer Competency Test)	0-4
HHP 252A	Fitness/First Aid	3
MTH 060	Algebra I (or higher)	4
WR 121	Academic Composition	4

                                                    Total Credits 100-104

[1] Automotive CWE may be taken after 24 credits of automotive courses in addition to the basic skills courses, including summer. Students may not enroll in CWE without first being cleared by an instructor. Exceptions are based on individual student goals.

ADVISING NOTES
Full-time students are discouraged from working more than 15 hours each week due to a heavy course load. It is recommended that the ASE (Automotive Service Excellence) certification test be taken as the student completes the program.

Automotive Management: Technology in Electronics and Diagnostics
Associate of Applied Science

PROGRAM DESCRIPTION
The Automotive Technology program emphasizes educating students as multi-skilled workers with the ability to complete a wide variety of tasks within the automotive technology service and repair setting. Coursework includes technical skills in computer applications, electrical, electronic, mechanical, hydraulic and network systems, both in theory as well as hands-on training. Heavy emphasis will be placed on the following three areas: Hybrid Electric Vehicles (HEV) /Electric Vehicles (EV), clean diesel

and on-board vehicle networking. A self-paced method of instruction is offered for the entry-level courses. Communication skills are also highly emphasized throughout each program. Both the Associate of Applied Science degree and Master Automotive Certificate option enable students to enter the transportation industry as an automotive technician and/or middle management.

ACCREDITATION
National Automotive Technicians Education Foundation (NATEF)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee
- All advanced AUT courses (AUT 260 Diesel Performance II and above) have a $200 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 115	College Success for Auto Tech	2
AUT 201	Automotive Engines	4
AUT 202	Manual Drive Trains I	3
AUT 203	Manual Drive Trains II	3
AUT 204	Steering and Suspension	3
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 208	Automotive Brakes	3
AUT 216A	CWE Automotive A[1]	4
AUT 216B	CWE Automotive B	4
AUT 251	Automatic Transmissions I	3
AUT 253	Automotive Air Conditioning	3
AUT 256	Automatic Transmissions II	2
AUT 260	Diesel Performance II	4
AUT 270	Auto Controller Systems I	4
AUT 271	Auto Controller Systems II	4
AUT 280	Hybrid Electric Vehicles I (HEV)	4
AUT 281	Hybrid Electric Vehicles II (HEV)	4

Other Requirements

BA 178	Customer Service	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
HHP 252A	Fitness/First Aid	3
MTH 060	Algebra I (or higher)	4
WR 121	Academic Composition	4
	Total Credits	**101-104**

[1] Automotive CWE may be taken after 24 credits of automotive courses in addition to the basic skills courses, including summer. Students may not enroll in CWE without first being cleared by an instructor. Exceptions are based on individual student goals.

ADVISING NOTES
Full-time students are discouraged from working more than 15 hours each week due to a heavy course load. It is recommended that the ASE (Automotive Service Excellence) certification test be taken as the student completes the program.

Master Automotive Technician
Certificate of Completion

PROGRAM DESCRIPTION
The Master Automotive Technician program emphasizes educating students as multi-skilled workers with the ability to complete a wide variety of tasks within the automotive technology service and repair setting. Coursework includes technical skills in computer applications, electrical, electronic, mechanical, hydraulic and network systems, both in theory as well as hands-on training. A self-paced method of instruction is offered for the entry-level classes. Communication skills are also highly emphasized throughout the program. The program is planned so that students will be able to complete the Master Automotive Technician Certificate in approximately 12 to 15 months as well as earn up to seven short-term certificates of completion. The certificate enables students to enter the transportation industry as an automotive technician.

ACCREDITATION
National Automotive Technicians Education Foundation (NATEF)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- AUT prefix courses may have a $15 course fee based on lab usage

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - AUT 106 Automotive Program Orientation is a prerequisite or co-requisite to AUT 101 Basic Electricity-Automotive, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech. These four courses are prerequisites to all other AUT courses.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 115	College Success for Auto Tech	2
AUT 201	Automotive Engines	4
AUT 202	Manual Drive Trains I	3
AUT 203	Manual Drive Trains II	3
AUT 204	Steering and Suspension	3
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 208	Automotive Brakes	3
AUT 216A	CWE Automotive A	8
& AUT 216B	and CWE Automotive B[1]	
AUT 251	Automatic Transmissions I	3
AUT 253	Automotive Air Conditioning	3
AUT 256	Automatic Transmissions II	2
Select two Automotive Electives courses from the following:		2-4
AUT 112	Basic Engine Performance I	
AUT 113	Basic Engine Performance II	
AUT 114	Welding for the Auto Trade	
AUT 211	ASE Test Prep I	
AUT 212	ASE Test Prep II	

Other Required Courses

Human Relations approved course		3-4
MTH 060	Algebra I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**76-79**

[1] Recommended preparation for CWE is 24 credits of automotive courses in addition to the basic skills courses.

ADVISING NOTES
Full-time students are discouraged from working more than 15 hours each week due to a heavy course load.

It is recommended that the ASE (Automotive Service Excellence) certification test be taken as the student completes the program.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Automotive Electrical Technician (Basic)
Short Term Certificate of Completion

PROGRAM DESCRIPTION
Preparation in the electrical technician coursework establishes skill in charging systems, starting systems, voltage drops, electrical troubleshooting, lighting, gauges, accessories, battery load testing, and repairs. This coursework prepares students for the ASE certification in (A6) Electrical/Electronic Systems and (G1) Maintenance and Light Repair.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Required Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 115	College Success for Auto Tech	2
	Total Credits	**16**

Automotive Electrical Technician (Advanced)
Short Term Certificate of Completion

PROGRAM DESCRIPTION
Preparation in the electrical technician coursework establishes skill in voltage drops, electrical troubleshooting, vehicle ignition systems, logic controls, air bag systems, Controller Area Network, and cruise control. This coursework prepares students for ASE certification in (A6) Electrical/Electronic Systems, (A8) Engine Performance, and (G1) Maintenance and Light Repair.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS

Academic Requirements

- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 115	College Success for Auto Tech	2
	Total Credits	**20**

Automotive Engine Performance Technician
Short Term Certificate of Completion

PROGRAM DESCRIPTION

The Automotive Engine Performance Technician short term certificate trains students to be the key troubleshooter in figuring out a vehicle's drivability problems. Students learn to identify everything from powertrain malfunctions to ignition failures and other engine-related problems using state-of-the-art computer diagnostic equipment, as well as the best way to repair a vehicle. This coursework applies toward ASE certification in (A6) Automotive Electrical/Electronic Systems (A8) Automotive Engine Performance, and the (L1) Advanced Engine Performance Specialist.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs

- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees

- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements

- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS

Academic Requirements

- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5

AUT 103	Automotive Electric II	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 115	College Success for Auto Tech	2
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
	Total Credits	**29**

Automotive Basic Skills with Basic Engine Performance
Short Term Certificate of Completion

PROGRAM DESCRIPTION

The Automotive Basic Skills with Basic Engine Performance short term certificate is designed to capture a range of skills that are required for the automotive industry, including basic internal combustion engines and theory, basic DC electrical and schematic understanding, and vehicle inspection. The largest portion addresses shop and vehicle safety. This coursework prepares students for the ASE certification in (G1) Maintenance and Light Repair.

The Automotive Basic Skills with Basic Engine Performance short term certificate also introduces the operation, diagnoses and repair of the carbureetion system and the points ignition system. Green statement: As with all engine performance related subjects, fuel delivery in carburetors affects air quality. This class introduces the student to the skill of reducing hydrocarbon and carbon dioxide emissions.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs

- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees

- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements

- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS

Academic Requirements

- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3

AUT 112	Basic Engine Performance I	1
AUT 113	Basic Engine Performance II	1
AUT 115	College Success for Auto Tech	2
	Total Credits 13	

Automotive Basic Skills with Welding
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Basic Skills with Welding short term certificate is designed to capture a range of skills that are required for the automotive industry, including basic internal combustion engines and theory, basic DC electrical and schematic understanding, and vehicle inspection. The largest portion addresses shop and vehicle safety. This coursework prepares students for the ASE certification in (G1) Maintenance and Light Repair.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 114	Welding for the Auto Trade	3
AUT 115	College Success for Auto Tech	2
	Total Credits 14	

Clean Energy Diesel Technician (Advanced)
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Clean Energy Diesel Technician (Advanced) short term certificate trains students to be the key troubleshooter in figuring out a vehicle's drivability problems on the most current light duty diesel systems. Students learn to identify everything on powertrain malfunctions using the most current computer diagnostic equipment. The Automotive Clean Energy Diesel Technician (Advanced) short term certificate also trains students on the operational principles and theory of Hydraulically actuated Electronically controlled Unit Injection (HEUI) systems, the Electronic Unit Injection (EUI) systems, and the Common Rail (CR) systems. This coursework applies toward ASE certification in (A6) Automotive Electrical/Electronic Systems and (A9) Diesel Engine Performance.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee
- All advanced AUT courses (AUT 260 Diesel Performance II and above) have a $200 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 115	College Success for Auto Tech	2
AUT 111	Computerized Engine Controls	5
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 260	Diesel Performance II	4
	Total Credits 35	

Automotive Controller Systems Technician Level 1
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Controller Systems Technician Level I short term certificate trains students to be the key troubleshooter in figuring out a vehicle's drivability problems. Students learn to identify everything from

powertrain malfunctions to ignition failures and other engine-related problems using state-of-the-art computer diagnostic equipment, as well as the best way to fix the problem for the client. Students will be well prepared to work with multiple vehicle platforms to reprogram vehicle computer systems for safety and vehicle function. Students will become competent working with logic circuits and Controller Area Network. This coursework applies toward ASE certification in (A6) Automotive Electrical/Electronic Systems and (A8) Automotive Engine Performance.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee
- All advanced AUT courses (AUT 260 Diesel Performance II and above) have a $200 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 115	College Success for Auto Tech	2
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 270	Auto Controller Systems I	4
	Total Credits 35	

Automotive Controller Systems Technician Level 2
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Controller Systems Technician Level 2 trains students to be the key troubleshooter in figuring out a vehicle's drivability problems. Students learn to identify everything from powertrain malfunctions to ignition failures and other engine-related problems using state-of-the-art

computer diagnostic equipment. This coursework applies toward ASE certification in (A6) Automotive Electrical/Electronic Systems, (A8) Automotive Engine Performance, and the (L1) Advanced Engine Performance Specialist.

The Automotive Controller Systems Technician Level 2 also trains students in testing volumetric efficiency, performance as it relates to program modification, dynamometer operation and safety, and reprogramming for performance.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee
- All advanced AUT courses (AUT 260 Diesel Performance II and above) have a $200 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 115	College Success for Auto Tech	2
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 270	Auto Controller Systems I	4
AUT 271	Auto Controller Systems II	4
	Total Credits 39	

Automotive Drive Train Technician
Short Term Certificate of Completion

PROGRAM DESCRIPTION
Preparation to work with vehicle drivelines, transaxles, clutches, differentials and transmissions.

The Automotive Drive-Train Technician short term certificate prepares students on all elements of manual and automatic transmissions, as well

as basic hydraulic and electrical principles. The automotive drive-train courses apply toward ASE certification in (A2) Automotive Automatic Transmission, (A3) Automotive Manual Drive Trains and Axles, and (G1) Maintenance and Light Repair.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 115	College Success for Auto Tech	2
AUT 202	Manual Drive Trains I	3
AUT 203	Manual Drive Trains II	3
AUT 251	Automatic Transmissions I	3
AUT 256	Automatic Transmissions II	2
	Total Credits	**22**

Automotive Engine Technician
Short Term Certificate of Completion

PROGRAM DESCRIPTION
Preparation and study of an automotive engine rebuilding process. Included is the study of diesel engine systems. This coursework applies toward ASE certification in (A1) Automotive Engine Repair, (A9) Light Vehicle Diesel Engines, and (G1) Maintenance and Light Repair.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 115	College Success for Auto Tech	2
AUT 201	Automotive Engines	4
	Total Credits	**17**

Automotive Heating & Air Conditioning Technician
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Heating and Air Conditioning short term certificate gives students a hands-on opportunity to learn about automotive air conditioning and heating systems, EPA Recovery Requirements for R-12, R-134a, and R1234yf systems, and general diagnosis and service. Courses in this option apply toward ASE certification in (A7) Automotive Heating and Air Conditioning, (A6) Electrical/Electronic Systems and (G1) Maintenance and Light Repair.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 115	College Success for Auto Tech	2
AUT 253	Automotive Air Conditioning	3

Total Credits 19

Automotive Hybrid Electric Vehicles Technician - Level 1
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Hybrid Electric Vehicles Technician – Level 1 short term certificate trains students to be the key troubleshooter in figuring out a vehicle's drivability problems. Students learn to identify everything from powertrain malfunctions to ignition failures and other engine-related problems using state-of-the-art computer diagnostic equipment, as well as the best way to fix the problem for the client. Students will be introduced to hybrid (HEV) and electric (EV) vehicles to study and apply skills on diagnosing systems on an array of vehicles with electric drive systems. This coursework applies toward ASE certification in (A6) Automotive Electrical/Electronic Systems and (L3) Light Duty Hybrid / Electric Vehicle Specialist.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee
- All advanced AUT courses (AUT 260 Diesel Performance II and above) have a $200 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines, and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 115	College Success for Auto Tech	2
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 280	Hybrid Electric Vehicles I	4

Total Credits 35

Automotive Hybrid Electric Vehicles Technician - Level 2
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Hybrid Electric Vehicles Technician – Level 2 short term certificate is a continuation on the Automotive Hybrid Electric Vehicles Technician – Level 1 short term certificate. Students will become well prepared to analyze and repair electric drive vehicles as it applies to the state-of-health and predictive maintenance on vehicles with electric drive systems. Students will be able to experience extensive time with analysis of vehicles with electric drive systems. Emphasis will be placed on high voltage battery systems and inverter diagnosis. This coursework applies toward ASE certification in (A6) Automotive Electrical/Electronic Systems and (L3) Light Duty Hybrid/Electric Vehicle Specialist.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee
- All advanced AUT courses (AUT 260 Diesel Performance II and above) have a $200 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines, and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 102	Automotive Electric I	5
AUT 103	Automotive Electric II	2
AUT 104	Automotive Electric III	2
AUT 105	Diesel Performance I	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 111	Computerized Engine Controls	5
AUT 115	College Success for Auto Tech	2
AUT 205	Engine Performance I	2
AUT 206	Engine Performance II	2
AUT 280	Hybrid Electric Vehicles I	4
AUT 281	Hybrid Electric Vehicles II	4
	Total Credits	**39**

Under-Car Technician
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Automotive Under-Car Technician short term certificate gives students an in-depth understanding of under-vehicle systems: brakes, suspension, driveline and electrical, and prepares students for a job in suspension and brakes, either as a technician or manager. The under-car technician courses apply toward ASE certification in (A5) Automotive Brakes, (A4) Automotive Steering and Suspension, and (G1) Maintenance and Light Repair.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Materials (coveralls, safety glasses, work jacket, safety shoes, t-shirts): $200
- ASE (Automotive Service Excellence) Certification – up to $450 total for all eight areas of testing
- Cost of tools: $1,500 to $2,500 depending on the source

Enrollment Fees
- All AUT prefix courses up to AUT 260 Diesel Performance II have a $15 course fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Students must complete the following five courses prior to proceeding into other AUT courses: AUT 101 Basic Electricity-Automotive, AUT 106 Automotive Program Orientation, AUT 107 Mechanical Systems I, AUT 110 Small Gas Engines, and AUT 115 College Success for Auto Tech.
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

AUT 101	Basic Electricity-Automotive	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 115	College Success for Auto Tech	2
AUT 204	Steering and Suspension	3
AUT 208	Automotive Brakes	3
	Total Credits	**17**

AVIATION
Aviation - Professional Pilot Airplane
Associate of Applied Science

PROGRAM DESCRIPTION
The Aviation program trains individuals to work as professional pilots in the air transportation industry. The opportunities in the pilot career field are fascinating and many, and include piloting a commercial airliner, flying for a corporation providing a service to the leaders of the company, flying as a charter pilot taking passengers point-to-point, providing flight instruction to new pilot students and operating autonomous aerial vehicles.

Students in the airplane track will be eligible to earn the FAA Private Pilot and Commercial Pilot certificates (single and multiengine), the Instrument rating, the Multiengine rating and Certified Flight Instructor certificate/ratings (CFI, CFII, MEI). Training will be conducted under Federal Aviation Regulations Part 61.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- All fees for the term must be paid in full by 5 p.m. on Friday of the second week of the term.
- Unless under unusual, nonacademic and documented circumstances simulator fees are non-refundable.
- Used portions of flight fees are non-refundable.
- Pilot headset, approximately $350.
- Flight Labs: Authorized Aircraft and Hourly Rates: Airplane Aircraft: C-172, C-182, Seminole, Bonanza, Baron, Decathlon, FTD
  - **AV222A Airplane Flight Lab, Private Pilot (AV110)**
    Cessna 172
    16 hrs. Pre/Post Instruction @ $35 = $560
    20 hrs. Dual flight @ $200 = $4,000
    2.25 hrs. Dual FTD @ $90 = $202.50
    Total = $4,762.50
    Total Flight Hrs. =22.25 hrs. (1 credit)
  - **AV222B Airplane Flight Lab, Private Pilot (AV110)**
    Cessna 172
    14 hrs. Pre/Post Instruction @ $35 = $490
    5 hrs. Dual flight @ $200 = $3,000
    5 hrs. Solo flight @ $165=$825
    3 hrs. Dual FTD @ $90 = $270
    Written Exam: $160
    DPE Fee: $450
    Total = $5,195.00
    Total Flight Hrs. =23 hrs. (1 credit)
  - **AV222C Airplane Flight Lab, Private Pilot (AV110)**
    Cessna 172
    11 hrs. Pre/Post Instruction @ $35 = $385
    10 hrs. Dual flight @ $200 = $2,000
    10 hrs. Solo flight @ $165=$1,650
    Total = $4,035.00
    Total Flight Hrs. =20 hrs. (1 credit)
  - **AV222D Airplane Flight Lab, Instrument Pilot (AV210)**
    Cessna 172
    13 hrs. Pre/Post Instruction @ $35 = $455
    24 hrs. Dual flight @ $200 = $4,800
    10 hrs. Dual FTD @ $90 = $900
    Written Exam: $160
    DPE Fee: $450
    Total = $6,765.00
    Total Flight Hrs. =34 hrs. (1 credit)
  - **AV222E Airplane Flight Lab, Instrument Pilot (AV210)**
    Cessna 172
    13 hrs. Pre/Post Instruction @ $35 = $455
    24 hrs. Dual flight @ $200 = $4,800

12 hrs. Dual FTD @ $90 = $1,080
Total = $6,335.00
Total Flight Hrs. =36 hrs. (1 credit)

- **AV222F Airplane Flight Lab, Commercial Pilot (AV220)**
  Cessna 172
  12 hrs. Pre/Post Instruction @ $35 = $420
  28 hrs. Dual flight @ $200 = $5,600
  25 hrs. Solo flight @ $165=$4,125
  12 hrs. Dual FTD @ $90 = $1,080
  Total = $11,225.00
  Total Flight Hrs. =65 hrs. (1 credit)

- **AV222G Airplane Flight Lab, Commercial Pilot (AV220)**
  Cessna 172, Cessna 182, Bonanza
  22 hrs. Pre/Post Instruction @ $35 = $770
  19 hrs. Dual flight @ $200 = $3,800
  25 hrs, Dual flight @ $260=$6,500
  34 hrs. Solo flight @ $165=$5,610
  12 hrs. Dual FTD @ $90 = $1,080
  Written Exam: $160
  DPE Fee: $450
  Total = $18,370.00
  Total Flight Hrs. =90 hrs. (1 credit)

- **AV222M Airplane Flight Lab, Commercial Pilot (AV220)**
  Decathlon
  14 hrs. Pre/Post Instruction @ $35 = $490
  9 hrs. Dual flight @ $545.56 = $4,910
  Total = $5400.00
  Total Flight Hrs. =9 hrs. (1 credit)

- **AV222I Airplane Flight Lab, Certified Flight Instructor (AV250)**
  Cessna 182, Bonanza
  22 hrs. Pre/Post Instruction @ $35 = $770
  38 hrs, Dual flight @ $260=$9,880
  Written Exam: $320
  DPE Fee: $650
  Total = $11,620.00
  Total Flight Hrs. =38 hrs. (1 credit)

- **AV222J Airplane Flight Lab, Certified Flight Instructor (AV250)**
  Cessna 172
  12 hrs. Pre/Post Instruction @ $35 = $420
  15 hrs. Dual flight @ $200 = $3,000
  6 hrs. Dual FTD @ $90 = $540
  Written Exam: $160
  DPE Fee: $450
  Total = $4,570.00
  Total Flight Hrs. =21 hrs. (1 credit)

- **AV222K Airplane Flight Lab, Multi Engine Pilot (AV230)**
  Baron, Seminole
  10 hrs. Pre/Post Instruction @ $35 = $35
  20 hrs. Dual flight @ $385 = $7,700
  DPE Fee: $450
  Total = $8,500.00
  Total Flight Hrs. =20 hrs. (1 credit)

- **AV222H Airplane Flight Lab, Multi Engine Pilot (AV230)**
  Baron, Seminole
  16 hrs. Pre/Post Instruction @ $35 = $560
  22 hrs. Dual flight @ $385 = $8,470
  2 hrs. Dual FTD @ $90 = $180
  DPE Fee: $450
  Total = $9,660.00
  Total Flight Hrs. =24 hrs. (1 credit)

Enrollment Fees
- None

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- None

Other Entrance Requirements
- Required:
  - Students who enroll in this course of study must have a valid FAA Medical Certificate and a student pilot certificate. A doctor designated by the FAA as an Aviation Medical Examiner must conduct the medical exam. Incoming students in the professional pilot program are encouraged to obtain at least a second-class medical certificate prior to entry into the program to ensure that they can eventually pursue a career in commercial aviation. The medical application form will ask the applicant's prior medical history, prior DUI/DUII, any record of alcohol or substance abuse and any history of non-traffic misdemeanors or felonies.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- Students must maintain a minimum 2.0 GPA while enrolled in the program. Students who do not maintain this standard and desire to continue the program, require completion of a training plan approved by their COCC advisor.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- Students must be prepared to fly three to four days per week in order to maintain the rigorous schedule that is required in order to complete the flight training in a timely manner.
- National/state legal eligibility or unique requirements for licensure and/or entry into occupation, or advancement in the occupation
- Pilots are credentialed by the Federal Aviation Administration (FAA) and must meet the requirements of the Federal Aviation Regulations to qualify for the pilot certificates/ratings.
- FAA medical certificate required prior to beginning flight training.
- Student Pilot certificate required prior to beginning flight training.
- The FAA requires applicants pass an airman knowledge exam for pilot certificates/ratings. A third-party company administers those exams and a $160 testing fee is required.
- Pilot certificates/ratings are issued after an applicant passes a practical exam (ground oral exam and flight check) administered by a Designated Pilot Examiner (DPE) who will charge a fee for that exam.
- Background checks and random drug screening can be expected in any aviation industry position.

PROGRAM COURSE REQUIREMENTS
Core Courses

AV 101	Introduction to Aviation[1]	3
AV 104	Introduction to Aircraft Systems[1]	4
AV 108	Meteorology I[1]	4
AV 110	Private Pilot - Airplane[2]	5
AV 112	Technically Advanced Aircraft	1
AV 112A	Tech Advanced Aircraft Lab	1
AV 150	Aerodynamics[1]	4
AV 200	Aviation Law[1]	3
or AV 201	Airport Management	
AV 204	Advanced Aircraft Systems[1]	4
AV 208	Meteorology II[1]	4
AV 210	Instrument - Airplane[4]	5
AV 220	Commercial Pilot-Airplane[4]	4
AV 230	Multiengine Pilot[4]	2
AV 235	Human Factors[1]	4
AV 246	Aviation Safety[1]	3
AV 250	CFI - Airplane[4]	5

Airplane Flight Labs[3]		12
AV 222A	Airplane Flight Lab	
AV 222B	Airplane Flight Lab	

PROGRAM DESCRIPTIONS

AV 222C	Airplane Flight Lab	
AV 222D	Airplane Flight Lab	
AV 222E	Airplane Flight Lab	
AV 222F	Airplane Flight Lab	
AV 222G	Airplane Flight Lab	
AV 222H	Airplane Flight Lab	
AV 222I	Airplane Flight Lab	
AV 222J	Airplane Flight Lab	
AV 222K	Airplane Flight Lab	
AV 222M	Airplane Flight Lab	

Other Required Courses

BA 206	Management Fundamentals I	4
or BA 101	Intro to Business	
BA 285	Business Human Relations	3
or SP 218	Interpersonal Communication	
CIS 120	Computer Concepts (Computer Competency Test)	0-4
Discipline Studies Courses		8
MTH 085	Technical Mathematics I	4
or MTH 111 or higher		
WR 121	Academic Composition[5]	3-4
or BA 214	Business Communications	
	Total Credits 90-95	

[1] May be taken in any order, in any term and may be taken before, with or after the flight courses.

[2] Must be taken as the first flight course. May be taken any term.

[3] Flight fees, simulator fees and FAA testing fees are required in addition to normal tuition for all flight labs and must be paid by the end of the second week of the term. Used portions of flight fees are not refundable. Contact the Aviation program director, 541.318.3702, for more information.

[4] The Instrument Airplane course AV 210, Commercial Airplane course AV220 and Certified Flight Instructor course AV 250 shall be completed before the Multiengine Pilot course AV230 can be taken.

[5] WR 121 recommended for students who will pursue a bachelor's degree.

ADVISING NOTES

Airplane students in particular should plan to transfer to an institution granting bachelor's degrees to enhance employment opportunities. Therefore, the program works with several universities for transfer options. The AAS degree is designed to train the student as a professional pilot. Universities that have an aviation bachelor's degree (Eastern Kentucky University, Embry-Riddle Aeronautical University, etc.) will often accept the majority of these credits toward their degree.

Those wishing to transfer to Oregon Institute of Technology should use the Associate of Science (AS) degree program. For information about transfer requirements at other institutions, contact the Aviation program director, 541.318.3702.

Aviation - Professional Pilot Helicopter
Associate of Applied Science

PROGRAM DESCRIPTION

The Aviation program trains individuals to work as professional pilots in the air transportation industry. Students in the helicopter track will be eligible to earn the FAA Private Pilot and Commercial Pilot certificates, the Instrument rating and Certified Flight Instructor certificate/rating (CFI, CFII). Training will be conducted under Federal Aviation Regulations Part 61

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs

- All fees for the term must be paid in full by 5 p.m. on Friday of the second week of the term.

- Unless under unusual, nonacademic and documented circumstances simulator fees are non-refundable.
- Used portions of flight fees are non-refundable.
- Pilot headset, approximately $350.
- Flight Labs: Authorized Aircraft and Hourly Rates:

Helicopter Series I Aircraft: Robinson R22, R44, B206, FTD

- **AV 227A Helicopter Flight Lab, Private Pilot (AV115)**
  Robinson R22
  15 hrs. Pre/Post Instruction @ $35 = $525
  24 hrs. Dual flight @ $360 = $8,640
  3 hrs. Dual FTD @ $195 = $585
  Total = $9,750.00
  Total Flight Hrs. =27 hrs. (1 credit)

- **AV 227B Helicopter Flight Lab, Private Pilot (AV115)**
  Robinson R22
  16 hrs. Pre/Post Instruction @ $35 = $560
  24 hrs. Dual flight @ $360 = $8,640
  2 hrs. Dual FTD @ $195 = $390
  Total = $9,590.00
  Total Flight Hrs. =26 hrs. (1 credit)

- **AV 227C Helicopter Flight Lab, Private Pilot (AV115)**
  Robinson R22
  16 hrs. Pre/Post Instruction @ $35 = $560
  14 hrs. Dual flight @ $360 = $5,040
  10 hrs. Solo flight @ $360 * = $3,600
  2 hrs. Dual FTD @ $195 = $390
  Written Exam Fee = $160
  DPE Fee = $750
  Total = $10,500.00
  Total Flight Hrs. =26 hrs. (1 credit)
  *Supervised Solo- charged at a dual rate due to required presence of a certified flight instructor

- **AV 227D Helicopter Flight Lab, Instrument Pilot (AV215)**
  Robinson R44
  20 hrs. Pre/Post Instruction @ $35 = $700
  20 hrs. Dual flight @ $650 = $13,000
  (Dual flight includes 15 hrs Pilot in Command)
  10 hrs. Dual FTD @ $195 = $1,950
  Total = $15,650.00
  Total Flight Hrs. =30 hrs. (1 credit)

- **AV 227E Helicopter Flight Lab, Instrument Pilot (AV215)**
  Robinson R44
  25 hrs. Pre/Post Instruction @ $35 = $875
  15 hrs. Dual flight @ $650 = $9,750
  10 hrs. Dual FTD @ $195 = $1,950
  Written Exam Fee = $160
  DPE Fee = $750
  Total = $13,485.00
  Total Flight Hrs. =25 hrs. (1 credit)

- **AV 227N Helicopter Flight Lab, Instrument Pilot (AV215)**
  Robinson R44
  10 hrs. Pre/Post Instruction @ $35 = $350
  10 hrs. Dual flight @ $760* = $7,600
  NVG Fee = $500
  Total = $8,450.00
  Total Flight Hrs. =10 hrs. (1 credit)
  *Flown in a night vision google compatible helicopter

- **AV 227F Helicopter Flight Lab, Commercial Pilot (AV225)**
  Robinson R22
  18 hrs. Pre/Post Instruction @ $35 = $630
  35 hrs. Dual flight @ $360 = $12,600
  (Dual flight includes 15 hrs Pilot in Command)
  2 hrs. Dual FTD @ $195 = $390
  Total = $13,620.00
  Total Flight Hrs. =37 hrs. (1 credit)

- **AV 227G Helicopter Flight Lab, Commercial Pilot (AV225)**
  Robinson R22
  18 hrs. Pre/Post Instruction @ $35 = $630
  35 hrs. Dual flight @ $360 = $12,600
  2 hrs. Dual FTD @ $195 = $390
  Written Exam Fee= $160
  DPE Fee= $750
  Total = $14,530.00
  Total Flight Hrs. =37 hrs. (1 credit)

- **AV 227H Helicopter Flight Lab, Commercial Pilot (AV225)**
  Bell 206
  12 hrs. Pre/Post Instruction @ $35 = $420
  20 hrs. Dual flight @ $935 = $18,700
  Total = $19,120.00
  Total Flight Hrs. =20 hrs. (1 credit)

- **AV 227I Helicopter Flight Lab, Certified Flight Instructor (AV255)**
  Robinson R22
  53 hrs. Pre/Post Instruction @ $35 = $1,855
  20 hrs. Dual flight @ $360 = $7,200
  2 hrs. Dual FTD @ $195 = $390
  Written Exam Fee = $320
  DPE Fee = $850
  Total = $10,615.00
  Total Flight Hrs. =22 hrs. (1 credit)

- **AV 227J Helicopter Flight Lab, Certified Flight Instructor (AV255)**
  Robinson R44
  25 hrs. Pre/Post Instruction @ $35 = $875
  10 hrs. Dual flight @ $650 = $6,500
  5 hrs. Dual FTD @ $195 = $975
  Written Exam Fee = $160
  DPE Fee = $750
  Total = $9,260.00
  Total Flight Hrs. =15 hrs. (1 credit)

Series II Aircraft: Robinson R44, B206, FTD
- **AV 228A Helicopter Flight Lab, Private Pilot (AV115)**
  Robinson R44
  15 hrs. Pre/Post Instruction @ $35 = $525
  24 hrs. Dual flight @ $650 = $15,600
  3 hrs. Dual FTD @ $195 = $585
  Total: $16,710.00
  Total Flight Hrs. =27 hrs. (1 credit)

- **AV 228B Helicopter Flight Lab, Private Pilot (AV115)**
  Robinson R44
  16 hrs. Pre/Post Instruction @ $35 = $560
  24 hrs. Dual flight @ $650 = $15,600
  2 hrs. Dual FTD @ $195 = $390
  Total: $16,550.00
  Total Flight Hrs. =26 hrs. (1 credit)

- **AV 228C Helicopter Flight Lab, Private Pilot (AV115)**
  Robinson R44
  16 hrs. Pre/Post Instruction @ $35 = $560
  14 hrs. Dual flight @ $650 = $9,100
  10 hrs, Solo Flight @ $650 * =$6,500
  2 hrs. Dual FTD @ $195 = $390
  Written Exam Fee = $160
  DPE Fee = $750
  Total: $17,460.00
  Total Flight Hrs. =26 hrs. (1 credit)
  *Supervised Solo- charged at a dual rate due to required presence of a certified flight instructor

- **AV 228D Helicopter Flight Lab, Instrument Pilot (AV215)**
  Robinson R44
  20 hrs. Pre/Post Instruction @ $35 = $700
  20 hrs. Dual flight @ $650 = $13,000
  (Dual flight includes 15 hrs Pilot in Command)

  10 hrs. Dual FTD @ $195 = $1,950
  Total = $15,650.00
  Total Flight Hrs. =30 hrs. (1 credit)

- **AV 228E Helicopter Flight Lab, Instrument Pilot (AV215)**
  Robinson R44
  25 hrs. Pre/Post Instruction @ $35 = $875
  15 hrs. Dual flight @ $650 = $9,750
  10 hrs. Dual FTD @ $195 = $1,950
  Written Exam Fee = $160
  DPE Fee = $750
  Total = $13,485.00
  Total Flight Hrs. =25 hrs. (1 credit)

- **AV 228N Helicopter Flight Lab, Instrument Pilot (AV215)**
  Robinson R44
  10 hrs. Pre/Post Instruction @ $35 = $350
  10 hrs. Dual flight @ $760* = $7,600
  NVG Fee = $500
  Total = $8,450.00
  Total Flight Hrs. =10 hrs. (1 credit)
  * Flown in a night vision google compatible helicopter

- **AV 228F Helicopter Flight Lab, Commercial Pilot (AV225)**
  Robinson R44
  18 hrs. Pre/Post Instruction @ $35 = $630
  35 hrs. Dual flight @ $650 = $22,750
  (Dual flight includes 15 hrs Pilot in Command)
  2 hrs. Dual FTD @ $195 = $390
  Total: $23,770.00
  Total Flight Hrs. =37 hrs. (1 credit)

- **AV 228G Helicopter Flight Lab, Commercial Pilot (AV225)**
  Robinson R44
  18 hrs. Pre/Post Instruction @ $35 = $630
  35 hrs. Dual flight @ $650 = $22,750
  2 hrs. Dual FTD @ $195 = $390
  Written Exam Fee= $160
  DPE Fee= $750
  Total: $24,680.00
  Total Flight Hrs. =37 hrs. (1 credit)

- **AV 228H Helicopter Flight Lab, Commercial Pilot (AV225)**
  Bell 206
  12 hrs. Pre/Post Instruction @ $35 = $420
  20 hrs. Dual flight @ $935 = $18,700
  Total = $19,120.00
  Total Flight Hrs. =20 hrs. (1 credit)

- **AV 228I Helicopter Flight Lab, Certified Flight Instructor (AV255)**
  Robinson R44
  53 hrs. Pre/Post Instruction @ $35 = $1,855
  20 hrs. Dual flight @ $650 = $13,000
  2 hrs. Dual FTD @ $195 = $390
  Written Exam Fee = $320
  DPE Fee = $850
  Total: $16,415.00
  Total Flight Hrs. =22 hrs. (1 credit)

- **AV 228J Helicopter Flight Lab, Certified Flight Instructor (AV255)**
  Robinson R44
  25 hrs. Pre/Post Instruction @ $35 = $875
  10 hrs. Dual flight @ $650 = $6,500
  5 hrs. Dual FTD @ $195 = $975
  Written Exam Fee = $160
  DPE Fee = $750
  Total = $9,260.00
  Total Flight Hrs. =15 hrs. (1 credit)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- None

Other Entrance Requirements
- Required:
  - Students who enroll in this course of study must have a valid FAA Medical Certificate and a student pilot certificate. A doctor designated by the FAA as an Aviation Medical Examiner must conduct the medical exam.
- Recommended:
  - Incoming students in the professional pilot program are encouraged to obtain at least a second-class medical certificate prior to entry into the program to ensure that they can eventually pursue a career in commercial aviation.

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- Students must maintain a minimum 2.0 GPA while enrolled in the program. Students who do not maintain this standard and desire to continue the program, require completion of a training plan approved by their COCC advisor.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- The FAA requires applicants pass an airman knowledge exam for pilot certificates/ratings.
- Students must be prepared to fly three to four days per week in order to maintain the rigorous schedule that is required in order to complete the flight training in a timely manner.

PROGRAM COURSE REQUIREMENTS

Core Courses

AV 101	Introduction to Aviation [1]	3
AV 104	Introduction to Aircraft Systems [1]	4
AV 108	Meteorology I[1]	4
AV 112	Technically Advanced Aircraft	1
AV 112A	Tech Advanced Aircraft Lab	1
AV 115	Private Pilot-Helicopter[2]	5
AV 117	Helicopter Fundamentals	3
AV 150	Aerodynamics[1]	4
AV 200	Aviation Law[1]	3
or AV 201	Airport Management	
AV 208	Meteorology II[1]	4
AV 215	Instrument Helicopter[4]	5
AV 225	Commercial Pilot-Helicopter[4]	4
AV 235	Human Factors[1]	4
AV 245	Advanced Helicopter Operations	4
AV 246	Aviation Safety[1]	3
AV 255	Cert Flight Instr-Helicopter	5

Helicopter Flight Labs (Choose Series I or Series II)[3]		11

Series I

AV 227A	Helicopter Flt Lab Series I
AV 227B	Helicopter Flt Lab Series I
AV 227C	Helicopter Flt Lab Series I
AV 227D	Helicopter Flt Lab Series I
AV 227E	Helicopter Flt Lab Series I
AV 227F	Helicopter Flt Lab Series I
AV 227G	Helicopter Flt Lab Series I
AV 227H	Helicopter Flt Lab Series I
AV 227I	Helicopter Flt Lab Series I
AV 227J	Helicopter Flt Lab Series I
AV 227N	Helicopter Flt Lab Series I

Series II

AV 228A	Helicopter Flt Lab Series II
AV 228B	Helicopter Flt Lab Series II
AV 228C	Helicopter Flt Lab Series II
AV 228D	Helicopter Flt Lab Series II
AV 228E	Helicopter Flt Lab Series II
AV 228F	Helicopter Flt Lab Series II
AV 228G	Helicopter Flt Lab Series II
AV 228H	Helicopter Flt Lab Series II
AV 228I	Helicopter Flt Lab Series II
AV 228J	Helicopter Flt Lab Series II
AV 228N	Helicopter Flt Lab Series II

Other Required Courses

BA 206	Management Fundamentals I	4
or BA 101	Intro to Business	
BA 285	Business Human Relations	3
or SP 218	Interpersonal Communication	
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
Discipline Studies Courses		8
MTH 085	Technical Mathematics I	4
or MTH 111 or higher		
WR 121	Academic Composition[5]	3-4
or BA 214	Business Communications	
	Total Credits	**90-95**

[1] May be taken in any order, in any term and may be taken before, with or after the flight courses.

[2] Must be taken as the first flight course. May be taken any term.

[3] Flight fees, simulator fees and FAA testing fees are required in addition to normal tuition for all flight labs and must be paid by the end of the second week of the term. Used portions of flight and simulator fees are not refundable. Contact the Aviation program director at 541.318.3702 for more information.

[4] The Private Pilot Helicopter course AV 115 shall be completed prior to the Instrument Helicopter course AV215, and the Instrument Helicopter course AV215 shall be completed before the Commercial Pilot Helicopter course AV225.

[5] WR 121 recommended for students who will pursue a bachelor's degree.

Unmanned Aerial Systems (UAS) Operations
Associate of Applied Science

PROGRAM DESCRIPTION

The Aviation Unmanned Aerial Systems Operations (UAS) program trains individuals to work as professional UAS operators in the national/international arena. Students will learn to operate UAS to include: conducting mission/preflight planning, mission briefings and programming. They will learn how to obtain and evaluate weather forecasts, Notice to Airmen (NOTAMs), Special Instructions (SPINs) and airspace requirements. Students will be taught to perform limited UAS and ground support equipment testing, troubleshooting and maintenance. The UAS degree is intended to prepare students for a fast growing industry with many civilian applications including agriculture, search and rescue, monitoring environment and wildlife, border security, fire mapping, surveying structures after natural disasters, real estate photography and police surveillance.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- AV 272 and AV 273 have $750 fees to cover equipment costs.

PROGRAM ENTRANCE REQUIREMENTS

None

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

AV 104	Introduction to Aircraft Systems	4
AV 108	Meteorology I	4
AV 110	Private Pilot - Airplane	5
or AV 115	Private Pilot-Helicopter	
AV 150	Aerodynamics	4
AV 271	Introduction to Unmanned Aerial Systems	4
AV 272	Unmanned Aerial Systems (UAS) Operations	5
AV 273	Unmanned Aerial Sys Ops Maint	5
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
GEOG 211	Computer Cartography	4
GEOG 265	Geographic Information Systems	4
GEOG 266	Arc GIS	5
GEOG 267	Geodatabase Design	5
GEOG 273	Spatial Data Collection	5
GEOG 275	GIS Capstone	5
GEOG 285	Data Conversion/Documentation	5
GEOG 286	Remote Sensing	5
GEOG 287	Analysis of Spatial Data	5

Other Required Courses

BA 206	Management Fundamentals I	4
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
MTH 085	Technical Mathematics I[1]	4
or MTH 111	College Algebra	
WR 121	Academic Composition	4
	Total Credits 94-98	

[1] Or higher than MTH 111 College Algebra

Aviation-Technology and Management (OIT Transfer) Emphasis
Associate of Science

FOCUS AREA DESCRIPTION
This degree is intended to prepare students to continue on to Oregon Institute of Technology's Bachelor of Applied Science (BAS) in Technology and Management degree in order to promote career advancement into management or the aviation field.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All general education/foundational courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Mathematics

MTH 111	College Algebra	4

Oral Communication

SP 111	Fundamentals Public Speaking	4

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
WR 227	Technical Writing	4

General Education/Discipline Studies
Arts and Letters
Choose two courses from the Discipline Studies list   6-8

Social Science
Choose two courses from the Discipline Studies list   8
Recommend: EC 201 and EC 202

Science/Math/Computer Science
Choose one lab science course from the Discipline Studies list   3-5

PROGRAM REQUIREMENTS

AV 108	Meteorology I	4
AV 208	Meteorology II	4
BA 206	Management Fundamentals I	4
BA 211	Financial Accounting I	4
BA 213	Managerial Accounting[1]	4
BA 223	Marketing Principles I	4
BA 226	Business Law I	4
CIS 125A	Access	4
CIS 125E	Excel	4

Electives   17
Choose enough electives to reach a minimum total of 90 overall degree credits[2]

Total Credits 90-94	

[1] COCC recommends students take BA 212 Financial Accounting II prior to BA 213 Managerial Accounting.
[2] Elective credits must be 100-level and above with a maximum of 12 CTE credits and 15 credits of CWE/HHPA performance courses.

BIOLOGY
Biological Sciences
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The Associate of Arts Oregon Transfer (AAOT) degree with a focus in biology is designed for students who wish to pursue bachelor's degree areas such as health professions, life sciences or natural sciences. Graduates with a Bachelor of Science degree from their transfer institution will be well-equipped for graduate school and other careers in biomedical fields, industry, governmental agencies and non-governmental organizations which require a broad-based education in science, mathematics and communication. Those graduates may enter such fields as conservation or environmental science, science writing, education, botany, forest or marine science, veterinary medicine, agricultural research, pharmaceuticals, human medicine or other life science careers such as research in microbiology, biotechnology, bio-informatics or genetics.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements:
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix[1]   3

Mathematics

MTH 105	Math in Society (or higher)	4

Recommend: MTH 111 or MTH 243

Oral Communication
Choose one course from the following: 3-4
SP 111 Fundamentals Public Speaking
SP 114 Argumentation & Discourse
SP 115 Intro Intercultural Commun
SP 218 Interpersonal Communication
SP 219 Small Group Communication

Writing
WR 121 Academic Composition 4
WR 122 Argument, Research and Multimodal Composition 4
or WR 227 Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters 9-12
At least three courses chosen from at least two prefixes

Social Science 12-16
At least four courses from at least two prefixes

Science/Math/Computer Science 12-20
At least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: BI 211, BI 212, BI 213 and CH 221

Electives 39
Take enough elective courses to meet the minimum 90 credits required for the AAOT degree[2]
Recommend: CH 222, CH 223, FN 225, MTH 251, MTH 252, MTH 253, PH 201, PH 202, PH 203

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

[2] CH 221 General Chemistry I, CH 222 General Chemistry II, and CH 223 General Chemistry III are recommended for students interested in medical, dental and veterinary schools. BI 205 Scientific Terminology: Latin and Greek Roots, BI 231 Human Anatomy and Physiology I, BI 232 Human Anatomy and Physiology II, BI 233 Human Anatomy and Physiology III and BI 234 Microbiology are not prerequisites for admission into dental medicine, or veterinary programs, but may help a student preparing for any of those careers.

ADVISING NOTES
Oregon universities with a biology major include: Eastern Oregon University, Oregon Health Sciences University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, Western Oregon University.

Dental Hygiene
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
While COCC does not offer a Dental Hygiene program, many students begin their courses here with the intent of transferring to another college for their actual degree.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
• All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix[1] 3

Mathematics
MTH 105 Math in Society (or higher) 4
Recommend: MTH 111

Oral Communication
SP 111 Fundamentals Public Speaking 4

Writing
WR 121 Academic Composition 4
WR 122 Argument, Research and Multimodal Composition 4

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters 9-12
Choose at least three courses from at least two prefixes

Social Science 12-16
Choose at least four additional courses from at least two prefixes
Recommend: SOC 201

Science/Math/Computer Science 12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: BI 231, BI 232, BI 233, FN 225

Electives
Choose any college-level course that brings total credits to 90 quarter hours[2] 38
Recommend: AH 111, BI 234, CH 104, CH 105, CH 106

Total Credits 90-105

[1] HHPA activity courses (1 credit each) are not to be duplicated

[2] This may include up to 9 credits of Career and Technical Education courses (in addition to AH 111 Medical Terminology I) designated by COCC as acceptable.

ADVISING NOTES
For a list of accredited Dental Hygiene programs, contact the American Dental Association ada.org/357.aspx.

If transferring to Lane Community College: PSY 201 Mind and Brain or PSY 202 Mind and Society and WR 227 Technical Writing are recommended. Lane gives additional application points for Spanish language proficiency (completion of SPAN 102 First Year Spanish II or CLEP test score of 50 or higher). See LCC's catalog and website for details.

If transferring to Mt. Hood Community College: a psychology elective is recommended. See MHCC's catalog and website for details.

If transferring to Oregon Tech (OIT): Oregon Institute of Technology requires DHE 100 Introduction to Dental Hygiene (2) and is offered online. OIT requires completion of CH 104 Introduction to Chemistry I only. See OIT's catalog and website for details.

If transferring to Portland Community College: a psychology elective is recommended. See PCC's catalog and website for details.

Pre-Dentistry, Pre-Medicine, Pre-Veterinary
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Students interested in pursuing professional degrees in medicine, dentistry or veterinary medicine are required to complete a bachelor's degree, preferably in a related area, including any of the biological sciences. To provide a solid foundation for bachelor's degree work,

students are encouraged to complete the Associate of Arts Oregon Transfer (AAOT) degree, with an emphasis on pre-med, -vet and -dentistry related coursework.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix[1]   3

Mathematics
MTH 105   Math in Society (or higher)   4
Recommend: MTH 111

Oral Communication
(choose one course from the following):   3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: BI 211, BI 212, BI 213, CH 221

Electives   39
Choose enough electives to reach 90 credits
Recommend: CH 222, CH 223, FN 225 or HHP 240, MTH 112, MTH 113, MTH 251, MTH 252, MTH 253, PH 201 or PH 211, PH 202 or PH 212, PH 203 or PH 213

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES
Students may transfer to a baccalaureate institution without the AAOT; however, completion of this degree guarantees that a student will transfer to an Oregon public university with junior standing and that all lower division general education coursework is complete.

BUSINESS ADMINISTRATION
Business
Associate of Science Oregon Transfer

FOCUS AREA DESCRIPTION
The Associate of Science Oregon Transfer Business degree (ASOT) is designed for students with a high level of certainty about their decision to earn a bachelor's degree with a major in business from an Oregon public university. Students completing the ASOT – Business will have met lower division general education requirements upon transfer to an Oregon public institution, and will have junior standing for registration purposes. Admission to the business school is not guaranteed; students are strongly encouraged to contact the institution(s) to which they intend to transfer when choosing from the selection of courses within the ASOT – Business degree.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - College-level math placement

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Mathematics
MTH 243   Introduction to Probability and Statistics I   4
Two additional courses of MTH 105 or higher   8

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose three courses from two or more disciplines

Social Sciences
EC 201   Microeconomics   4
EC 202   Macroeconomics   4
Choose two courses (at least one must have a different prefix than EC)   6-8

Science/Math/Computer Science   12-20
Choose four courses from at least two disciplines including at least three laboratory courses in biological and/or physical science

Business Specific Requirements
BA 101   Intro to Business   4
BA 211   Financial Accounting I   4
BA 212   Financial Accounting II   4
BA 213   Managerial Accounting   4
BA 226   Business Law I   4

PROGRAM DESCRIPTIONS

Electives 12
Choose enough elective credits to reach a minimum of 90 credits
(with a maximum of 12 Career and Technical Education (CTE) credits).[1]
Recommend: BA 206 and BA 223

		Total Credits 90-104

[1] See advisor for recommended electives as well as specific institution
transfer requirements.

ADVISING NOTES

All courses should be aligned with the student's intended program of
study and the degree requirements of the university or college to which
the student plans to transfer. Admission to an Oregon public university is
not guaranteed upon completion of the ASOT – Business degree. Every
student is strongly encouraged to contact the institution(s) to which they
intend to transfer when choosing from the selection of courses within the
ASOT – Business degree.

Business Administration
Associate of Applied Science

PROGRAM DESCRIPTION
The Associate of Applied Science in Business prepares students for
immediate employment in business occupations. Business Administration
AAS degrees may be awarded indicating emphasis in the following areas
of specialization: General Business, Accounting, Management, or Small
Business/Entrepreneurship.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic
    Composition placement or completion of WR 065 Rhetoric/Critical
    Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II
    placement or completion of MTH 060 Algebra I ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC
  certificate or degree.
- All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
Level 1 Foundation Courses

BA 101	Intro to Business	4
BA 104	Business Math	3
BA 111	Applied Accounting I	3
BA 178	Customer Service	3
or BA 285	Business Human Relations	
BA 218	Personal Finance	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	4

Level 2 Core Courses

BA 112	Applied Accounting II	3
BA 113	Applied Accounting III	3
BA 206	Management Fundamentals I	4
BA 214	Business Communications	3
BA 223	Marketing Principles I	4
BA 226	Business Law I	4
BA 250	Entrepreneurship	4
BA 261	Consumer Behavior	4
CIS 125E	Excel	4

Level 3 General Business Specialization
Choose an additional 21-24 credits of any courses with
a BA prefix and/or CIS 178 21-24

Level 4 Advanced Core and Capstone Courses

BA 220	Business Analysis and Budgeting	4
BA 222	Business Finance	4
BA 290	Business Seminar	3
		Total Credits 90-97

ADVISING NOTES
Take as many Level 1 courses as possible before attempting Level 2
courses, and take as many Level 2 courses before Level 3 courses. Level
3 courses may be taken concurrently with Level 4 courses.

This degree is designed for students planning to enter their chosen
career upon graduation. Only selected credits are considered
transferrable to public or private baccalaureate institutions. See advisor
for additional information.

Business Administration: Accounting
Associate of Applied Science

PROGRAM DESCRIPTION
The Associate of Applied Science Business Administration Accounting
Specialization degree qualifies graduates for employment as accounting
managers, full-charge bookkeepers, staff accountants, accounts payable
managers and accounts receivable managers.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic
    Composition placement or completion of WR 065 Rhetoric/Critical
    Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II
    placement or completion of MTH 060 Algebra I ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate
  or degree.
- All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
Level 1 Foundation Courses

BA 101	Intro to Business	4
BA 104	Business Math	3
BA 111	Applied Accounting I	3
BA 178	Customer Service	3
or BA 285	Business Human Relations	
BA 218	Personal Finance	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	4

Level 2 Core Courses

BA 112	Applied Accounting II	3
BA 113	Applied Accounting III	3
BA 206	Management Fundamentals I	4
BA 214	Business Communications	3
BA 223	Marketing Principles I	4
BA 226	Business Law I	4
BA 250	Entrepreneurship	4
BA 261	Consumer Behavior	4
CIS 125E	Excel	4

Level 3 Accounting Specialization

BA 177	Payroll Accounting	3
BA 211	Financial Accounting I	4
BA 212	Financial Accounting II	4
BA 213	Managerial Accounting	4
BA 228	Computer Accounting Applications	3
BA 229	QuickBooks	3
BA Elective	Any BA prefix course	3-4

Level 4 Advanced Core and Capstone Courses

BA 220	Business Analysis and Budgeting	4
BA 222	Business Finance	4
BA 290	Business Seminar	3
	Total Credits 93-98	

ADVISING NOTES

Take as many Level 1 courses as possible before attempting Level 2 courses, and take as many Level 2 courses before Level 3 courses. Level 3 courses may be taken concurrently with Level 4 courses.

This degree is designed for students planning to enter their chosen career upon graduation. Only selected credits are considered transferrable to public or private baccalaureate institutions. See advisor for additional information.

Business Administration: Management
Associate of Applied Science

PROGRAM DESCRIPTION
The Associate of Applied Science in Business Administration prepares students for immediate employment in business occupations. This general Business degree allows students to choose from a wide variety of Business elective courses according to their individual interests.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II placement or completion of MTH 060 Algebra I ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Level 1 Foundation Courses

BA 101	Intro to Business	4
BA 104	Business Math	3
BA 111	Applied Accounting I	3
BA 178	Customer Service	3
or BA 285	Business Human Relations	
BA 218	Personal Finance	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	4

Level 2 Core Courses

BA 112	Applied Accounting II	3
BA 113	Applied Accounting III	3
BA 206	Management Fundamentals I	4
BA 214	Business Communications	3
BA 223	Marketing Principles I	4

BA 226	Business Law I	4
BA 250	Entrepreneurship	4
BA 261	Consumer Behavior	4
CIS 125E	Excel	4

Level 3 Management Specialization

BA 207	Management Fundamentals II	4
BA 224	Human Resources Management	4
BA 286	Managing Business Processes	4
Choose 9-12 credits from any BA prefix		9-12

Level 4 Advanced Core and Capstone Courses

BA 220	Business Analysis and Budgeting	4
BA 222	Business Finance	4
BA 290	Business Seminar	3
	Total Credits 90-97	

ADVISING NOTES

Take as many Level 1 courses as possible before attempting Level 2 courses, and take as many Level 2 courses before Level 3 courses. Level 3 courses may be taken concurrently with Level 4 courses.

This degree is designed for students planning to enter their chosen career upon graduation. Only selected credits are considered transferrable to public or private baccalaureate institutions. See advisor for additional information.

Business Administration: Small Business and Entrepreneurship
Associate of Applied Science

PROGRAM DESCRIPTION
The Associate of Applied Science Business Administration Small Business/Entrepreneurship Specialization degree qualifies graduates to start and run a business, grow an existing business, or be employed in a new startup venture. The skills learned will enable the student to comprehend and assist in the basics of successfully operating a small business. Employment opportunities and job functions will vary greatly with industry, size of business and geographical region.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II placement or completion of MTH 060 Algebra I ("C" or better)

PROGRAM PERFORMANCE STANDARDS
- Academic Requirements
  - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
  - All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Level 1 Foundation Courses

BA 101	Intro to Business	4
BA 104	Business Math	3
BA 111	Applied Accounting I	3
BA 178	Customer Service	3
or BA 285	Business Human Relations	
BA 218	Personal Finance	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	4

Level 2 Core Courses

BA 112	Applied Accounting II	3
BA 113	Applied Accounting III	3
BA 206	Management Fundamentals I	4
BA 214	Business Communications	3
BA 223	Marketing Principles I	4
BA 226	Business Law I	4
BA 250	Entrepreneurship	4
BA 261	Consumer Behavior	4
CIS 125E	Excel	4

Level 3 Small Business/Entrepreneurship Specialization

BA 232	Branding	4
BA 233	Internet Marketing	4
BA 237	Marketing Research	4
BA 253	Business Plan Elements	4
Choose two from the following:		8
BA 239	Advertising	
BA 254	Business Strategies	
BA 271	Product Development Process	
BA 272	Product Development Strategies	
CIS 178	Internet in Depth	

Level 4 Advanced Core and Capstone Courses

BA 220	Business Analysis and Budgeting	4
BA 222	Business Finance	4
BA 290	Business Seminar	3
	Total Credits 93-97	

ADVISING NOTES

Take as many Level 1 courses as possible before attempting Level 2 courses, and take as many Level 2 courses before Level 3 courses. Level 3 courses may be taken concurrently with Level 4 courses.

This degree is designed for students planning to enter their chosen career upon graduation. Only selected credits are considered transferable to public or private baccalaureate institutions.
See advisor for additional information.

Accounting Clerk
Certificate of Completion

PROGRAM DESCRIPTION
The Accounting Clerk certificate is designed to give students a foundation for careers in clerical accounting. All coursework may be applied to an Associate of Applied Science (AAS) Business degree.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II placement or completion of MTH 060 Algebra I ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

BA 101	Intro to Business	4
BA 104	Business Math	3
BA 111	Applied Accounting I	3
BA 112	Applied Accounting II	3
BA 113	Applied Accounting III	3

BA 177	Payroll Accounting	3
BA 178	Customer Service	3
or BA 285	Business Human Relations	
BA 229	QuickBooks	3
BA Elective (any BA prefix)		3-4
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 125E	Excel	4
CIS 131	Software Applications	4
WR 121	Academic Composition	4
	Total Credits 40-45	

ADVISING NOTES
Students should consult their advisor if they have transfer credits, are not able to attend full time, or are not at college level in reading, writing and math.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

Entrepreneurship
Certificate of Completion

PROGRAM DESCRIPTION
The Entrepreneurship certificate is designed to give students a foundation for starting their own business or assisting in the business startup activities of others. All coursework may be applied to an Associate of Applied Science (AAS) Business degree.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II placement or completion of MTH 060 Algebra I ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

BA 101	Intro to Business	4
BA 104	Business Math	3
BA 206	Management Fundamentals I	4
BA 217	Accounting Fundamentals	4
BA 223	Marketing Principles I	4
BA 237	Marketing Research	4
BA 250	Entrepreneurship	4
BA 253	Business Plan Elements	4
or BA 271	Product Development Process	
BA 254	Business Strategies	4
or BA 272	Product Development Strategies	
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	4
	Total Credits 44-48	

ADVISING NOTES
Students should consult their advisor if they have transfer credits, are not able to attend full time, or are not at college level in reading, writing and math.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

Marketing Communications
Certificate of Completion

PROGRAM DESCRIPTION
The Marketing Communications Certificate gives students the skills to research target consumer preferences and utilize that research to create a branding strategy and promotional content for both electronic and traditional marketing media channels. A student pursuing this certificate should be seeking to add these skills to other previously acquired business education or experience. All coursework may be applied to an Associate of Applied Science (AAS) Business degree.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II placement or completion of MTH 060 Algebra I ("C" or better)
  - Work experience providing an understanding of general business functions or completion of BA 101 Introduction to Business

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

BA 104	Business Math	3
BA 178	Customer Service	3
BA 214	Business Communications	3
BA 223	Marketing Principles I	4
BA 232	Branding	4
BA 233 or BA 239	Internet Marketing Advertising	4
BA 237	Marketing Research	4
BA 261	Consumer Behavior	4
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
CIS 178	Internet in Depth	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	4

Total Credits 42-46

ADVISING NOTES
Students should consult their advisor if they have transfer credits, are not able to attend full time, or are not at college level in reading, writing and math.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

Office Assistant
Certificate of Completion

PROGRAM DESCRIPTION
The Office Assistant certificate is designed for persons preparing for immediate entry-level employment in office occupations and those already in business who desire to update and enhance their skills.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II placement or completion of MTH 060 Algebra I ("C" or better)
  - Keyboarding skills at 25 words per minute or better (CIS 010 Computer Keyboarding is recommended for basic keyboarding skills acquisition)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

BA 101	Intro to Business	4
BA 104	Business Math	3
BA 111	Applied Accounting I	3
BA 178	Customer Service	3
BA 214	Business Communications	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 125E	Excel	4
CIS 131	Software Applications	4
WR 121	Academic Composition	4
Choose two courses from the following:		8
CIS 122	Introduction to Programming	
CIS 125A	Access	
CIS 125G	Photoshop	
CIS 140	A+ Essentials I	
CIS 178	Internet in Depth	
CIS 195	Web Development I	

Total Credits 36-40

ADVISING NOTES
Full-time suggested term-by-term coursework schedule assumes college-level placement in reading, writing and math. Part-time students and those with schedule conflicts, should see an advisor for proper course sequencing and prerequisite requirements.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

Retail Management
Certificate of Completion

PROGRAM DESCRIPTION
The Retail Management certificate is designed to give students a foundation for careers in retail business management. All coursework may be applied to an AAS Business degree.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 065 Algebra II placement or completion of MTH 060 Algebra I ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

BA 101	Intro to Business (or any BA prefix course)	4
BA 104	Business Math	3
BA 111	Applied Accounting I	3
BA 178	Customer Service (or any BA prefix course)[1]	3
BA 206	Management Fundamentals I	4
BA 214	Business Communications	3
BA 223	Marketing Principles I	4
BA 224	Human Resources Management	4
BA 249	Retailing	4
BA 285	Business Human Relations	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
WR 121	Academic Composition	4
	Total Credits	**43-47**

[1] Students planning to continue education and apply coursework toward any AAS Business Specialization are advised to plan these 3 credits carefully with an advisor.

ADVISING NOTES
Students should consult their advisor if they have transfer credits, are not able to attend full time, or are not at college level in reading, writing and math.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

Western Association of Food Chains provides an industry certificate of completion for 8 courses of the COCC Retail Management Certificate Coursework. See retailmanagementcertificate.com for course list and application information.

CASCADE CULINARY INSTITUTE
Baking and Pastry Arts
Associate of Applied Science

PROGRAM DESCRIPTION
The Baking and Pastry Arts AAS Degree program is designed to expose students to the step-by-step process, from foundation to advanced skill mastery, of classical and contemporary baking and pastry techniques and to serve as a competency-based learning experience that prepares students for a successful career within the hospitality industry.

ACCREDITATION
American Culinary Federation (ACF)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)

Material Costs
- $23 OLCC Liquor Control Card
- Additional costs for books, knives and supplies approximately $1,500

Enrollment Fees
- Specified courses carry a $185 per credit course fee for lab and consumable materials (estimated at $9600)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Enrollment in or completion of WR 121 or BA 214.
  - Minimum placement scores resulting in MTH 060 Algebra I placement (equivalent to CUL 090 Applied Math for Culinary Arts) or completion of MTH 020 Pre-Algebra/MTH 031 Health Care Math ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

BAK 110	Baking and Pastry Foundations I[1]	4
BAK 140	Baking & Pastry Foundations II[1]	4
BAK 170	Baking Pastry Foundations III[1]	4
BAK 180	Custards and Frozen Desserts[1]	4
BAK 210	Modern Sugar & Chocolate Deco[1]	4
BAK 220	Wedding Celebration Cakes[1]	4
BAK 240	The Craft of Artisan Breads[1]	4
BAK 250	Petit Fours Candies Mignardise[1]	4
BAK 280	Baking Industry Internship	6
CUL 090	Applied Math for Culinary Arts	4
CUL 101	Introduction to Culinary Arts[1]	4
CUL 102	Food Safety and Sanitation	2
CUL 200	Kitchen Operations/Elevation	5
CUL 230	Nutrition & Healthy Cooking[1]	4
CUL 270	Culinary Capstone Internship	6
HM 130	Supervision in Hospitality	4
HM 150	Procurement & Cost Control	3
HM 190	Dining Room Operations	5
HM 290	Career Success and E-Folio	2
WR 121	Academic Composition	3-4
or BA 214	Business Communications	

Baking & Pastry Specialization List
Choose 16 credits from the following: 16

BAK 215	Laminated Dough & Viennoiserie[1]	
BAK 225	Entremets[1]	
BAK 230	Plated Desserts & Presentation[1]	
BAK 235S	Classical French Pastries[1]	
BAK 245S	Adv Sugar Decor & Chocolate[1]	
BAK 255S	Artisan Breads with Heirloom Whole Grains[1]	
BAK 260	Advanced Specialty Cakes[1]	
BA 101	Intro to Business	
BA 250	Entrepreneurship	
CUL 105	International Exchange Prep	
CUL 225	Applied Harvest & Preservation[1]	
CUL 265S	Advanced Skill Development and Culinary Competition Mastery[1]	
	Total Credits	**96-97**

[1] Course carries a $185 per credit fee for lab and consumable materials.

ADVISING NOTES
This certificate is designed for students planning to enter their chosen field after completion. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Baking and Pastry Arts
Certificate of Completion

PROGRAM DESCRIPTION
This program is designed to expose students to the step-by-step process, from foundation to advanced skill mastery, of classical and contemporary baking and pastry arts techniques and to serve as a competency-based learning experience that prepares students for a successful career within the hospitality industry.

ACCREDITATION
American Culinary Federation (ACF)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- $23 OLCC Liquor Control Card
- Additional costs for books, knives and supplies approximately $1,500

Enrollment Fees
- Specified courses carry a $185 per credit course fee for lab and consumable materials (estimated at $5180)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Enrollment in or completion of WR 121 Academic Composition or BA 214 Business Communications
  - Minimum placement scores resulting in MTH 060 Algebra I placement (equivalent to CUL 090) or completion of MTH 020 Pre-Algebra/MTH 031 Health Care Math ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

BAK 110	Baking and Pastry Foundations I[1]	4
BAK 140	Baking & Pastry Foundations II[1]	4
BAK 170	Baking Pastry Foundations III[1]	4
BAK 180	Custards and Frozen Desserts[1]	4
BAK 210	Modern Sugar & Chocolate Deco[1]	4
CUL 090	Applied Math for Culinary Arts	4
CUL 101	Introduction to Culinary Arts[1]	4
CUL 102	Food Safety and Sanitation	2
CUL 200	Kitchen Operations/Elevation	5
CUL 230	Nutrition & Healthy Cooking[1]	4
HM 130	Supervision in Hospitality	4
HM 150	Procurement & Cost Control	3
HM 190	Dining Room Operations	5
WR 121	Academic Composition	3-4
or BA 214	Business Communications	
	Total Credit	**54-55**

[1] Course carries a $185 per credit fee for lab and consumable materials.

ADVISING NOTES
This certificate is designed for students planning to enter their chosen field after completion. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Culinary Arts
Associate of Applied Science

PROGRAM DESCRIPTION
This program is designed to expose students to the step-by-step process, from foundation to advanced skill mastery, of classical and contemporary culinary techniques and to serve as a competency-based learning experience that prepares students for a successful career within the hospitality industry.

ACCREDITATION
American Culinary Federation (ACF)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- $23 OLCC Liquor Control Card
- Additional costs for books, knives and supplies approximately $1,500

Enrollment Fees
- Specified courses carry a $185 per credit course fee for lab and consumable materials (estimated at $9000)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Enrollment in or completion of WR 121 or BA 214.
- Minimum placement scores resulting in MTH 060 Algebra I placement (equivalent to CUL 090 Applied Math for Culinary Arts) or completion of MTH 020 Pre-Algebra/MTH 031 Health Care Math ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Requirements

BAK 101	Introduction to Baking & Pastry[1]	4
CUL 090	Applied Math for Culinary Arts	4
CUL 102	Food Safety and Sanitation	2
CUL 110	Culinary Foundations I[1]	4
CUL 140	Culinary Foundations II[1]	4
CUL 170	Culinary Foundations III[1]	4
CUL 180	Modern Garde Manger[1]	4
CUL 200	Kitchen Operations/Elevation	5
CUL 220	International Cuisine[1]	4
CUL 230	Nutrition & Healthy Cooking[1]	4
CUL 240	Butchery[1]	4
CUL 270	Culinary Capstone Internship	6
CUL 280	Culinary Industry Internship	6
HM 130	Supervision in Hospitality	4
HM 150	Procurement & Cost Control	3
HM 160	Wine & Beverage Management[1]	3
HM 190	Dining Room Operations	5
HM 210	Menu Composition and Analysis	3
HM 290	Career Success and E-Folio	2
WR 121	Academic Composition	3-4
or BA 214	Business Communications	

Culinary Specialization List

Choose 16 credits from the following:		16
BA 101	Intro to Business	
BA 206	Management Fundamentals I	
BA 223	Marketing Principles I	
BA 250	Entrepreneurship	
BAK 210	Modern Sugar & Chocolate Deco[1]	
BAK 220	Wedding Celebration Cakes[1]	
BAK 235S	Classical French Pastries[1]	
BAK 240	The Craft of Artisan Breads[1]	

PROGRAM DESCRIPTIONS

BAK 245S	Adv Sugar Decor & Chocolate[1]	
BAK 255S	Artisan Breads with Heirloom Whole Grain[1]	
CUL 101	Introduction to Culinary Arts[1]	
CUL 105	International Exchange Prep	
CUL 199	Selected Topics: Culinary Arts	
CUL 225	Applied Harvest & Preservation[1]	
CUL 235S	Farm-to-Table and Sustainable Cuisine Practices[1]	
CUL 242	Charcuterie[1]	
CUL 245S	Modernist Cuisine[1]	
CUL 255S	Event Planning and Execution with Modern Banquet Cookery[1]	
CUL 265S	Advanced Skill Development & Culinary Competition Mastery[1]	
CUL 276A	Regional World Cuisines: Africa[1]	
CUL 276C	Regional World Cuisines: Caribbean[1]	
CUL 276F	Regional World Cuisines: France[1]	
CUL 276G	Regional World Cuisines: Germany[1]	
CUL 276I	Regional World Cuisines: Italy[1]	
CUL 276J	Regional World Cuisines: Asia[1]	
CUL 276S	Regional World Cuisines: Spain[1]	

Total Credits 94-95

[1] Course carries a $185 per credit fee for lab and consumable materials.

ADVISING NOTES

This certificate is designed for students planning to enter their chosen field after completion. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Culinary Arts
Certificate of Completion

PROGRAM DESCRIPTION

This program is designed to expose students to the step-by-step process, from foundation to advanced skill mastery, of classical and contemporary culinary techniques and to serve as a competency-based learning experience that prepares students for a successful career within the hospitality industry.

ACCREDITATION
American Culinary Federation (ACF)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- $23 OLCC Liquor Control Card
- Additional costs for books, knives and supplies approximately $1,500

Enrollment Fees
- Specified courses carry a $185 per credit course fee for lab and consumable materials (estimated at $4440)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Completion of or enrollment in WR 121 Academic Composition or BA 214 Business Communications
  - Minimum placement scores resulting in MTH 060 Algebra I placement (equivalent to CUL 090 Applied Math for Culinary Arts) or completion of MTH 020 Pre-Algebra/MTH 031 Health Care Math ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Requirements

BAK 101	Introduction to Baking & Pastry[1]	4
CUL 090	Applied Math for Culinary Arts	4
CUL 102	Food Safety and Sanitation	2
CUL 110	Culinary Foundations I[1]	4
CUL 140	Culinary Foundations II[1]	4
CUL 170	Culinary Foundations III[1]	4
CUL 180	Modern Garde Manger[1]	4
CUL 200	Kitchen Operations/Elevation	5
CUL 230	Nutrition & Healthy Cooking[1]	4
HM 130	Supervision in Hospitality	4
HM 150	Procurement & Cost Control	3
HM 190	Dining Room Operations	5
WR 121	Academic Composition	4
or BA 214	Business Communications	

Total Credits 51

[1] Course carries a $185 per credit fee for lab and consumable materials.

Hospitality Management
Associate of Applied Science

PROGRAM DESCRIPTION
The Associate of Applied Science (AAS) coursework prepares students for immediate employment in hospitality occupations. A Hospitality Management (HM) AAS degree will provide students with the skills the hospitality industry requires – specifically, skills in management, hospitality technology, food and beverage operations and basic business fundamentals of marketing, customer service and financial analysis.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- $23 OLCC Liquor Control Card
- Additional cost for supplies approximately $150

Enrollment Fees
- Specified courses carry a $185 per credit course fee for lab and consumable materials (estimated at $1295)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Enrollment in or completion of WR 121 or BA 214.
  - Minimum placement scores resulting in MTH 060 Algebra I/CUL 090 Applied Math for Culinary Arts placement or completion of MTH 020 Pre-Algebra/MTH 031 Health Care Math ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- Academic dishonesty will not be tolerated and can result in the offending student being dropped from the program. Students wishing reinstatement must seek endorsement from the department chair after completing a progressive review.

PROGRAM COURSE REQUIREMENTS
Level 1 Foundation Courses

BA 217	Accounting Fundamentals	4
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
CUL 090	Applied Math for Culinary Arts	4
CUL 101	Introduction to Culinary Arts[1]	4
CUL 102	Food Safety and Sanitation	2

HM 101	Introduction to Hospitality	4
HM 130	Supervision in Hospitality	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	3-4
or BA 214	Business Communications	

Level 2 Core Courses

BA 178	Customer Service	3
BA 223	Marketing Principles I	4
BA 250	Entrepreneurship	4
CIS 125E	Excel	4
CUL 105	International Exchange Prep	2
HM 150	Procurement & Cost Control	3
HM 160	Wine & Beverage Management[1]	3
HM 190	Dining Room Operations	5
HM 210	Menu Composition and Analysis	3
HM 230	Lodging Management	4
HM 240	Hospitality Law	4
HM 280	Hospitality Indust. Internship	6
HM 290	Career Success and E-Folio	2

Level 3
Choose 16 credits from the following: 16

BA 101	Intro to Business	
BA 224	Human Resources Management	
BA 249	Retailing	
BA 261	Consumer Behavior	
CIS 178	Internet in Depth	
HHP 268	Sustainable Food and Nutrition	
HM 275	Mixology and Beverage Ops	

Total Credits 93-98

[1] Course carries a $185 per credit fee for lab and consumable materials.

ADVISING NOTES
Foundation courses ensure that students have basic skills and basic business concepts to address further skill development. Foundation courses include math, computer and writing skills. Core courses that will allow students to begin to understand concepts in their specialization courses taken in Level 3. Students should take as many Level 1 courses as possible before attempting Level 2 courses, Level 2 courses before Level 3 courses, etc. This will enable students to approach each class with the background necessary to succeed and enjoy the course content. This degree is designed for students planning to enter their chosen career upon graduation. Only selected credits are considered transferable to public or private baccalaureate institutions. See advisor for additional information.

Hospitality Management
Certificate of Completion

PROGRAM DESCRIPTION
The Hospitality Management certificate is designed to give students a foundation for careers in hospitality management.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
• $23 OLCC Liquor Control Card
• Additional cost for supplies approximately $150

Enrollment Fees
• Specified courses carry a $185 per credit course fee for lab and consumable materials (estimated at $1295)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
• Enrollment in or completion of WR 121 or BA 214

• Minimum placement scores resulting in MTH 060 Algebra I/CUL 090 Applied Math for Culinary Arts placement or completion of MTH 020 Pre-Algebra/MTH 031 Health Care Math ("C" or better)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
• All courses in the program must be completed with a grade of C or higher.

Additional Requirements
• Academic dishonesty will not be tolerated and can result in the offending student being dropped from the program. Students wishing reinstatement must seek endorsement from the department chair after completing a progressive review.

PROGRAM COURSE REQUIREMENTS
Level 1 Foundation Courses

BA 217	Accounting Fundamentals	4
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
CIS 131	Software Applications	4
CUL 090	Applied Math for Culinary Arts	4
CUL 101	Introduction to Culinary Arts[1]	4
CUL 102	Food Safety and Sanitation	2
HM 101	Introduction to Hospitality	4
HM 130	Supervision in Hospitality	4
LIB 100	Intro to Finding Information	1
WR 121	Academic Composition	3-4
or BA 214	Business Communications	

Level 2 Core Courses

HM 150	Procurement & Cost Control	3
HM 160	Wine & Beverage Management[1]	3
HM 190	Dining Room Operations	5
HM 210	Menu Composition and Analysis	3
HM 230	Lodging Management	

Total Credits 44-49

[1] Course carries a $185 per credit fee for lab and consumable materials.

ADVISING NOTES
Students should consult their advisor if they have transfer credits, are not able to attend full time or are not at college level in reading, writing and math.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

CHEMISTRY
Chemistry
Associate of Science Oregon Transfer

FOCUS AREA DESCRIPTION
Chemists study the composition and transformations of matter. Chemists work in a wide variety of settings and find employment with government, academic and private institutions. Chemistry is frequently described as the "central science" because of the connections between it and all other scientific disciplines. Earning a degree in chemistry can be the first step toward careers with chemical, materials or pharmaceutical companies, biotech firms or forensic laboratories. It can also be a stepping stone on the route to a professional medical degree, for instance in medicine, physical therapy or pharmacy. Chemists are readily employable after completion of a bachelor's degree. Earning an Associate of Arts Oregon Transfer (AAOT) degree with a chemistry emphasis is also excellent preparation for bachelor's degrees in related disciplines such as toxicology, atmospheric science, environmental science or materials science.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix[1]   3

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
(choose one course from the following):   3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: CH 221, CH 222, CH 223, and PH 201 or PH 211

Electives   39
Choose enough electives to reach 90 credits
Recommend: MTH 251, MTH 252, MTH 253, PH 202 or PH 212, PH 203 or PH 213

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES
Oregon public universities with a chemistry major include: Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, Western Oregon University.

COMMUNICATION
Communication/Journalism
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The Associate of Arts Oregon Transfer (AAOT) with a focus in communication/journalism includes courses that are commonly required for these majors and meets lower division general education requirements at all Oregon public universities. COCC offers courses in public speaking, small group communication, interpersonal communication, as well as courses on the media, gender, intercultural communication, argumentation and journalism. One-credit, workshop-style courses are also available for those who want to learn team skills, conflict management, listening skills and the basics of free expression. A degree in communication/journalism can lead to a career in teaching, the hospitality industry, broadcast and cyber media, human resources, business management, public relations, politics, law or the arts.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
Choose one of the following courses: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes [2]

Social Science   12-16
Choose at least four courses from at least two prefixes [3]

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Choose enough electives to reach the minimum of 90 credits
for the AAOT [4]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Speech communication majors should consider courses with ART, HUM, ENG, PHL, SP or TA prefixes.
[3] Speech communication majors interested in quantitative communication studies should consider courses with a PSY or SOC prefix. Speech communication majors interested in rhetoric and public address should consider courses with an HST or PS prefix.
[4] Related courses to consider: any course with a SP prefix

ADVISING NOTES
Oregon public universities offer a variety of programs for speech communication majors who seek a bachelor's or more advanced degree. Some Oregon two-year and four-year colleges have required speech courses that are 4 credits, so students transferring to those colleges may find it helpful to take one of the 1 credit courses, such as SP 250 Listening, SP 252 Team Skills, SP 253 Conflict Management or SP 255 to supplement one of the 3 credit speech courses.

Oregon State University – Cascades offers a speech communication minor; contact its Admissions office for more information. OSU's (Corvallis) department of Speech Communication offers undergraduate programs leading to BA or BS degrees, with concentrations in communication or theatre arts. Additionally, students at OSU can complete a minor either in communication or theatre arts, as well as one in the multimedia minors. At the graduate level they participate in the Master of Arts in Interdisciplinary Studies program.

Oregon Tech's Communications Department offers a BS in Communication Studies, with an optional certificate in Dispute Resolution. They also offer minors in Human Communication or Technical Communication.

Southern Oregon University's Department of Communication provides students the opportunity to develop verbal and nonverbal communication knowledge and skills through exploration of human communication, mass media studies and journalism. In addition to these three degree programs, the department offers four minor options to support a variety of goals: human communication, journalism, media studies and public relations.

The University of Oregon's School of Journalism and Communication offers majors in six areas: advertising, electronic media, communication studies, magazine journalism, news-editorial or public relations.

Western Oregon University's Speech Communication Department offers a 57-hour major and a 27-hour minor in speech communication. In the liberal arts tradition, their program emphasizes classic texts of rhetoric, modern communication theory and the latest developments in mass media and communication technology.

COMPUTER & INFORMATION SYSTEMS
Computer & Information Systems
Associate of Applied Science

PROGRAM DESCRIPTION
The Computer Information Systems (CIS) degree program is designed around a core curriculum and four distinct options. The program's core provides an introduction to computer concepts, software applications, operating systems, networking, database, computer servicing, internet, math, human relations and writing. Graduates work in information technology (IT) for a wide variety of commercial businesses, education, federal/state/local governments, e-commerce, publishing and real estate. CIS careers typically include positions such as PC technician, desktop support, network administrator, web developer, draftsperson, database administrator, system administrator and related managerial and administrative roles.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
  - Recommended: a home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
- $10 per credit for online courses

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)

- Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
- Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- All COCC students enrolled in the Computer Information Systems program (which includes requirements for Cooperative Work Experience) may have to pass Criminal History Checks (CHC) as a condition of their acceptance into a work site. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director.

PROGRAM COURSE REQUIREMENTS
Core Courses

CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
CIS 244	Information Systems Analysis	4
CIS 279WC	Windows Client	4
CIS 297	CIS Professional Capstone	4

General CIS AAS Degree

Select 27 credits with a CIS prefix numbered 100 or higher	27

Other Required Courses

Choose one course from the following:		3-4
BA 214	Business Communications	
SP 111	Fundamentals Public Speaking	
WR 122	Argument, Research and Multimodal Composition	
WR 227	Technical Writing	

Choose two courses from the Discipline Studies list (except CS prefix courses) or the recommended electives list below　6-8
Recommend: BA 101, BA 111, BA 112, BA 113, BA 177, BA 178, BA 206, BA 207, BA 211, BA 212, BA 213, BA 217, BA 218, BA 220, BA 222, BA 223, BA 224, BA 226, BA 228, BA 229, BA 239, BA 249, BA 250, BA 286

Human Relations approved course		3-4
MTH 085	Technical Mathematics I (or higher)	3-4
or BA 104	Business Math	
WR 121	Academic Composition	4

Total Credits 94-99

ADVISING NOTES
Core courses are all offered two to three quarters each academic year. All CIS option courses are offered one to two quarters an academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

PROGRAM DESCRIPTIONS

Computer & Information Systems: Computer Aided Drafting
Associate of Applied Science

PROGRAM DESCRIPTION

The Computer Information Systems (CIS) degree program is designed around a core curriculum and four distinct options. The program's core provides an introduction to computer concepts, software applications, operating systems, networking, database, computer servicing, internet, math, human relations and writing. Graduates work in information technology (IT) for a wide variety of commercial businesses, education, federal/state/local governments, e-commerce, publishing and real estate. CIS careers typically include positions such as PC technician, desktop support, network administrator, web developer, draftsperson, database administrator, system administrator and related managerial and administrative roles.

The Computer Aided Drafting option prepares students for entry-level employment in the drafting field. Students prepare for advanced CAD applications through an introductory set of CAD-based curriculum. Students will gain experience using dedicated architectural, civil and mechanical software.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
• (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
• Recommended:
  A home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
• $10 per credit for online courses

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
• Recommended:
  • High school diploma or GED
  • Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  • Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
  • Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
• All courses in the program must be completed with a grade of C or higher.

Additional Requirements
• All COCC students enrolled in the Computer Information Systems program (which includes requirements for Cooperative Work Experience) may have to pass Criminal History Checks (CHC) as a condition of their acceptance into a work site. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director.

PROGRAM COURSE REQUIREMENTS
Core Courses

CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
CIS 244	Information Systems Analysis	4
CIS 279WC	Windows Client	4
CIS 297	CIS Professional Capstone	4

Computer Aided Drafting Option

CIS 125A1	AutoCAD 1	4
CIS 125A2	AutoCAD 2	4
CIS 135A1	AutoDESK Revit 1	4
CIS 135A2	AutoDESK Revit 2	4
CIS 135C1	AutoCAD Civil 3D	4
CIS 135S1	SolidWorks 1	4
CIS 135S2	SolidWorks 2	4

Other Required Courses

Choose one course from the following:		3-4
BA 214	Business Communications	
SP 111	Fundamentals Public Speaking	
WR 122	Argument, Research and Multimodal Composition	
WR 227	Technical Writing	
Choose two courses from the Discipline Studies list (except CS prefix courses) or the following CIS electives.		6-8

CIS electives: BA 101, BA 111, BA 112, BA 113, BA 177, BA 178, BA 206, BA 207, BA 211, BA 212, BA 213, BA 217, BA 218, BA 220, BA 222, BA 223, BA 224, BA 226, BA 228, BA 229, BA 239, BA 249, BA 250, BA 286

Human Relations approved course		3-4
MTH 085	Technical Mathematics I (or higher)	3-4
or BA 104	Business Math	
WR 121	Academic Composition	4

Total Credits 95-100

ADVISING NOTES

Core courses are all offered two to three quarters each academic year. All CIS option courses are offered one to two quarters an academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Computer & Information Systems: Desktop Support
Associate of Applied Science

PROGRAM DESCRIPTION

The Computer Information Systems (CIS) degree program is designed around a core curriculum and four distinct options. The program's core provides an introduction to computer concepts, software applications, operating systems, networking, database, computer servicing, internet, math, human relations and writing. Graduates work in information technology (IT) for a wide variety of commercial businesses, education, federal/state/local governments, e-commerce, publishing and real estate. CIS careers typically include positions such as PC technician, desktop support, network administrator, web developer, draftsperson, database administrator, system administrator and related managerial and administrative roles.

The Desktop Support option prepares students to provide technical assistance to computer system users, answer questions, or resolve computer problems for clients in person, via telephone or from a remote location. Other responsibilities may include providing support for computer hardware and software, including printing, installation, word processing, spreadsheets, database, electronic mail and operating systems.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
- Recommended:
  A home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
- $10 per credit for online courses

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
  - Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- All COCC students enrolled in the Computer Information Systems program (which includes requirements for Cooperative Work Experience) may have to pass Criminal History Checks (CHC) as a condition of their acceptance into a work site. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director.

PROGRAM COURSE REQUIREMENTS

Core Courses

CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
CIS 244	Information Systems Analysis	4
CIS 279WC	Windows Client	4
CIS 297	CIS Professional Capstone	4

Desktop Support Option

Choose a minimum of 27 credits from the following: 27

BA 101	Intro to Business
BA 178	Customer Service
BA 223	Marketing Principles I
CIS 125A	Access
CIS 125E	Excel
CIS 125G	Photoshop
or CIS 125V	Visio
CIS 197	CMS Web Development: WordPress
CIS 235	IT in Business
CIS 280	Co-op Work Experience CIS

Other Required Courses

Choose one course from the following:		3-4
BA 214	Business Communications	
SP 111	Fundamentals Public Speaking	
WR 122	Argument, Research and Multimodal Composition	
WR 227	Technical Writing	

Choose two courses from the Discipline Studies list (except   6-8
CS prefix courses) or the recommended CIS electives list below.
Recommend: BA 101, BA 111, BA 112, BA 113, BA 177, BA 178,
BA 206, BA 207, BA 211, BA 212, BA 213, BA 217, BA 218, BA 220,
BA 222, BA 223, BA 224, BA 226, BA 228, BA 229, BA 239, BA 249,
BA 250, BA 286

Human Relations approved course		3-4
MTH 085	Technical Mathematics I (or higher)	3-4
or BA 104	Business Math	
WR 121	Academic Composition	4

Total Credits 94-99

ADVISING NOTES

Core courses are all offered two to three quarters each academic year. All CIS option courses are offered one to two quarters an academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Computer & Information Systems: Networking
Associate of Applied Science

PROGRAM DESCRIPTION

The Computer Information Systems (CIS) degree program is designed around a core curriculum and four distinct options. The program's core provides an introduction to computer concepts, software applications, operating systems, networking, database, computer servicing, internet, math, human relations and writing. Graduates work in information technology (IT) for a wide variety of commercial businesses, education, federal/state/local governments, e-commerce, publishing and real estate. CIS careers typically include positions such as PC technician, desktop support, network administrator, web developer, draftsperson, database administrator, system administrator and related managerial and administrative roles.

The Networking option prepares students for entry-level positions in network administration. Network specialists have the ability to design, create, manage and maintain computer networks for small businesses. Courses cover both hardware and software and closely follow major industry certification requirements.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
- Recommended: a home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
- $10 per credit for online courses

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)

- Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
- Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- All COCC students enrolled in the Computer Information Systems program (which includes requirements for Cooperative Work Experience) may have to pass Criminal History Checks (CHC) as a condition of their acceptance into a work site. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director.

PROGRAM COURSE REQUIREMENTS
Core Courses

CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
CIS 244	Information Systems Analysis	4
CIS 279WC	Windows Client	4
CIS 297	CIS Professional Capstone	4

Networking Option
Choose a minimum of 27 credits from the following: 27

CIS 151C	Cisco Internetworking
CIS 152C	Cisco Router Configuration
CIS 154C	Cisco VLAN and WAN Technologies
CIS 279L	Linux+
CIS 279SC	Windows Server Configuration
CIS 279SE	Security+
CIS 279SM	Windows Server Management
CIS 279SS	Windows Server Services
CIS 280	Co-op Work Experience CIS
CIS 284	Cisco CCNA Security
CIS 284EH	Ethical Hacking

Other Required Courses
Choose one course from the following: 3-4

BA 214	Business Communications
SP 111	Fundamentals Public Speaking
WR 122	Argument, Research and Multimodal Composition
WR 227	Technical Writing

Choose two courses from the Discipline Studies list (except   6-8
CS prefix courses) or the recommended CIS electives list below.
Recommend: BA 101, BA 111, BA 112, BA 113, BA 177, BA 178,
BA 206, BA 207, BA 211, BA 212, BA 213, BA 217, BA 218, BA 220,
BA 222, BA 223, BA 224, BA 226, BA 228, BA 229, BA 239, BA 249,
BA 250, BA 286

Human Relations approved course		3-4
MTH 085	Technical Mathematics I (or higher)	3-4
or BA 104	Business Math	
WR 121	Academic Composition	4

Total Credits 94-99

ADVISING NOTES
Core courses are all offered two to three quarters each academic year. All CIS option courses are offered one to two quarters an academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Computer & Information Systems: Web Development
Associate of Applied Science

PROGRAM DESCRIPTION
The Computer Information Systems (CIS) degree program is designed around a core curriculum and four distinct options. The program's core provides an introduction to computer concepts, software applications, operating systems, networking, database, computer servicing, internet, math, human relations and writing. Graduates work in information technology (IT) for a wide variety of commercial businesses, education, federal/state/local governments, e-commerce, publishing and real estate. CIS careers typically include positions such as PC technician, desktop support, network administrator, web developer, draftsperson, database administrator, system administrator and related managerial and administrative roles.

The Web Development option prepares students for a career as a web developer or website administrator. These professionals are responsible for creating standards-based websites and web/database applications. In addition to programming skills in common markup, scripting and SQL languages, these types of professions require project management and communication skills.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
- Recommended: A home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
- $10 per credit for online courses

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
  - Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- All COCC students enrolled in the Computer Information Systems program (which includes requirements for Cooperative Work Experience) may have to pass Criminal History Checks (CHC) as

a condition of their acceptance into a work site. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director.

PROGRAM COURSE REQUIREMENTS

Core Courses

CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
CIS 244	Information Systems Analysis	4
CIS 279WC	Windows Client	4
CIS 297	CIS Professional Capstone	4

Web Development Option

Choose a minimum of 27 credits from the following: 27

CIS 125G	Photoshop	
or CIS 125I	Adobe Illustrator	
CIS 125DV	Digital Video Productions	
or CIS 125WA	Web Animation	
CIS 133JS	Introduction to JavaScript	
CIS 133P	Introduction to PHP	
CIS 197	CMS Web Development: WordPress	
CIS 233P	Web Programming	
CIS 280	Co-op Work Experience CIS	
CIS 295	Web Development II	

Other Required Courses

Choose one course from the following: 3-4

BA 214	Business Communications
SP 111	Fundamentals Public Speaking
WR 122	Argument, Research and Multimodal Composition
WR 227	Technical Writing

Choose two courses from the Discipline Studies list (except   6-8
CS prefix courses) or the recommended CIS electives list below.
Recommend: BA 101, BA 111, BA 112, BA 113, BA 177, BA 178, BA 206, BA 207, BA 211, BA 212, BA 213, BA 217, BA 218, BA 220, BA 222, BA 223, BA 224, BA 226, BA 228, BA 229, BA 239, BA 249, BA 250, BA 286

Human Relations approved course		3-4
MTH 085	Technical Mathematics I (or higher)	3-4
or BA 104	Business Math	
WR 121	Academic Composition	4

Total Credits 94-99

ADVISING NOTES

Core courses are all offered two to three quarters each academic year. All CIS option courses are offered one to two quarters an academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Computer Science
Associate of Science Oregon Transfer

PROGRAM DESCRIPTION

Any student who earns the Associate of Science/Oregon Transfer-Computer Science degree on their official Oregon college transcript will have met the lower division general education requirements of

baccalaureate degree programs of any Oregon public university. Students transferring under the ASOT/CS agreement will have junior status for registration purposes. The ASOT/CS degree was created through collaboration between members of the Oregon Council of Computer Chairs (OCCC) which includes Oregon community college faculty and administration and Oregon public university computer science chairs and faculty. The degree provides general guidelines for a computer science major, however, GPA and course requirements are NOT guaranteed to have been satisfied with this degree. Students are encouraged to refer to the catalog of the specific university to which they plan to transfer to ensure accuracy of academic planning.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

General Education/Foundational

Health

Health (3 credits with HHP or HHPA prefix) [1]	3

Mathematics

MTH 251	Calculus I (or higher)	4

Oral Communication

Choose one course from the following: 3-4

SP 111	Fundamentals Public Speaking
SP 114	Argumentation & Discourse
SP 115	Intro Intercultural Commun
SP 218	Interpersonal Communication
SP 219	Small Group Communication

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

Recommend: WR 227

General Education/Discipline Studies

One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science

MTH 252	Calculus II	4

Choose three science courses designated as lab science
courses from the Discipline Studies list   9-15

Program Requirements

CS 160	Computer Science Orientation	4
CS 161	Computer Science I	4
CS 162	Computer Science II	4
CS 260	Data Structures	4

Electives

Choose enough electives to reach a minimum total of
90 overall degree credits [2]   22

Total Credits 90-104

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Elective credits must number 100 or above with a maximum of 12 CTE credits. Students are encouraged to plan these credits carefully in consultation with university-specific CS program requirements.

ADVISING NOTES

Oregon State University Cascades campus offers a major in Computer Science, Applied Option: Web & Mobile Software Development (osucascades.edu). Students are recommended to reference current degree requirements including required courses and GPA. At the time of this publication, the following courses are recommended in the first 90 credits: COCC courses MTH 231 Discrete Mathematics Elements of Discrete Math; BA 250 Entrepreneurship Entrepreneurship; BA 217 Accounting Fundamentals Accounting Fundamentals; OSU courses CS 271, CS 275.

Computer & Information Systems
Certificate of Completion

PROGRAM DESCRIPTION
The Computer Information Systems (CIS) certificate of completion provides a foundation of skills in computer concepts, software applications, networking, and the internet. Students can apply all the credits of this program toward the AAS degree if desired.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
- Recommended: A home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
- $10 per credit for online courses

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
  - Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4

Other Required Courses

Human Relations approved course		3-4
MTH 085	Technical Mathematics I (or higher)	3-4
or BA 104	Business Math	
WR 121	Academic Composition	4
	Total Credits	**46-48**

ADVISING NOTES
Core Computer and Information Systems program courses (CIS) are all offered two to three quarters each academic year. All CIS elective courses are offered one to two quarters an academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites.

Computer Aided Drafting
Certificate of Completion

PROGRAM DESCRIPTION
The certificate of completion in Computer Aided Drafting (CAD) prepares students for entry-level employment in the drafting field.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
- Recommended: A home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
- $10 per credit for online courses

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended: High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
  - Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Requirements

CIS 120	Computer Concepts	4
CIS 125A1	AutoCAD 1	4
CIS 125A2	AutoCAD 2	4
CIS 125V	Visio	4
CIS 135A1	AutoDESK Revit 1	4
CIS 135A2	AutoDESK Revit 2	4
CIS 135C1	AutoCAD Civil 3D	4
CIS 135S1	SolidWorks 1	4
CIS 135S2	SolidWorks 2	4

Other Required Courses

Human Relations courses		3-4
MTH 085	Technical Mathematics I (or higher)	3-4
or BA 104	Business Math	
WR 121	Academic Composition	4
	Total Credits	**46-48**

ADVISING NOTES
Core Computer and Information Systems program courses (CIS) are all offered two to three quarters each academic year. All CIS elective courses are offered one to two quarters an academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites.

Cybersecurity
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The Cybersecurity short term certificate extends knowledge and skills beyond entry-level computer networking and administration. Students will learn concepts and techniques essential for securing data and networks in both a vendor-neutral and Cisco environment.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- (8-32 GB usb/flash drive, basic office supplies, notebooks), $100
- Recommended: A home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

Enrollment Fees
- $10 per credit for online courses

Industry Certifications
- Certifications for each class range in price from $200-$350
  - CompTIA Security+ approximately $200
  - CompTIA Linux+ approximately $150
  - Certified Ethical Hacker (CEH) approximately $200-$350
  - CCNA Cyber Ops approximately $200-$350

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - CIS 140 A+ Essentials I, CIS 145 A+ Essentials II, CIS 179 Networking Essentials
- Recommended:
  - CIS 120 Computer Concepts or equivalent skills
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
  - Basic computer competency (or CIS 010 Computer Keyboarding and CIS 070 Intro to Computers: Windows

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

CIS 279L	Linux+	4
CIS 279SE	Security+	4
CIS 279OP	CCNA Cyber Ops	4
CIS 284EH	Ethical Hacking	4
	Total Credits	**16**

CRIMINAL JUSTICE
Criminal Justice
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Criminal Justice is a growing profession in Oregon and is expected to grow faster than the labor market on average into the foreseeable future.

Job openings may call for a high school diploma, an associate's degree or a bachelor's degree.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication
Choose one course from the following: 3-4

SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
At least three courses from at least two prefixes

Social Science   12-16
At least four courses from at least two prefixes
Recommend: CJ 100, 101, 110

Science/Math/Computer Science   12-20
At least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Choose any college-level course that brings the total credits to 90 quarter hours[2]
Recommend: CJ 210, CJ 253 [3]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] This may include up to 12 credits of Career and Technical Education (CTE) courses designated by COCC as acceptable.
[3] See advising notes. Related courses to consider: CJ prefix courses

ADVISING NOTES
If transferring to Oregon State University: HHP 295 Health and Fitness and WR 227 Technical Writing are recommended.

If transferring to Portland State University: CJ 101 Introduction to Criminology, CJ 110 Law Enforcement and CJ 253 Corrections are recommended.

If transferring to Southern Oregon University: CJ 210 Criminal Investigation I and CJ 211 Criminal Investigation II are recommended. If transferring to Western Oregon University: CJ 100 Survey of the Criminal Justice System is recommended.

Criminal Justice
Associate of Applied Science

PROGRAM DESCRIPTION
Criminal Justice is a growing profession in Oregon and is expected to grow faster than the labor market on average into the foreseeable future. Job openings may call for a high school diploma, an associate's degree or a bachelor's degree. COCC's AAS in Criminal Justice program prepares students to begin a criminal justice career upon graduation.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All Support and Core courses must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Support Courses

MTH 020	Pre-Algebra (or higher)	4
SP 218	Interpersonal Communication	3
WR 121	Academic Composition	4

Core Courses

CJ 100	Survey of the Criminal Justice System	3
CJ 101	Introduction to Criminology	4
CJ 120	Judicial Process	3
CJ 153	Ethical Issues in Criminal Justice	3
CJ 201	Introduction to Juvenile Justice	3
CJ 243	Drugs and Crime in Society	3
CJ 253	Corrections	4
CJ 280	CWE Criminal Justice [1]	2
CJ Electives		15-18

Choose from: CJ 110, CJ 123, CJ 153, CJ 188, CJ 199, CJ 204, CJ 207, CJ 210, CJ 211, CJ 214, CJ 220, CJ 222, CJ 230, CJ 234, CJ 243, CJ 280, CJ 281, CJ 282, EMT 195

Other Required Courses

ED 265	Children at Risk	3
Discipline Studies Social Science (no CJ prefix)		4
Discipline Studies (no CJ prefix)		3-5
Health (3-4 credits with HHP or HHPA prefix)		3-4

Recommend: HHP 252A, HHP 231, HHP 242, HHP 258, HHP 266, HHP 295 [2]

PSY 233	Psych of Violence & Aggression	4
SOC 201	Introduction to Sociology	4
Two additional Psychology courses		8

General Electives: Choose enough credits to reach degree minimum 93 credits [3]   13

Total Credits 93-99

[1] CJ 281 CWE Criminal Justice II and CJ 282 CWE Criminal Justice III may be taken as electives after successful completion of CJ 280 CWE Criminal Justice.

[2] HHPA activity courses (1 credit each) are not to be duplicated.

[3] Any class from the Discipline Studies list or any 100-level or higher class from the following subject areas, or with approval from the CJ program director:
- Addictions Studies (HS prefix)
- ART 161, ART 162, ART 163, ART 261, ART 265
- Computer and Information Systems
- Criminal Justice
- Emergency Medical Services (EMT)
- World Languages
- Geographic Information Systems
- Health and Human Performance (no repeats of activity courses)
- Military Science
- Speech
- Study Skills (HD prefix)

ADVISING NOTES
This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

Juvenile Corrections
Certificate of Completion

PROGRAM DESCRIPTION
The statewide one-year certificate program with a concentration in juvenile corrections is specifically designed for individuals who want to work directly with juvenile offenders in various settings. These settings may include Oregon Youth Authority (OYA) as well as other public, private and nonprofit agencies/programs. A criminal background check is required to complete the one-year certificate or the two-year degree. The criminal background check is also a requirement for any job in the criminal justice field.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

CJ 100	Survey of the Criminal Justice System	3
CJ 101	Introduction to Criminology	4
CJ 201	Introduction to Juvenile Justice	3
CJ 230	Juvenile Corrections	3
CJ 280	CWE Criminal Justice	2
HS 205	Youth and Addictions	3
PSY 201	Mind and Brain	4
PSY 202	Mind and Society	4
PSY 215	Developmental Psychology	4
PSY 219	Abnormal Psychology	4
PSY 233	Psych of Violence & Aggression	4
SOC 201	Introduction to Sociology	4

Other Required Courses

CIS 120	Computer Concepts (or Computer Competency test)	0-4
MTH 065	Algebra II	4
WR 121	Academic Composition	4

Total Credits 50-54

ADVISING NOTES
Most agencies in the criminal justice field will require a background check and most likely a physical abilities test. Each agency may have different requirements at local, state and federal levels.

This certificate/degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

DENTAL ASSISTING
Dental Assisting
Certificate of Completion

PROGRAM DESCRIPTION
The Dental Assisting program trains individuals in a broad range of clinical and administrative skills such as preparing patients for dental exams and treatment, assisting a dentist with dental procedures, taking dental radiographs, scheduling and appointment procedures, maintenance of medical records, performing basic front office skills, professional, communication and public relations skills. Graduates are prepared for the Dental Assisting National Board examinations and the Oregon Certification in Expanded Functions.

ACCREDITATION
Commission on Dental Accreditation of the American Dental Association

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
• Materials (scrubs with COCC Dental Assisting patch, goggles), $50
• National Board exams, $1,000 total
• Fees associated with immunizations, $220 and CPR card, $20-$60
• Criminal History Check, $65
• Drug Screen, $45
• Immunization Tracking, $10

Enrollment Fees
• Fee of $167 per term (or $501 total for the year) while enrolled in the DA cohort

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
• Required:
  • A high school diploma, a high school transcript noting successful graduation, or a GED
  • MTH 095 Intermediate Algebra or higher
  • WR 121 Academic Composition (or higher)
  • SP 218 Interpersonal Communication
  • CIS 010 Computer Keyboarding
  • CIS 120 Computer Concepts or computer competency test
  • HHP 252 First Aid & BLS Provider CPR
  • Choose one of: PSY 101 Applied Psychology, PSY 201 Mind and Brain, PSY 215 Developmental Psychology, or PSY 216 Social Psychology
  • A minimum of 12 hours of observation in a dental office

Other Entrance Requirements
• Required:
  • Must be 18 years of age
  • Criminal History Check, and 10-Panel Drug Screen with vendor chosen by COCC as a condition of acceptance into the program. For more information see cocc.edu/programs/dental-assisting/immunizations--background-check--drug-testing-and-cpr-requirements.aspx
  • Documentation of current immunizations: TB Blood Titer, MMR, Hep B (series of 3 vaccines), Varicella, Tdap, Flu
  • AHA Basic Life Support (BLS) for Healthcare Providers CPR card must remain current throughout the Dental Assisting program. For CPR class options see enrole.com/cocc/jsp/index.jsp?categoryId=10228.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
• All courses in the program must be completed with a grade of C or higher.

Additional Requirements
• Once a student begins the DA cohort they must enroll in all DA courses offered each term. In order to progress to the next term, the student must complete all DA courses with a "C" or better.

PROGRAM COURSE REQUIREMENTS
Prerequisites Courses

CIS 010	Computer Keyboarding	1
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
HHP 252	First Aid & BLS Provider CPR	3
MTH 095	Intermediate Algebra (or higher)	4
Choose one from the following:		3-4
PSY 101	Applied Psychology	
PSY 201	Mind and Brain	
PSY 215	Developmental Psychology	
PSY 216	Social Psychology	
SP 218	Interpersonal Communication	3
WR 121	Academic Composition	4

Core Courses

DA 110	Basic Dental Assisting	4
DA 115	Dental Science	5
DA 120	Advanced Dental Assisting	4
DA 125	Dental Infection Control	3
DA 130	Dental Materials I	4
DA 131	Dental Materials II	4
DA 134	Dental Radiology I	3
DA 135	Dental Radiology II	4
DA 145	Preventive Dentistry	3
DA 150	Intro to Dental Office Management	3
DA 151	Dental Computing	2
DA 160	Oral Medicine	3
DA 181	Dental Seminar I	1
DA 182	Dental Seminar II	1
DA 190	Dental Assisting Practicum I	2
DA 191	Dental Assisting Practicum II	8

Total Credits 72-77

ADVISING NOTES
Documents required for entry into the Dental Assisting program must be submitted after students register for the program. A letter of instruction is emailed to all registered and waitlisted students at the end of Spring term with an assigned documentation due date prior to Fall term. Failure to submit the required paperwork by the assigned date will result in administrative withdrawal from the program.

Program (DA) courses begin once per year in Fall term. Students wishing to register in the Fall Dental Assisting cohort must meet the basic prerequisite competencies and may register according to seat availability on a first-come, first-served basis, determined by the priority registration schedule. Students may view the priority registration schedule at cocc.edu. After successful registration into the Dental Assisting program, DA courses must be taken together and sequentially. Please see the Dental Assisting program website for more information or contact the program director and/or CAP Services.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

ECONOMICS
Economics
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Economics is the study of how society allocates its scarce resources to satisfy its many needs and wants. The discipline is divided into two general areas: microeconomics and macroeconomics. Macroeconomics

studies the role of government in the economy, both in promoting social objectives and in keeping the economy healthy through fiscal and monetary policies. Microeconomics provides an understanding of consumption, production and distribution of goods and services subject to the forces of supply and demand. Additional courses within the economics program expand upon these ideas. International Economics provides an introductory survey of economic, political, social and cultural dimensions of globalization. Political Economy covers various micro and macro topics related to the United States economy from a systems and institutional perspective. This program is good preparation for careers in business, engineering, resource management or government, as well as solid training for graduate or law school.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4
Recommend: MTH 111		

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters		9-12

Choose at least three courses from at least two prefixes
Recommend: PHL 203, 200-level language courses

Social Science		12-16

Choose at least four courses from at least two prefixes
Recommend: EC 201, EC 202
Choose at least two additional courses with at least one different prefix

Science/Math/Computer Science		12-20

Choose at least three laboratory courses in biological and/or physical science
Additional math as transfer university requires
Recommend: MTH 243, MTH 244, MTH 251

Electives		39

Students must take enough elective courses to meet the minimum 90 credits required for the degree
Recommend: EC 230, EC 285, HD 100CS, MTH 112, 100/200-level language courses

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES
Students should check with each school to ensure that the latest transfer information is used when designing their program.

Students pursuing a BA should consider completing three terms of 200-level language courses at COCC. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the Arts and Letters requirement.

Students pursuing a BS should consider taking more math, social science and science courses. Language is not necessary for the BS degree, but would be valuable for students with a major or emphasis in international economics. For specific details, speak with an advisor.

EDUCATION
Early Childhood Education
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The Associate of Arts Oregon Transfer (AAOT) degree prepares students to transfer to a four-year college or university to achieve additional professional goals in Early Childhood Education, which may require further education.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4-12
Recommend: MTH 211, MTH 212, MTH 213		

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters		9-12

Choose at least three courses from at least two prefixes

Social Science		12-16

Choose at least four courses from at least two prefixes

Science/Math/Computer Science		12-20

Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives		39

Choose enough electives to reach 90 credits
Recommend: ED 140, ED 150, ED 151, ED 152, ED 172, ED 173, ED 174, ED 216, ED 219, ED 250, ED 253, ED 265, ED 290, ENG 221, HHP 100, PSY 215

Total Credits 90-114

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES

ED 216 Purpose, Structure and Function of Education in a Democracy, ED 219 Multicultural Issues in Education Settings and ED 253 Learning Across the Lifespan count toward the recommended courses for students pursuing the MAT at OSU-Cascades.

Students should check with each school to ensure that the latest transfer information is used when designing their program.

For students intending to transfer to Oregon State University-Cascades program in Human Development and Family Sciences (HDFS), please meet with an advisor in Early Childhood Education early in your course of study.

Education – Elementary
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

Have you always wanted to be a teacher? Do you enjoy working in a collaborative, fast-paced environment? Are you looking for a challenging career where you can make a difference in the lives of students? If so, COCC can you give you a strong foundation for your goal of teaching at the elementary, middle school or high school level. The following is a suggested course of study for students interested in pursuing a bachelor's degree in education designed for elementary licensure.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3
Recommend: HHP 295[2]

Mathematics
MTH 105   Math in Society (or higher)   4
Recommend: MTH 211

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition[2]   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes
Recommend: ED 112

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: ED 152 or SOC 222, ED 219, PSY 201, SOC 201[2]

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: FN 225

Electives   39
Choose enough electives to meet 90 credits
Recommend: CIS 120, ED 172, ED 174, ED 176, ED 216, ED 235, ED 253, ED265, ED 269, ED 290, HST 201, HST 202, HST 203, MTH 212,[2] MTH 213[2]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Intended to align with requirements for OSU's Education major. Students should confirm current major requirements at OSU.

ADVISING NOTES
- In Oregon, students may achieve an initial license to teach through a bachelor's program, a post-baccalaureate program or a master's-level program. Students prepare to teach at different grade levels of authorization, depending on their background, interests and the requirements of specific programs of study. Students may prepare for a transfer degree in Early Childhood Education through COCC as the initial preparation for early childhood education as well as elementary grade-level teaching. However, it is important to work closely with an advisor to ensure that the degree contains the necessary prerequisite coursework for the desired licensure program.
- Students should check with each school to ensure that the latest transfer information is used when designing their program.
- There are several options for completing a teaching licensure program in Central Oregon.
- Students should consult with an education advisor as early as possible to discuss program options and determine which courses fulfill transfer requirements to different institutions and different levels of licensure.
- For more information on teacher preparation programs in Oregon, see the Oregon Teacher Standard and Practices Commission website at oregon.gov/TSPC. Students may also wish to review COCC's advising guide for teacher education at cocc.edu.
- Students pursuing a BA should consider completing three terms of 200-level language courses at COCC. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the Arts and Letters requirement.
- Students pursuing a BS should consider taking more math, social science and science courses. Language is not necessary for the BS degree, but would be valuable for students with a major or emphasis in international economics. For specific details, speak with an advisor.

Education – Secondary
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Have you always wanted to be a teacher? Do you enjoy working in a collaborative, fast-paced environment? Are you looking for a challenging career where you can make a difference in the lives of students? This focus area is intended to provide the lower division coursework for students preparing for careers in secondary education.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]　　　　　　　　3
Recommend: HHP 295

Mathematics
MTH 105　　　Math in Society (or higher) [2]　　　　4

Oral Communication
Choose one course from the following:　　　　　　3-4
SP 111　　　Fundamentals Public Speaking
SP 114　　　Argumentation & Discourse
SP 115　　　Intro Intercultural Commun
SP 218　　　Interpersonal Communication
SP 219　　　Small Group Communication

Writing
WR 121　　　Academic Composition　　　　　　　4
WR 122　　　Argument, Research and Multimodal Composition　4
or WR 227　　Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters　　　　　　　　　　　　　　9-12
Choose at least three courses from at least two prefixes [2]

Social Science　　　　　　　　　　　　　　12-16
Choose at least four courses from at least two prefixes [2]

Science/Math/Computer Science　　　　　　　12-20
Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science [2]

Electives　　　　　　　　　　　　　　　　39
Students must take enough elective courses to meet the minimum 90
credits required for the degree.
Recommend: ED 210, ED 216, ED 219, ED 253

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Dependent on subject area student intends to teach.

ADVISING NOTES
- In Oregon, students are eligible to apply for a preliminary teaching
  license after completing an approved teacher preparation program
  (bachelor's, post-baccalaureate, or master's level), passing the Oregon
  Educator Licensure Assessments (ORELA) and completing student
  teaching. Students interested in teaching a high school subject area
  will need to be experts in the content area they intend to teach and will
  be required to pass a subject matter exam. Passing the exam allows
  for the necessary "endorsement" (the subject/s which a teacher is
  approved to teach). Commonly a student will complete a bachelor's
  degree in the subject area they intend to teach to build foundational
  knowledge, followed by or in conjunction with an approved teacher
  education program.
- Students should check with each school to ensure that the latest
  transfer information is used when designing their program.
- There are several options for completing a teaching licensure program
  in Central Oregon.
- Students should consult with an education advisor as early as possible
  to discuss program options and determine which courses fulfill transfer
  requirements to different institutions and different levels of licensure.
- For more information on teacher preparation programs in Oregon,
  see the Oregon Teacher Standard and Practices Commission website
  at oregon.gov/tspc. Students may also wish to review COCC's advising
  guide for teacher education at cocc.edu.
- Students who plan to major in the subject area they intend to teach
  should refer to the page in the catalog that aligns with that subject
  area (Example: Math, Biology, Literature, History, etc.).
- Students pursuing a BA should consider completing three terms of
  200-level language courses at COCC. The 100-level language courses

will count as electives. The 200-level language courses will partially
fulfill the Arts and Letters requirement.
- Students pursuing a BS should consider taking more math, social
  science and science courses. Language is not necessary for the BS
  degree, but would be valuable for students with a major or emphasis in
  international economics. For specific details, speak with an advisor.

Helpful Resources
Oregon Department of Education
teachin.oregon.gov/en/become-a-teacher-in-oregon

Oregon Teacher Standards and Practices Commission (TSPC)
oregon.gov/tspc/pages/index.aspx

Oregon Educator Licensure Assessments (ORELA)
orela.nesinc.com

Early Childhood Education
Associate of Applied Science

PROGRAM DESCRIPTION
At COCC, the Early Childhood Education (ECE) program provides
students who have an interest in early childhood, including the early
primary elementary years, with a foundation in the theoretical, social,
historical and legal aspects of early childhood programming. The
COCC associate degree programs in early childhood education provide
the foundational knowledge, field experiences and common skills and
strategies to prepare students for multiple roles within the field of early
childhood education.

The Associate of Applied Science (AAS) degree prepares students with a
strong emphasis in the theories, curriculum goals and developmentally
appropriate teaching and guidance strategies necessary to lead an early
childhood classroom program or work as a paraprofessional in the
public schools.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Background check ($30-$70)
- Cost of mileage to and from field placement/practicum sites

Enrollment Fees
- None

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - Complete ED 140 Introduction to ECE before taking other Early
    Childhood Education courses.

Other Entrance Requirements
- Required:
  - The ECE program requires a background check through the Oregon
    Employment Office-Child Care Division.
  - Some field placement sites may require documentation of
    current immunizations.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate
  or degree.
- All courses in the program must be completed with a grade of
  C or higher.

Additional Requirements
- Adhere to the field placement contract; and
- Adhere to confidentiality, health-related and no-smoking policies as
  they pertain to field placement settings
- Refer to the COCC Early Childhood Student Handbook at cocc.edu for
  an explanation of each of the above policies.

PROGRAM COURSE REQUIREMENTS
Core Courses

ED 140	Introduction to ECE	4
ED 150	Enviro & Curric in ECE	4
ED 151	Observ & Guidance in ECE Learn	4
ED 152	Family, School, Com. Relations	3
ED 172	Language & Literacy in ECE	3
ED 173	Movement, Music & Arts in ECE	3
ED 174	Math, Science and Technology in Early Childhood Education	3
ED 219	Multicultural Issues in Education Settings	3-4
or ED 224	AntiBias Curric in Education	
ED 250	Advanced Curriculum Development & Teaching Methods in Early Childhood Education	4
ED 261	ECE Practicum I	6
& ED 262	ECE Practicum II	
ED 265	Children at Risk	3
ED 269	Exceptional Children in Early Childhood Education	3

Early Childhood Electives
Choose a minimum of 11 credits from the following list: 11

ED 141	Youth Mentoring & Advocacy
ED 176	Supporting Social, Emotional and Mental Health in Early Childhood
ED 216	Purpose, Structure and Function of Education in a Democracy
ED 235	Teaching and Learning in a Digital Age
ED 240	Learning through Play
ED 245	Trauma Sensitive Classrooms
ED 253	Learning Across the Lifespan
ED 290	Eng Lang Dev in Prim Classroom
GEOG 272	Geography for Teachers

Other Required Courses

Discipline Studies (choose 2 courses)		6-10
ENG 221	Introduction to Children's Literature	3-4
or ED 112	Children's Lit & Curriculu	
FN 225	Human Nutrition [1]	3-4
or HHP 266	Nutrition for Health	
MTH 060	Algebra I (or higher)	4
PSY 201	Mind and Brain	4
PSY 215	Developmental Psychology	4
SOC 201	Introduction to Sociology	4
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	
	Total Credits 90-97	

[1] Students who may eventually complete a bachelor's degree should take FN 225.

ADVISING NOTES
This degree is designed for students planning to enter their chosen career upon graduation. Often, only selected credits are considered transferable to public or private baccalaureate institutions.

COCC's ECE program works closely with four year programs to prepare students for transfer opportunities in early learning, elementary education, and human service-related programs. In addition to working closely with programs, including OSU-C, and George Fox, the AAS degree is fully articulated with Southern Oregon University's Early Childhood Development program and allows students to transfer directly as juniors and to become admitted into the Early Childhood Development program at Southern Oregon University (SOU) with no loss of credits to pursue a bachelor's degree. The program offers an excellent balance of early childhood and general education courses that support advanced study in the field of early childhood development.

Students should contact the SOU School of Education early in the beginning of their AAS in Early Childhood Education program to be advised about additional requirements and procedures for admission to the school or program. Students should be aware that if they transfer

before completing this degree, their courses will be evaluated individually toward the general education requirements in effect at SOU. For more information, visit sou.edu and search "COCC" to access the articulation agreement.

Students wishing to use the AAS in ECE as a foundation for future licensure in K-12 classrooms should work closely with academic advisors in the education program to ensure appropriate transfer preparation.

Child, Family and Community Studies
Short Term Certificate of Completion

PROGRAM DESCRIPTION
The CFC Studies short-term certificate of completion is designed to support students seeking careers in school and human service settings. The CFC Studies program is a step along the pathway to the AAS in Early Childhood Education. It invites students to apply theories and applications toward a broader perspective, including settings outside of school.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Background check ($3-$70)
- Cost of mileage to and from field placement/practicum sites.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- None

Other Entrance Requirements
- Required:
  - The ECE program requires a background check through the Oregon Employment Office-Child Care Division.
  - Some field placement sites may require documentation of current immunizations.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- Adhere to the field placement contract
- Adhere to confidentiality, health-related and no-smoking policies as they pertain to field placement settings
- Refer to the COCC Early Childhood Student Handbook at cocc.edu for an explanation of each of the above policies.

PROGRAM COURSE REQUIREMENTS
Core Courses

ED 140	Introduction to ECE	4
ED 151	Observ & Guidance in ECE Learn	4
ED 152	Family, School, Com. Relations	3
ED 176	Supporting Social, Emotional and Mental Health in Early Childhood	3
or ED 245	Trauma Sensitive Classrooms	
ED 219	Multicultural Issues in Education Settings	3-4
or ED 224	AntiBias Curric in Education	
ED 265	Children at Risk	3

Other Required Courses

FN 225	Human Nutrition	4
or HHP 266	Nutrition for Health	
PSY 201	Mind and Brain	4
or PSY 215	Developmental Psychology	
SOC 201	Introduction to Sociology	4
	Total Credits 32-33	

ADVISING NOTES

Students with intentions to seek higher degrees or career opportunities in settings serving children and families may use the CFC Studies Certificate to demonstrate coursework and field placement experience. Credits will apply toward the Head Start Reauthorization Act for highly qualified lead and assistant teachers and family advocates. Students considering the HDFS program through OSU may use several courses (ED 140, PSY 202, SOC 201, FN 225) to HDFS program requirements.

Developmentally Appropriate Learning Environments
Short Term Certificate of Completion

PROGRAM DESCRIPTION

The Short Term Certificate of Completion (STCC) is designed to support students seeking careers in early learning settings.

PROGRAM ENTRANCE REQUIREMENTS

None

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

ED 140	Introduction to ECE	4
ED 150	Enviro & Curric in ECE	4
ED 151	Observ & Guidance in ECE Learn	4
ED 152	Family, School, Com. Relations	3
Choose two courses from the following:		6
ED 112	Children's Lit & Curriculum	
ED 172	Language & Literacy in ECE	
ED 173	Movement, Music & Arts in ECE	
ED 174	Math, Science and Technology in Early Childhood Education	
ED 176	Supporting Social, Emotional and Mental Health in Early Childhood	

Total Credits 21

ADVISING NOTES

Credits will apply toward the Head Start Reauthorization Act for highly qualified lead and assistant teachers and family advocates. Students considering the Early Childhood Development program at Southern Oregon University or the HDFS program through OSU may apply to program requirements. The DALE certificate is a step along the pathway to the AAS in Early Childhood Education and it invites students to apply theories and applications toward early learning environments.

EMERGENCY MEDICAL SERVICES
Paramedicine
Associate of Applied Science

PROGRAM DESCRIPTION

The AAS in Paramedicine is designed for students seeking a career in emergency medical services and/or the fire service industry. The program meets or exceeds the required technical skills and knowledge necessary for national and state licensure testing.

The program is challenging and will require participants to spend between 600 and 800 hours in clinical and field settings. The program contains certification requirements at the Emergency Medical Technician (EMT) and Paramedic levels. Students will need to satisfy a computer based and practical hands-on test through the National Registry of EMTs to complete certification.

Paramedics work in a variety of settings including fire departments, private and public ambulance services, hospitals (emergency departments), emergency communication systems, law enforcement agencies, search and rescue, recreation industry, forest service/smokejumpers and some rural clinical environments. Paramedics provide many services to their communities, often working in teams where communication and technical skills are expected. Starting salaries range from $2,500 to $3,500 per month.

ACCREDITATION

The Paramedicine Program is accredited by the Commission on Accreditation of Allied Health (CAAHEP) upon the recommendation of the Commission on Accreditation of Education Programs for the Emergency Medical Services Professions (CoAEMSP).

The Paramedicine Program is also accredited by the Oregon Health Authority (OHA) upon the recommendation of the Higher Education Coordinating Commission (HECC).

CAAHEP
25400 US Highway 19 North, Suite 158
Clearwater, FL 33763
727.210.2350

CoAEMSP
8301 Lakeview Parkway, Suites 111-312
Rowlett, TX 75088
214.703.8992

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- CPR for Healthcare Provider card: $55. Must remain current throughout Basic and Paramedic classes.
- Background check: $55. Students must pass a Criminal History Check (CHC) prior to enrolling in the Basic or Paramedic classes.
- Drug screen: $55.
- Immunization upload $14. Documentation of completion of the following immunizations; Hepatitis B, current TB, MMR, annual Influenza, Tetanus within previous 10 years, Varicella (Chickenpox).
- In some cases fees associated with immunizations can range from $20-$200.
- Materials (stethoscope, paramedic field manual, uniforms, etc.) range from $20-$150.
- Testing fees which include National Registry computer exams, practical skills testing, fingerprint background checks (depending on location of practical testing) range from $450-$1,000 (includes travel outside of the area).
- Paramedic students should anticipate costs for housing and living expenses when doing their field internship outside of the local area.

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Required:
  - Successfully complete the application process and be accepted into Paramedic program.
- Recommended:
  - It is strongly recommended that candidates enrolling in the Paramedicine program have a strong background in high school or college math and chemistry. This knowledge will enhance the student's success in Anatomy and Physiology and college-level math.

Other Entrance Requirements
- Required:
  - High school diploma or GED.

- Students must be 18 years old or older to test for state and national exams.
- A current Health Care Provider CPR card is required prior to placement into EMT or Paramedic courses.
- Uploaded and verified, required immunizations as set forth in clinical agreement with St. Charles hospital system.
- Information on the courses that are required for entry into the Paramedic course as prerequisites and those used to calculate points for selection can be found on the Paramedicine website.
- All COCC students enrolled in an EMT, paramedic course and/or seeking agency affiliation requiring practical experience, will have to pass a Criminal History Check (CHC) as a condition of their acceptance into a medical, fire or other facility for training. Students who do not pass the CHC may not be eligible to complete training at affiliated sites, to sit for licensure or certification exams, or to be hired for some professional positions. Students who believe their personal history may interfere with their ability to complete the program of study or to obtain licensure or certification in their chosen field should contact the appropriate state board or the program director.
- Prior to entry into a health profession program, students must complete a 10 panel urine drug screen with Verified Credentials, Inc. With the exception of certain prescribed medications, students with a positive drug screen, which prevents them from attending clinical, will be disqualified from entering the program. Please refer to the Paramedicine website and/or program handbook for more detailed information.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements:
- All students will undergo drug screening, background check and immunization verification with the vendor approved by Central Oregon Community College, prior to entrance into the EMT or Paramedic certification courses, at their expense. Students will be administratively withdrawn from the program and the seat given to an alternate student if requirements are not initiated with the specified vendor by the due date indicated by the Paramedicine program. Students with a positive urine drug screen will be disqualified from entering the EMT or Paramedic certification courses at Central Oregon Community College, with the exception of certain prescribed medications. The director of EMS/SFS will notify the student of positive drug screens and their resulting disqualification from the program. Students have a right to appeal the decision.
- State requirements: 85 percent attendance in EMT or Paramedic classes; 100 percent attendance for clinical and field rotations; and students must pass the overall EMT or Paramedic class at a minimum of 76 percent to sit for state and national registry testing and certification.
- All prerequisite courses must be completed at an average of a 3.0 GPA or higher.
- Students must maintain a minimum overall 2.7 GPA to maintain enrollment in the program; students falling below an overall 2.7 GPA during the Paramedicine program will have one term to correct the deficit. Students who fail to bring their grades up may not be allowed to register the following term and complete the course. They may reapply for the following year if they meet current requirements as set in Paramedic program readmission policy. Students applying for readmission who have failed a course will have to repeat the entire program sequence.
- Upon completion of EMT 151 EMT Basic Part A and EMT 152 EMT Basic Part B, students must pass the National Registry exam and be certified in the state of Oregon before continuing in Paramedic courses. Currently certified students do not need to retake the courses

for the degree but must hold a current Oregon EMT License or higher to enter the Paramedic course. License must remain current during entire program including CWE; failure to maintain current license and CPR card will result in student removal from the program.

PROGRAM COURSE REQUIREMENTS
Core Courses
AH 111	Medical Terminology I	3
BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
BI 233	Human Anatomy and Physiology III	4
EMT 151	EMT Basic Part A	5
EMT 152	EMT Basic Part B	5
EMT 170	Emergency Response Communication/Documentation	2
EMT 171	Emerg Response Pt Transport	2
EMT 195	Crisis Intervention	3
EMT 290	Paramedic Part I	8
EMT 291	Paramedic Part I Clinical	3
EMT 292	Paramedic Part II	8
EMT 293	Paramedic Clinical Part II	3
EMT 294	Paramedic Part III	8
EMT 295	Paramedic Clinical Part III	3
EMT 296	Advanced Cardiac Life Support (ACLS)	1
EMT 297	Pediatric Advanced Life Support (PALS)	1
EMT 298	Prehospital Trauma Life Support (PHTLS)	1
SFS 101	Introduction to Emergency Services	4
SFS 230	Rescue Practices	3
Choose enough from the following to reach 4 credits [2]		4
EMT 280	Paramedic Co-op Work Experience	
EMT 280A	Paramedic Co-op Work Experience	
EMT 280B	Paramedic Co-op Work Experience	
EMT 280C	Paramedic Co-op Work Experience	
Paramedic Elective:		3-5

ANTH 103, BI 234, CJ 100, EMT 163, EMT 164, OL 244, PSY 101, PSY 201, PSY 202, PSY 216, SOC 201

Other Required Courses
HHP 242	Stress Management	3
or HHP 266	Nutrition for Health	
or HHP 295	Health and Fitness	
FOR 211	Supervision and Leadership	3
or BA 285	Business Human Relations	
MTH 065	Algebra II (or higher) [1]	4
SP 111	Fundamentals Public Speaking (or higher)	3-4
WR 121	Academic Composition	4
	Total Credits 99-102	

[1] Students planning to transfer should take MTH 105 Math in Society or MTH 111 College Algebra.

[2] Student will have the option if affiliated with a transporting EMS agency to enroll in a 1 credit CWE course in the Winter and/or Spring terms. If a student completes a CWE in one or both of these terms, they will enroll in a two or three credit CWE for the Summer term in order to have a total of four credits worth of CWE. Summer CWE is required by the program as more than 50% of a student's patient contacts needs to happen at the conclusion of all didactic and clinical experiences.

ADVISING NOTES
- Students should contact the Admissions and Records office to obtain details for Paramedic course selection and application process.
- Speak with an advisor prior to registration to get a list of recommended courses in categories that offer more than one option such as the general education requirement.
- Speak with program director to make sure students understand the state and national testing process for EMT and Paramedic courses.

ENGINEERING
Physics
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

Physics is arguably the oldest academic discipline; it is the study of matter and its motion and related energy. The Associate of Arts Oregon Transfer (AAOT) with a focus in physics includes most courses that are commonly required for a major and meets lower division general education requirements at all Oregon public universities. Since there are minor variations between university physics programs, students may have to take some additional courses after transferring.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4

Recommend: MTH 251

Oral Communication
Choose one course from the following: 3-4

SP 111	Fundamentals Public Speaking
SP 114	Argumentation & Discourse
SP 115	Intro Intercultural Commun
SP 218	Interpersonal Communication
SP 219	Small Group Communication

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

Recommend: WR 227

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters	9-12

Choose at least three courses from at least two prefixes

Social Science	12-16

Choose at least four courses from at least two prefixes

Science/Math/Computer Science	12-20

Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: MTH 252, PH 211, PH 212, PH 213

Electives	39

Choose enough electives to reach 90 credits
Recommend: CH 221, CH 222, CH 223, ENGR 201, ENGR 202, ENGR 211, ENGR 212, ENGR 213, GE 101, GE 102, MTH 253, MTH 254, MTH 255, MTH 256

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

Engineering Emphasis
Associate of Science

FOCUS AREA DESCRIPTION

COCC offers freshman and sophomore core science, engineering and general education courses needed for most engineering majors. Students earning an engineering degree choose from among the many branches of engineering available, such as: civil, mechanical, electrical, chemical, computer and OSU-Cascades' energy engineering management. Certain engineering majors and branches may require additional courses not offered at COCC.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

HHP 295	Health and Fitness	3

Mathematics

MTH 251	Calculus I	4

Oral Communication

SP 111	Fundamentals Public Speaking	4

Writing

WR 121	Academic Composition	4
WR 227	Technical Writing	4

General Education/Discipline Studies

Arts and Letters	6-8

Choose two courses from the Discipline Studies list

Social Science	6-8

Choose two courses from the Discipline Studies list
Recommend: EC 201

PROGRAM REQUIREMENTS

CH 221	General Chemistry I	5
CH 222	General Chemistry II	5
ENGR 201	Electrical Fundamentals	4
ENGR 202	Electrical Fundamentals II	4
ENGR 211	Statics	4
ENGR 212	Dynamics	4
ENGR 213	Strength of Material	4
GE 101	Engineering Orientation	3
GE 102	Eng. Prob. Solv. & Technology	3
MTH 252	Calculus II	4
MTH 253	Calculus III	4
MTH 254	Vector Calculus I	4
MTH 256	Applied Differential Equations	4
PH 211	General Physics I	5
PH 212	General Physics II	5
PH 213	General Physics III	5

Total Credits 98-102

ADVISING NOTES

Most engineering majors have few, if any, true electives and students must sequence courses very intentionally. The elective category should be used to tailor the program toward a specific engineering major or branch. Following are some general guidelines. We recommend students research requirements directly.

Chemical: CH 223 General Chemistry III, MTH 253 Calculus III. Note that OSU requires a year-long sequence prior to the junior year that COCC does not offer.

Civil: ENG 212 Dynamics

Energy Engineering Management: BA 217 Accounting Fundamentals, CS 161 Computer Science I, EC 201 Microeconomics, ENGR 202 Electrical Fundamentals II, ENGR 212 Dynamics, MTH 253 Calculus III

Mechanical: CIS programming class (CIS 122 Introduction to Programming, CIS 133JS Introduction to JavaScript, CIS 133P Introduction to PHP, CS 161 Computer Science I, CS 162 Computer Science II), CIS 125A1 AutoCAD 1, CIS 125A2 AutoCAD 2, ENGR 212 Dynamics, MFG 103 Welding Technology I, MFG 112 Manufacturing Processes II.

EXERCISE SCIENCE
Exercise Science/Kinesiology
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The AAOT degree meets the state of Oregon transfer degree requirements, allowing students to transfer to an Oregon public university and some out-of-state universities having met all lower-division general education requirements. With the appropriate course planning, all lower-division major requirements may also be met. Students should work closely with an advisor to select the best degree option and review specific transfer requirements. The following is a suggested course of study for students interested in pursuing a bachelor's degree in Exercise Science/Kinesiology.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105	Math in Society	4

Recommend: MTH 111

Oral Communication
Choose one course from the following: 3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: HHP 100, HHP 270, PSY 201, SOC 201

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: BI 231, BI 232, BI 233, HHP 261

Electives [2]   39
Choose enough electives to reach 90 credits
Recommend: HHP 131, HHP 259, HHP 260, HHP 262 and MTH 112

                                                      Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Related courses to consider: HHPA courses, HHP 212A AHA BLS Provider CPR, HHP 248 Health Psychology, HHP 266 Nutrition for Health, HHP 240 Science of Nutrition, HHP 267 Wellness Coaching Fundamentals, HHP 268 Sustainable Food and Nutrition, HHP 280A Practicum-Exercise Science, HHP 280B Practicum- EXSS

ADVISING NOTES
Nearby public universities with either an Exercise Science/Kinesiology major or closely related major:
- Boise State University
- Eastern Oregon University-Distance Education (Physical Activity and Health)
- Montana State University
- Oregon State University – Kinesiology
- Oregon State University-Cascades – Kinesiology
- Portland State University
- University of Montana
- University of Oregon

Health/Wellness Coaching
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The aim of the AAOT focusing toward Wellness Coaching is to empower students to help others through prevention of illness, injury and disease by effective application of principle and practices of holistic wellness and life coaching. This program provides significant preparation toward the wellness coaching majors (see a wellness coaching advisor for specific programs). Successful completion of this coursework will assist students with the preparation necessary to complete their national certification in wellness or life coaching certifications through the American College of Sports Medicine, Wellcoaches Corporation, International Coach Federation and the National Wellness Institute.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3
Recommend: HHP 242

Mathematics
MTH 105	Math in Society	4

Recommend: MTH 111

Oral Communication

Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: HHP 248, HHP 267, PSY 228

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including
at least three laboratory courses in biological and/or physical science
Recommend: BI 231, BI 232, BI 233, MTH 243

Electives   39
Choose enough elective credits to reach a minimum total of 90 overall
degree credits [2]
Recommend: HHP 280A, HHP 280B, HS 262

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Related courses to consider: AH 205 Medical Ethics, BI 101 General
     Biology: Cells & Genes, BI 102 General Biology: Evolution, HHP 100
     Intro to Public Health, HHP 231 Human Sexuality, HHP 210 Intro to
     Health Care System, HHP 212A AHA BLS Provider CPR,HHP 252 First
     Aid & BLS Provider CPR, HHP 260 Anatomical Kinesiology, HHP 261
     Exercise Physiology, HHP 266 Nutrition for Health or HHP 240 Science
     of Nutrition, HHP 270 Sport and Exercise Psychology, PSY 201 Mind
     and Brain, PSY 202 Mind and Society, PSY 225 Eating Disorders, SOC
     201 Introduction to Sociology.

Pre-Physical Therapy
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Students interested in pursuing professional degrees to become a
Physical Therapist (PT) are required to complete a bachelor's degree,
preferably in a related area, typically from exercise science, the biological
sciences, or psychology. To provide a solid foundation for bachelor's
degree work, students are encouraged to complete the Associate of Arts
Oregon Transfer (AAOT) degree, with an emphasis on pre-PT coursework.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate
  or degree.
• All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105   Math in Society (or higher)   4
Recommended: MTH 111 or MTH 243

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: PSY 201, PSY 219, HHP 100, HHP 270

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science
Recommend: BI 231, BI 232, BI 233, and CH 221

Electives   39
Choose enough electives to reach the 90 minimum credits
required for the AAOT degree [2, 3]
Recommend: (BI 101 and BI 102) or (BI 211 and 212), CH 221,
CH 222, CH 223, PH 201, PH 202, PH 203, AH 111 and BI 234 [4]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Related courses to consider: Students explore the field of physical
     therapy through HHP 131 Introduction to Exercise/Sport Science and
     the other courses recommended in the following prefixes: HHP, BI, CH,
     and PH.
[3] Refer to advising notes and your assigned advisor for suggestions for a
     baccalaureate major.
[4] Discuss the selection of BI 101 General Biology: Cells & Genes or
     BI 211 Principles of Biology I with your advisor.

ADVISING NOTES
Pacific University and George Fox are the two Doctorate of Physical
Therapy (DPT) programs in Oregon. These recommendations are
based off of their pre-requisites for application. If you are pursuing other
schools you must look at that school's specific course requirements for
application as they may vary.

FOREST RESOURCES TECHNOLOGY/FORESTRY
Forest Resources Technology
Associate of Applied Science

PROGRAM DESCRIPTION
The Associate of Applied Science (AAS) degree program in Forest
Resources Technology provides the education and practical skills
needed to succeed as a technician in forestry and natural resource
fields throughout the western U.S. Job opportunities exist in government
agencies (both state and federal) as well as private industry (contractors,
consultants and private companies). The U.S. Forest Service is the
primary employer for graduates of this program.

Traditional forest technician positions are now often referred to as natural resource technicians. Technicians spend considerable time outdoors. Typical entry-level positions might include forest management activities such as evaluation of reforestation efforts, timber sale layout, tree measurements, forest damage assessment and numerous other activities that are required when managing a forest. Additionally, entry-level natural resource technicians may perform noxious weed identification and eradication, plant and wildlife surveys, fire protection and suppression and stream monitoring and restoration. Natural resource technicians can work for state or federal government agencies and manage public property, or work for private industry and private landowners.

COCC's Forest Resources Technology program has the advantage of being located near several national forests. A majority of the courses within the program include outdoor lab opportunities, which provide hands-on experience and knowledge essential to being an effective natural resource technician. Additionally, students are able to take advantage of opportunities working with local agencies to develop and implement land management plans in the capstone course at the end of their second year.

ACCREDITATION
Society of American Foresters

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Equipment costs ranging from $665-$915 (suggested equipment includes: hardhat, boots, vest, compass, GPS, datum, plant press, hand lens, rain gear, field book)
- Students are expected to provide their own appropriate field clothing and tools

Enrollment Fees
- Additional lab fees of approximately $250

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - Placement into MTH 085 Technical Mathematics I or higher
  - Placement into WR 121 Academic Composition or higher

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

CIS 120	Computer Concepts (or Computer Competency Test)	0-4
FOR 100	Forestry Program Orientation	1
FOR 110	Wildland Fire Science I	2
FOR 111	Forestry Perspectives	4
FOR 126	Field Studies Pacific NW Forests	1
FOR 127	Plants of the Pacific Northwest	1
FOR 180	Co-op Work Experience Forestry	3
FOR 208	Soils: Sustainable Ecosystems	4
FOR 210	Wildland Fire Science II	2
FOR 211	Supervision and Leadership	3
FOR 215	Forest Resource Capstone	3
FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
FOR 235	Resource Measurements	4
FOR 236	Aerial Photo	3
FOR 237	Resource Sampling	4
FOR 240A	Forest Ecology	3
FOR 240B	Wildlife Ecology	3
FOR 241A	Field Dendrology	3
FOR 241B	Dendrology	3

FOR 260	Conservation of Natural Resources	3
FOR 271	Applied Forest Ecology	3
FOR 272	Forest Entomology/Pathology	3
FOR 273	Silviculture and Harvesting Systems	5
Forestry Resource Elective [1]		2
FW 218	Survey of Northwest Mammals	2
or FW 212	Survey of Northwest Birds	
GEOG 265	Geographic Information Systems	4

Other Required Courses

HHP 252A	Fitness/First Aid	3
Discipline Studies Courses		8
MTH 085	Technical Mathematics I [2]	4
MTH 086	Technical Mathematics II [2]	4
Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	
WR 121	Academic Composition [3]	4

Total Credits 101-106

[1] Choose a minimum of 2 credits of courses not already required, with the following prefixes: BI, CH, FOR, FW, G, or GEOG.
[2] Students can choose to take MTH 085 and MTH 086, or MTH 111. Students planning to transfer should consider MTH 111 and consult with their advisor for other specific transfer requirements.
[3] Transfer students should also take WR 227.

ADVISING NOTES
This program can be completed within two years provided the student is adequately prepared to take MTH 085 Technical Mathematics I and WR 121 Academic Composition and coursework is initiated during fall term. Students entering in winter or spring term and/or who require developmental writing or math courses, can complete the program within a three-year period.

This degree is designed for students planning to enter their chosen career upon graduation. As such, only selected credits are considered transferable to public or private baccalaureate institutions. This will vary by institution. Institutions with which COCC has articulation agreements in Forest Resources Technology are Oregon State University and Oregon State University – Cascades.

Students planning to transfer to Humboldt State University, Oregon State University, or the University of Idaho to acquire a Bachelor of Science degree should meet with a COCC Forestry program advisor to discuss current transfer requirements. Many of the required undergraduate courses for the Bachelor of Science degrees can be taken at COCC and transferred accordingly.

Students are encouraged to meet with a faculty advisor in the Forestry program to discuss a two- or three-year educational plan. Students who have obtained a degree or completed coursework from another institution may be able to transfer some coursework to apply toward the AAS in Forest Resources Technology. A meeting with faculty or their advisor is strongly recommended.

Agricultural Sciences (OSU Transfer) Emphasis
Associate of Science

PROGRAM DESCRIPTION
The Associate of Science (Agricultural Sciences/Oregon State University emphasis) fulfills many of the lower division requirements of a Bachelor of Science in Agricultural Sciences from Oregon State University. Course requirements for other agricultural majors at OSU and other universities will differ. Students are strongly encouraged to check current degree requirements for changes.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Baccalaureate Core

Writing I	WR 121 Academic Composition	4
Writing II	Met by Program Requirements	
Writing III	SP 111 Fundamentals Public Speaking	3-4
or SP 114	Argumentation & Discourse	
Mathematics	Met by Program Requirements	
Fitness	HHP 295 Health and Fitness	3

Perspectives Courses [1,2]
Choose one course from each of the following categories:
Physical Science
Met by Program Requirements

Biological Science
Met by Program Requirements

Physical or Biological Science
Met by Program Requirements

Western Culture [1]	3-4
Cultural Diversity [1]	4
Literature and the Arts [1]	3-4

Social Processes and Institutions
Met by Program Requirements

Difference, Power and Discrimination [1]	4

PROGRAM REQUIREMENTS

BA 217	Accounting Fundamentals	4
BI 101	General Biology: Cells & Genes [3]	4-5
or BI 211	Principles of Biology I	
BI 102	General Biology: Evolution [3]	4-5
or BI 212	Biology of Plants II	
BI 103	General Biology: Ecology [3]	4-5
or BI 213	Biology of Animals III	
CH 104	Introduction to Chemistry I [3]	5
or CH 221	General Chemistry I	
CH 105	Introduction to Chemistry II [3]	5
or CH 222	General Chemistry II	
CIS 120	Computer Concepts	4
EC 201	Microeconomics	4
FOR 208	Soils: Sustainable Ecosystems	4
MTH 105	Math in Society (or higher)	4
WR 227	Technical Writing	4

Electives   20
Choose any course numbered 100 or above that brings the total credits to 90 quarter hours. This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable.
Recommend: BA 226, CH 106, CH 223, FOR 260, MFG 100, MFG 103, MTH 111, MTH 112, MTH 241, MTH 113, MTH 251, SPAN 101, SPAN 102

Total Credits 90-96

[1] Select from the appropriate category in the OSU Baccalaureate Core course list in the COCC catalog.
[2] No more than two courses (or lecture/lab combinations) from any one department may be used by a student to satisfy the Perspectives category of the core. GEO courses listed under Physical Science are considered to be from a different department than GEO courses listed under any other Perspective category.
[3] Recommend: BI 211 Principles of Biology I, BI 212 Biology of Plants II and BI 213 Biology of Animals III and CH 221 General Chemistry I, CH 222 General Chemistry II and CH 223 General Chemistry III.

ADVISING NOTES
Transferrable from OSU E-Campus

AG 242	Personal Leadership Development	3
ANS 121	Introduction to Animal Science	4
AREC 221	Marketing in Agriculture	3
AREC 250	Introduction to Environmental Economics and Policy	3
HORT 111	Introduction to Horticultural Crop Production	2
HORT 112	Intro to Horticultural Systems, Practices and Careers	2

Forestry (OSU Transfer) Emphasis
Associate of Science

FOCUS AREA DESCRIPTION
The Associate of Science (Forestry/OSU emphasis) is intended to fulfill many of the lower division requirements of a Bachelor of Science in forest management from Oregon State University, Corvallis. Other universities' requirements for a forest management degree will be similar (though course requirements for other forestry majors will differ). Students planning to transfer to any university forestry program should meet with a COCC Forest Resources Technology advisor to discuss current transfer requirements.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Baccalaureate Core

Writing I	WR 121 Academic Composition	4
Writing II	WR 227 Technical Writing	4
Writing III	SP 111 Fundamentals Public Speaking	4
Mathematics	MTH 112 Trigonometry	4
Fitness	HHP 295 Health and Fitness	3

Perspectives Courses [1,2]
Choose one course from each of the following categories:
Physical Science
Met by Program Requirements
Biological Science
Met by Program Requirements
Physical or Biological Science
Met by Program Requirements

Western Culture [1]	3-4
Cultural Diversity [1]	4
Literature and the Arts [1]	3-4

Social Processes and Institutions
Met by Program Requirements

PROGRAM REQUIREMENTS

BI 101	General Biology: Cells & Genes	4-5
or BI 212	Biology of Plants II	
CH 221	General Chemistry I	5
CH 222	General Chemistry II	5
EC 201	Microeconomics	4
FOR 111	Forestry Perspectives	4
FOR 208	Soils: Sustainable Ecosystems	4
FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
FOR 240A	Forest Ecology	3
FOR 240B	Wildlife Ecology	3
FOR 241A	Field Dendrology	3
FOR 241B	Dendrology	3
FOR 235	Resource Measurements	4

FOR 236	Aerial Photo	3
GEOG 265	Geographic Information Systems	4
MTH 241	Calculus for Management/Social Science	4
MTH 243	Introduction to Probability and Statistics 1	4
MTH 244	Introduction to Probability and Statistics 2	4
	Total Credits 96-99	

[1] Select from the appropriate category in the OSU Baccalaureate Core course list in the COCC catalog.

[2] No more than two courses (or lecture/lab combinations) from any one department may be used by a student to satisfy the Perspectives category of the core. GEO courses listed under Physical Science are considered to be from a different department than GEO courses listed under any other Perspective category.

ADVISING NOTES

It is recommended that a student also take FOR 251 Recreational Resource Management and BI 212 Biology of Plants II. Though it is not included as an AS requirements, students will need to meet the Difference, Power and Discrimination requirement at OSU and could use COCC courses to meet it.

Natural Resources (OSU Transfer) Emphasis
Associate of Science

FOCUS AREA DESCRIPTION

The Associate of Science (Natural Resources/Oregon State University emphasis) is designed to fulfill 90-108 credits of the lower division requirements of a Bachelor of Science in Natural Resources, from Oregon State University - Cascades. Three options, NR Conservation and Technology, NR Policy and Management and Fish and Wildlife Conservation are available at OSU-Cascades and COCC. Other universities' requirements for a Natural Resources degree may be similar. Students planning to transfer to any university Natural Resources program should meet with a COCC Forest Resources Technology advisor to discuss current transfer requirements.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Baccalaureate Core

WR 121	Academic Composition	4
Choose one course from the Writing II list 1		3-4
Choose one course from the Writing III list 1		4
Mathematics		
Met by Program Requirements		
HHP 295	Health and Fitness	3

Perspectives Courses [1,2]

Choose one course in each of the following categories:

Physical Science		
Met by Program Requirements		
Biological Science		
Met by Program Requirements		
Physical or Biological Science		
Met by Program Requirements		
Western Culture[1]		3-4
Literature and the Arts[1]		3-4
Social Processes and Institutions		
Met by Program Requirements [1]		

PROGRAM REQUIREMENTS

Choose one option from the following[3]:		12-15
Option 1		
BI 101	General Biology: Cells & Genes	
BI 102	General Biology: Evolution	
BI 103	General Biology: Ecology	
Option 2		
BI 211	Principles of Biology I	
BI 212	Biology of Plants II	
BI 213	Biology of Animals III	
CH 104	Introduction to Chemistry I	5
or CH 221	General Chemistry I	
EC 201	Microeconomics	4
FOR 208	Soils: Sustainable Ecosystems	4
FW 212	Survey of Northwest Birds	2
or FW 218	Survey of Northwest Mammals	
FOR 235	Resource Measurements	4
FOR 240A	Forest Ecology	3
FOR 241A	Field Dendrology	3
or FOR 241B	Dendrology	
FOR 251	Recreational Resource Management	3-4
or ANTH 103	Cultural Anthropology	
FW 251	Wildlife Conservation	3
G 201	Geology I	4
or G 202	Geology II	
or GEOG 278	Physical Geography-Landforms and Water	
GEOG 265	Geographic Information Systems	4
GEOG 279	Physical Geography-Weather and Climate	4
MTH 243	Introduction to Probability and Statistics I	4
Choose one from the following:		4
MTH 112	Trigonometry	
MTH 241	Calculus for Management/Social Science	
MTH 245	Mathematics for Management, Life, and Social Sciences	
MTH 251	Calculus I	

Natural Resources Options

Choose one of the following three options (see lists below):	4-12
NR Conservation and Technology Option	
Fish and Wildlife Conservation Option	
NR Policy and Management Option	

Electives

| Choose any course numbered 100 or above that brings the total credits to 90 quarter hours. This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable | 3 |
| | **Total Credits 90-106** |

[1] Select from the appropriate category in the OSU Baccalaureate Core course list in the COCC catalog.

[2] No more than two courses (or lecture/lab combinations) from any one department may be used by a student to satisfy the Perspectives category of the core. GEO courses listed under Physical Science are considered to be from a different department than GEO courses listed under any other Perspective category.

[3] Option 2 is recommended.

NATURAL RESOURCES OPTIONS
NR Conservation and Technology Option

FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
FOR 236	Aerial Photo	3
FOR 240B	Wildlife Ecology	3
	Total Credits 12	

Fish and Wildlife Conservation Option

| FOR 111 | Forestry Perspectives | 4 |
| | **Total Credits 4** | |

NR Policy and Management Option

FOR 111	Forestry Perspectives	4
Choose two of the following course options:		8
PHL 201	Problems of Philosophy-Epistemology	
PS 201	Intro US Government & Politics	
PSY 201	Mind and Brain	
or PSY 202	Mind and Society	
SOC 201	Introduction to Sociology	
	Total Credits	**12**

ADVISING NOTES

The following requirement is not part of this AS degree but is required at OSU: Perspectives: Cultural Diversity category (see Baccalaureate Core list). Difference, Power and Discrimination is met by an upper division program requirement.

Advanced Forest Concepts
Short Term Certificate of Completion

PROGRAM DESCRIPTION

This certificate is designed for students who hold degrees in other areas or are already in the work force and are looking to enhance their skills related to determining forest utilization, planning and management.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- Students are expected to provide their own appropriate field clothing and tools.

PROGRAM ENTRANCE REQUIREMENTS

None

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

FOR 215	Forest Resource Capstone	3
FOR 237	Resource Sampling	4
FOR 273	Silviculture and Harvesting Systems	5
	Total Credits	**12**

ADVISING NOTES

It will take three quarters to complete this short-term certificate.

Conservation of Natural Resources
Short Term Certificate of Completion

PROGRAM DESCRIPTION

This certificate is designed for students who hold degrees in other areas or are already in the work force and are looking to enhance their skills related to the basic concepts of conserving natural resources including forest, wildlife, soil and water resources.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- Students are expected to provide their own appropriate field clothing and tools.

PROGRAM ENTRANCE REQUIREMENTS

None

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

FOR 111	Forestry Perspectives	4
FOR 208	Soils: Sustainable Ecosystems	4
FOR 240B	Wildlife Ecology	3
FOR 260	Conservation of Natural Resources	3
	Total Credits	**14**

ADVISING NOTES

It will take three quarters to complete this short-term certificate.

Forest Ecology
Short Term Certificate of Completion

PROGRAM DESCRIPTION

This certificate is designed or those who hold degrees in other areas or are already in the work force and are looking to enhance their skills irelated to the practical aspects of forest ecology, dendrology and their applications.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- Students are expected to provide their own appropriate field clothing and tools.

PROGRAM ENTRANCE REQUIREMENTS

None

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses

FOR 240A	Forest Ecology	3
FOR 241A	Field Dendrology	3
FOR 241B	Dendrology	3
FOR 271	Applied Forest Ecology	3
	Total Credits	**12**

ADVISING NOTES

It will take three quarters to complete this short-term certificate.

Forest Measurements
Short Term Certificate of Completion

PROGRAM DESCRIPTION

This certificate is designed for students who hold degrees in other areas or are already in the work force and are looking to enhance their skills related to basic measurements of trees, land and on-land navigation using maps, compasses and GPS.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- Students are expected to provide their own appropriate field clothing and tools.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
FOR 235	Resource Measurements	4
FOR 236	Aerial Photo	3
	Total Credits	**13**

ADVISING NOTES
It will take three quarters to complete this short-term certificate.

Forest Protection
Short Term Certificate of Completion

PROGRAM DESCRIPTION
This certificate is designed for students who hold degrees in other areas or are already in the work force and are looking to enhance their skills related to identification of forest disease and insects and the basic techniques used to protect forests from fire, disease and insects.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Students are expected to provide their own appropriate field clothing and tools.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

FOR 110	Wildland Fire Science I	2
FOR 210	Wildland Fire Science II	2
FOR 271	Applied Forest Ecology	3
FOR 272	Forest Entomology/Pathology	3
FOR 273	Silviculture and Harvesting Systems	5
	Total Credits	**15**

ADVISING NOTES
It will take three quarters to complete this short-term certificate.

Mapping/Cartography
Short Term Certificate of Completion

PROGRAM DESCRIPTION
This certificate is designed for students who hold degrees in other areas or are already in the work force and are looking to enhance their skills related to the basic use and production of maps focusing on field techniques and use of basic geographic information systems.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Students are expected to provide their own appropriate field clothing and tools.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
GEOG 211	Computer Cartography	4
GEOG 265	Geographic Information Systems	4
	Total Credits	**14**

ADVISING NOTES
It will take two quarters to complete this short-term certificate.

GENERAL TRANSFER
Exploratory
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
If a student plans to earn a college degree but has not yet decided on a major, COCC identifies the student as "exploratory," which aligns with the Associate of Arts Oregon Transfer (AAOT) degree plan. The AAOT degree is used for exploratory students because it provides a guideline of courses that meet bachelor's degree general education requirements at Oregon public universities. The AAOT degree does not include all bachelor degree requirements for freshmen and sophomores, and it does not include requirements for COCC's Career and Technical Education (CTE) programs. For these reasons, it is important for exploratory students to work actively to identify an educational goal.

Some exploratory students may choose to declare the Associate of General Studies degree which allows students to self-design a program to meet individual needs. However, it is not designed to meet bachelor's degree general education requirements as the AAOT degree, nor does it align with workforce training and skills as the AAS degrees. Again, it is important for exploratory students to work actively to identify an educational goal.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication

Choose one course from the following: 3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies

One course must be designated as Cultural Literacy.

Arts and Letters   9-12

Choose at least three courses from at least two prefixes

Social Science   12-16

Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20

Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39

Choose any course numbered 100 or above that brings the total credits to 90 quarter hours [2]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable.

ADVISING NOTES

COCC recommends that students use several strategies to ensure good decisions about educational goals. Many COCC resources are available to assist.
- Take HD 110 Career Planning, a 3-credit course offered every term.
- Visit with the Career Services Coordinator in CAP Services.
- Discuss options with your academic advisor and faculty members in departments that interest you.

COCC uses the AAOT and AGS degrees to provide exploratory students with a framework, but students should change their declared major when they make a decision. Initially, the GradTracks audit will present the Associate of Arts Oregon Transfer requirements but students should be aware that these guidelines are preliminary. Students can explore other COCC programs by using the "What If" option on the GradTracks menu. Give yourself a timeline within which to make a decision. Many universities require students to declare their major within their first 90 credits, but large majors such as engineering, science and business, should be declared in the first 45 credits. CTE programs that lead directly to employment typically don't have elective credits, so the earlier students make a decision, the better.

Nearly all bachelor's degrees are either a bachelor of arts (BA) or a bachelor of science (BS). Students pursuing a BA usually need to complete two years of a world language (the 200-level language courses may be applied to the arts and letters requirement in Discipline Studies.) Students pursuing a BS should consider taking more math and science courses. Students should refer to the transfer college's degree requirements for details.

Undeclared Transfer
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

If a student plans to transfer in order to a earn a bachelor's degree at another college or university but has not yet decided on a major, COCC identifies the student as "undeclared transfer." This goal aligns with the Associate of Arts Oregon Transfer (AAOT) degree plan because it provides a guideline of courses that meet bachelor's degree general education requirements at Oregon public universities. The AAOT degree does not include all bachelor degree requirements for freshmen and sophomores; it is important for undeclared transfer students to work actively with an academic advisor to identify a specific transfer goal.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105	Math in Society (or higher)	4

Oral Communication

Choose one course from the following: 3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies

One course must be designated as Cultural Literacy.

Arts and Letters   9-12

Choose at least three courses from at least two prefixes

Social Science   12-16

Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20

Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39

Choose any course numbered 100 or above that brings the total credits to 90 quarter hours [2]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable.

ADVISING NOTES

Nearly all bachelor's degrees are either a bachelor of arts (BA) or a bachelor of science (BS). Students pursuing a BA usually need to complete two years of a world language (the 200-level language courses may be applied to the arts and letters requirement in Discipline Studies.) Students pursuing a BS should consider taking more math and science courses. Students should refer to the transfer college's degree requirements for details.

Associate of General Studies
Associate of General Studies

PROGRAM DESCRIPTION
For students who are not pursuing specific transfer or Career and Technical Education (CTE) programs, the Associate of General Studies (AGS) degree provides an alternative to pursue a broad general education and accomplish personal educational goals. It is important for a student to work closely with an advisor in designing a course plan for this degree.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Digital Literacy

CIS 120	Computer Concepts (or pass competency exam)	4

Health

4 credits with HHP or HHPA prefix [1]	4

Mathematics

MTH 020	Pre-Algebra (or higher) [2]	4

Oral Communication
Choose one course from the following: 3-4

SP 111	Fundamentals Public Speaking
SP 114	Argumentation & Discourse
SP 115	Intro Intercultural Commun
SP 218	Interpersonal Communication
SP 219	Small Group Communication

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/ Discipline Studies
Arts and Letters 3-4
Choose one course from the Disciplines Studies list

Physical/ Biological Lab Science 3-5
Choose one course from the Disciplines Studies list

Social Science 3-4
Choose one course from the Disciplines Studies list

Cultural Literacy 3-4
Choose one course from the Disciplines Studies list

Electives 55
Choose enough elective credits to reach a minimum total of 90 overall degree credits [3]

Total Credit 90-96

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Except MTH 188 Special Studies: Mathematics, MTH 198 Practicum in Mathematics and MTH 199 Selected Topics: Mathematics.
[3] Cannot include reading, writing, or math classes below the 100-level.

ADVISING NOTES
Advantages
- The AGS awards a degree for completion of college-level coursework in core skills and general education and allows students flexibility to customize more than half of the degree's required number of credits.

It can be used to enhance employment, meet sponsoring agency requirements and/or meet unusual baccalaureate requirements.

Considerations
- The AGS degree is not transferrable as a whole and does not meet certification requirements for any Career and Technical Education (CTE) area.
- The AGS degree does not guarantee that a student will meet all lower-division general education and major requirements; however, with careful academic advising and in consideration of transfer institution requirements, the AGS degree may be designed to do so.

General OSU Transfer Emphasis
Associate of Science

FOCUS AREA DESCRIPTION
The AS (Oregon State University emphasis) degree is intended to give students who are confident they will finish their bachelor's degree at either OSU, Corvallis or OSU, Cascades a framework to directly meet OSU's general education (called "baccalaureate core" at OSU) requirements. Those students who are not certain that they will complete their degree at OSU or those who have fewer remaining requirements with the AAOT degree may be better served by the Associate of Arts degree which guarantees progress toward the general education core requirements at all Oregon public universities.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Baccalaureate Core

Fitness	HHP 295 Health and Fitness	3
Mathematics	One course from the Mathematics list[1]	4
Writing I	WR 121 Academic Composition	4
Writing II	One course from the WR II list[1]	3-4
Writing III	One course from the WR III list[1]	3-4

Perspectives Courses [1,2]
Choose one course in each of the following categories:

Physical Science [1]	4-5
Biological Science [1]	4-5
Physical or Biological Science	
Choose one additional course from the Physical Science or Biological Science lists [1]	4-5
Western Culture [1]	3-4
Cultural Diversity [1]	4
Literature and the Arts [1]	3-4
Social Processes and Institutions [1]	3-4
Difference, Power and Discrimination [1]	4

Electives 44
Choose enough elective credits from the followng list to reach a minimum of 90 overall degree units [3]

Total Credits 90-98

[1] Select from the appropriate category in the OSU Baccalaureate Core course list in the COCC catalog.
[2] No more than two courses (or lecture/lab combinations) from any one department may be used by a student to satisfy the Perspectives category of the core. GEO courses listed under Physical Science are considered to be from a different department than GEO courses listed under any other Perspective category.
[3] Electives must be numbered 100 or higher (with a maximum of 12 Career and Technical Education (CTE) credits).

PROGRAM DESCRIPTIONS

ADVISING NOTES

Students are highly recommended to include lower division major requirements and their BA/BS requirements in their first 90 credits. Many OSU majors require a significant number of lower division courses, and some programs (such as engineering, computer science and business) require completion of these courses before students may continue to upper division courses. Students who do not complete these requirements in their first 90 credits may find that they cannot complete their bachelor's degree in two years after completion of this AS degree nor in the minimum total of 180 credits.

This information reflects an accurate picture of OSU requirements at the time of approval, using the OSU catalog, advisors and web resources for consultation. However, degree requirements can and do change. OSU has made no guarantee about the accuracy of requirements in this AS degree; determination of transfer status is made on an individual course basis at the point of admission to OSU.

Timing
OSU recommends the following plan for timing your baccalaureate core requirements.

First Year:
- Complete Writing 1 (WR 121 Academic Composition, C- or better), Speech and Math (required in first 45 OSU credits)
- Begin Perspectives courses
- Consider a Difference, Power and Discrimination (DPD) or Fitness course

Second Year:
- Complete Writing II (required in first 90 OSU credits)
- Continue Perspectives courses
- Completed Difference, Power and Discrimination (DPD) and Fitness course requirements

Notes for Majors from the College of Liberal Arts (CLA)
At Cascades campus, this includes majors such as American Studies, Liberal Studies, Psychology and Social Science.
- Generally, double dipping is not allowed.
- CLA majors have a Liberal Arts Core requirement (5 courses, at least 15 credits).
- Students are encouraged to include the BA or BS requirements in their lower division courses.

Requirements for a BA or BS Degree, Other Requirements
Following are considerations for students working on their BA/BS requirement.
- Nearly all degrees at OSU are either BA (Bachelor of Arts) or BS (Bachelor of Science) degrees.
- Some majors offer both BA and BS options, and some only offer one option.
- BS requirements are included in major curriculum for all degrees that are in colleges outside of the College of Liberal Arts.
- A major will either allow students to "double dip" (use a course to meet two requirements, such as a major requirement and a BA/BS or baccalaureate core requirement) or will prohibit double dipping.
- Usually, majors that allow double dipping will require specific courses that can be used in both the major and the BA/BS or baccalaureate core.

GEOGRAPHIC INFORMATION SYSTEMS

Geographic Information Systems
Associate of Applied Science

PROGRAM DESCRIPTION
GIS is an information system designed to work with data referenced by spatial or geographic coordinates. GIS is both a database system with specific capabilities for spatially referenced data, as well as a set of operations for processing the data. The program is built on a foundation of computer-aided mapping and surveying technology for collecting spatial data, database generation and manipulation for tabular data and GIS-specific courses for organization, analysis and reporting.

Graduates work in retail and commercial businesses, natural resources, education, federal/state/local governments, banking and insurance, internet, publishing and real estate. GIS careers typically include positions such as GIS technician, analyst, project manager, computer programmer, database administrator, system administrator, cartographic designer, developer and related managerial and administrative roles.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Required:
  - Materials (usb/flash drive, maps, assorted office supplies), $500.
- Recommended:
  - A home or laptop computer capable of running the GIS software, $700. Contact program instructor for specifics.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Minimum placement scores resulting in MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra and/or MTH 060 Algebra I equivalent
  - Completion of computer competency (either IC3 exam or CIS 120 Computer Concepts, which may be taken as part of program)

Other Entrance Requirements
- All COCC students enrolled in the Geographic Information Systems program (which includes requirements for Co-operative Work Experience) may have to pass Criminal History Checks (CHC) as a condition of their acceptance into a work site. See the website or program director for more information.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

GEOG 211	Computer Cartography	4
GEOG 265	Geographic Information Systems	4
GEOG 266	Arc GIS	5
GEOG 267	Geodatabase Design	5
GEOG 273	Spatial Data Collection	5
GEOG 275	GIS Capstone	5
GEOG 280	Co-op Work Experience GIS	3
GEOG 284	GIS Customization	5
GEOG 285	Data Conversion/Documentation	5
GEOG 286	Remote Sensing	5
GEOG 287	Analysis of Spatial Data	5
GIS Electives: Choose two of the following courses:		6-8
CIS 120	Computer Concepts	
CIS 125A1	AutoCAD 1	
FOR 230B	Forest Surveying	
FOR 236	Aerial Photo	

Other Required Courses

CIS 135DB	Database Theory/SQL	4
Discipline Studies Courses		8
FOR 230A	Map, Compass and GPS	3
FOR 235	Resource Measurements	4
HHP 252A	Fitness/First Aid	3

Human Relations approved course		3-4
Choose one of the following:		4-8
MTH 085	Technical Mathematics I	
& MTH 086	Technical Mathematics II	
or MTH 105	Math in Society (or higher)	
WR 121	Academic Composition	4
WR 227	Technical Writing	4
		Total Credits 94-101

ADVISING NOTES

GIS courses begin once per year, in fall term. Students take non-program support and/or selected GIS courses if they begin in a term other than fall or if they need to build skills related to prerequisites. GIS courses, offered each term, must be taken together and sequentially. Students are discouraged from working more than 10 hours per week during any term due to heavy course load.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Geographic Information Systems
Certificate of Completion

PROGRAM DESCRIPTION
The GIS certificate program is designed for students already possessing a two- or four-year college degree that seek to add specific GIS skills to their discipline.

GIS is an information system designed to work with data referenced by spatial or geographic coordinates. GIS is both a database system with specific capabilities for spatially referenced data, as well as a set of operations for working with (analyzing) the data. The program is built on a foundation of computer-aided mapping and surveying technology for collecting spatial data, database generation and manipulation for tabular data and GIS-specific courses for organization, analysis and reporting. Graduates work in retail and commercial businesses, natural resources, education, federal/state/local governments, banking and insurance, internet, publishing and real estate. GIS careers typically include positions such as GIS technician, analyst, project manager, computer programmer, database administrator, system administrator, cartographic designer, developer and related managerial and administrative roles.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Required:
  - Materials (usb/flash drive, maps, assorted office supplies), $500.
- Recommended:
  - A home or laptop computer capable of running the GIS software, $700. Contact program instructor for specifics.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
Recommended:
- Two year, four-year, or graduate degree from accredited institution
- Completion of computer competency (either IC3 exam or CIS 120 Computer Concepts)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

GEOG 211	Computer Cartography	4
GEOG 265	Geographic Information Systems	4

GEOG 266	Arc GIS	5
GEOG 267	Geodatabase Design	5
GEOG 273	Spatial Data Collection	5
GEOG 275	GIS Capstone	5
GEOG 285	Data Conversion/Documentation	5
GEOG 286	Remote Sensing	5
GEOG 287	Analysis of Spatial Data	5

Other Required Courses

Human Relations approved course		3
WR 121	Academic Composition	4
		Total Credits 50

ADVISING NOTES
Program (GIS) courses begin once per year, in fall term. Students take non-program support and/or selected GIS courses if they begin in a term other than fall or if they need to build skills related to prerequisites. Students receiving federal financial aid are encouraged to speak with the financial aid advisor.

GIS courses, offered each term, must be taken together and sequentially. Students are discouraged from working more than 10 hours per week during any term due to heavy course load.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

GEOGRAPHY
Geography
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Geography is a discipline that studies the Earth and its human inhabitants, and is commonly divided into the branches of human geography and physical geography. The Associate of Arts Oregon Transfer (AAOT) with a focus in geography includes courses that are commonly required for this major and meets lower division general education requirements at all Oregon public universities.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters	9-12

Choose at least three courses from at least two prefixes

Social Science	12-16

Choose at least four courses from at least two prefixes
Recommend: GEOG 106, GEOG 201, GEOG 202
Choose another course from the Social Science Discipline
list that does not have a GEOG prefix

Science/Math/Computer Science	12-20

Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science
Recommend: GEOG 278, GEOG 279

Electives	39

Take enough courses to meet the minimum 90 credits
required for the AAOT degree
Recommend: GEOG 107, GEOG 190

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES

Students pursuing a BA after transfer should consider completing three
terms of a 200-level language course. The 100-level language courses
will count as electives. The 200-level language courses will partially fulfill
the arts and letters requirement.

Students pursuing a BS after transfer should consider taking more math
and science courses. Language is not necessary. For specific details,
speak with an advisor.

GEOLOGY

Geology
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Geology is the study of the solid features of Earth, and includes the study
of rocks that form the Earth's surface and the process by which they
change. The Associate of Arts Oregon Transfer (AAOT) with a focus in
geology includes courses that are commonly required for a geology major
and meets lower division general education requirements at all Oregon
public universities. A bachelor's degree with a major in geology prepares
a student for entry level jobs in environmental geology in industry, but
also prepares students for graduate school which can lead to jobs in
research, industry and government.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate
  or degree.
- All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]	3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters	9-12

Choose at least three courses from at least two prefixes

Social Science	12-16

Choose at least four courses from at least two prefixes

Science/Math/Computer Science	12-20

Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science
Recommend: CH 221, G 201, G 202, G 203

Electives	39

Choose any course numbered 100 or above that
brings the total credits to 90 quarter hours
Recommend: BI 101, BI 102, BI 103, CH 222, CH 223, G 148,
G 162CV, G 207, GS 108, MTH 254, MTH 255, MTH 256, PH 211,
PH 212, PH 213

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES
Students planning to transfer to Oregon Public Universities should take
the following:
CH 221 General Chemistry I, CH 222 General Chemistry II and CH 223
General Chemistry III

PH 201 General Physics I, PH 202 General Physics II and PH 203
General Physics III or PH 211 General Physics I, PH 212 General Physics
II and PH 213 General Physics III

Those planning to transfer to:
- OSU should take MTH 112 Trigonometry, MTH 251 Calculus I and
  MTH 252 Calculus II
- PSU should take MTH 251 Calculus I, MTH 252 Calculus II, MTH 253
  Calculus III and MTH 254 Vector Calculus I
- SOU should take MTH 111 College Algebra, MTH 112 Trigonometry,
  MTH 251 Calculus I and MTH 252 Calculus II
- UO should take MTH 251 Calculus I, MTH 252 Calculus II and MTH
  253 Calculus III

Students are strongly encouraged to contact the appropriate transfer
university for the most current requirements of their major and
emphasis area.

Oregon universities with a geology major include Oregon State University,
Portland State University, Southern Oregon University and University
of Oregon.

HEALTH INFORMATION TECHNOLOGY

Health Information Technology
Associate of Applied Science

PROGRAM DESCRIPTION
The Health Information Technology program prepares individuals in technical coursework, human relations, communications, mathematics and computer technology. The program employs a career ladder approach that includes the following certificates:
- Medical Insurance
- Medical Office Specialist
- Medical Billing Specialist
- Coding Competency

At the end of six academic quarters (approximately two years), students earn an Associate of Applied Science (AAS) degree in Health Information Technology. Students are eligible to take the RHIT (Registered Health Information Technician) national credential examination upon completion of the AAS degree. The Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) accredits the Health Information Technology program. Health information technicians collect, analyze, code, manage and maintain medical information regarding patients. Health information technicians must be highly organized and pay attention to detail, maintain patient medical information in a complete, accurate and secure manner while maintaining high ethical standards. Health information technicians work in a wide range of health care facilities including but not limited to hospitals, clinics, doctors' offices and nursing homes. In Oregon, the number of jobs for health information technicians is expected to grow much faster than the average for all occupations through the year 2020.

ACCREDITATION
Commission on Accreditation of Health Informatics and Information Management Education

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Required:
  - Total cost depends upon preparatory coursework and extent of completion within the program - certificate/degree. Additional costs estimated to be approximately $2,500 include textbooks, technology fees, Directed Practice travel expense, OrHIMA Convention, criminal history check, etc.
- Recommended:
  - Students are strongly encouraged to have access to a home computer with high-speed internet access.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Prior to enrolling in HIT 103 Health Info Systems/Procedures, students must pass CIS 120 Computer Concepts, AH 111 Medical Terminology I and WR 121 Academic Composition with a grade of "C" or better.

Other Entrance Requirements
- Required:
  - Students entering the HIT program are required to have a criminal history check prior to enrolling in HIT 103 Health Info Systems/ Procedures. A student may be prevented from entering the program if there is a felony conviction on their record.
  - Documentation of immunizations is required for directed practice (Tdap, MMR, Varicella, TB, Hep B and Flu).
  - Additional immunizations, background checks, and drug screens may be required by directed practice sites at the students expense.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Support Courses

AH 111	Medical Terminology I	3
CIS 120	Computer Concepts	4
WR 121	Academic Composition	4

Core Courses

HIT 103	Health Info Systems/Procedures	5
HIT 104	Health Data Content/Structure	5
HIT 131A	Document Management and Tech	3
HIT 180	HIPAA Management	2
HIT 182	Introduction to Medical Coding	4
HIT 184	Advanced Pathophysiology	5
HIT 193	Directed Practice I	2
HIT 201	Legal Aspects of Health Care	3
HIT 203	Healthcare Delivery/Tech	3
HIT 205	Intro Medical Record Analysis	3
HIT 272	Health Information Management	5
HIT 281	Health Data Collection	3
HIT 282	Quality Improve/Health Care	4
HIT 283	Coding Classifications	6
HIT 284	Classification & Reimb Systems	5
HIT 285	Advanced Coding Classification	4
HIT 287	Leadership & Project Mgmt	2
HIT 293	Directed Practice II	2
HIT 296	Ambulatory Data Systems	3

Other Required Courses

AH 112	Medical Terminology II	3
BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
BI 233	Human Anatomy and Physiology III	4
MTH 031	Health Care Math	3
SP 111	Fundamentals Public Speaking	4
Choose one course from the following:		3
SP 218	Interpersonal Communication	
BA 285	Business Human Relations	
PSY 101	Applied Psychology	

Total Credits 105

ADVISING NOTES
HIT is a cohort program, which begins each Fall. Students can complete non-HIT courses prior to entry into the cohort or concurrently. Courses are in sequence for first and second year. Students must complete all first-year courses before enrolling in second-year coursework.

This degree is designed primarily for students planning to enter their chosen career upon graduation. However, credits are transferable per an articulation agreement with the University of Cincinnati for students choosing to pursue an online BS in Health Information Management.

Coding Competency
Certificate of Completion

PROGRAM DESCRIPTION
This certificate prepares students for an entry-level position as a medical coder in a hospital, clinic, or medical offices. A Medical Coder analyzes medical records (history and physical reports, lab results, x-ray reports, treatment plans, etc.) and assigns codes which classify diagnoses and procedures, while applying the principles of professionalism and ethical conduct.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Required:
  - Total cost depends upon preparatory coursework and extent of completion within the program - certificate/degree. Additional costs estimated to be approximately $2,500 include textbooks, technology fees, Directed Practice travel expense, OrHIMA Convention, criminal history check, etc.
- Recommended:
  - Students are strongly encouraged to have access to a home computer with high-speed internet access.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Prior to enrolling in HIT 103 Health Info Systems/Procedures, students must pass CIS 120 Computer Concepts, AH 111 Medical Terminology I and WR 121 Academic Composition with a grade of "C" or better.

Other Entrance Requirements
- Recommended:
  - Keyboarding: 40 WPM minimum
  - Study skills
  - Writing skills
  - Reading with emphasis on critical thinking and analytical skills
  - Computer/technology skills (essential)
- Required:
  - Students entering the HIT program are required to have a criminal history check prior to enrolling in HIT 103 Health Info Systems/Procedures. A student may be prevented from entering the program if there is a felony conviction on their record.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Support Courses

AH 111	Medical Terminology I	3
CIS 120	Computer Concepts	4
WR 121	Academic Composition	4

Core Courses

HIT 103	Health Info Systems/Procedures	5
HIT 104	Health Data Content/Structure	5
HIT 131A	Document Management and Tech	3
HIT 180	HIPAA Management	2
HIT 182	Introduction to Medical Coding	4
HIT 184	Advanced Pathophysiology	5
HIT 193	Directed Practice I	2
HIT 201	Legal Aspects of Health Care	3
HIT 205	Intro Medical Record Analysis	3
HIT 283	Coding Classifications	6
HIT 284	Classification & Reimb Systems	5
HIT 285	Advanced Coding Classification	4
HIT 296	Ambulatory Data Systems	3

Other Required Courses

AH 112	Medical Terminology II	3
BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
BI 233	Human Anatomy and Physiology III	4
MTH 031	Health Care Math	3
SP 111	Fundamentals Public Speaking	4

Choose one course from the following:		3
SP 218	Interpersonal Communication	
BA 285	Business Human Relations	
PSY 101	Applied Psychology	
Pass CCA Proficiency Exam		

Total Credits 86

ADVISING NOTES
Students are encouraged to consult their academic advisor if they have transfer credits and/or are not able to attend full time in order to determine an appropriate course schedule. Additionally, students should reference the course descriptions to determine required lab hours.

Insurance
Certificate of Completion

PROGRAM DESCRIPTION
The Insurance Certificate program prepares the student for entry-level employment in the medical insurance field. With coursework in medical terminology, anatomy and physiology, health information systems and health data content and structure, a firm foundation is laid to work in health insurance. With this certificate, employment may be found with insurance companies and in offices of medical doctors, chiropractors, ophthalmologists, and dentists. Job descriptions may include filing of claims, verification of insurance, pre-authorizations and customer service.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Required:
  - Total cost depends upon preparatory coursework and extent of completion within the program - certificate/degree. Additional costs estimated to be approximately $2,500 include textbooks, technology fees, Directed Practice travel expense, OrHIMA Convention, criminal history check, etc.
- Recommended:
  - Students are strongly encouraged to have access to a home computer with high-speed internet access.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Prior to enrolling in HIT 103 Health Info Systems/Procedures, students must pass CIS 120 Computer Concepts, AH 111 Medical Terminology I and WR 121 Academic Composition with a grade of "C" or better.

Other Entrance Requirements
- Recommended:
  - Keyboarding: 40 WPM minimum
  - Study skills
  - Writing skills
  - Reading with emphasis on critical thinking and analytical skills
  - Computer/technology skills (essential)
- Required:
  - Students entering the HIT program are required to have a criminal history check prior to enrolling in HIT 103 Health Info Systems/Procedures. A student may be prevented from entering the program if there is a felony conviction on their record.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Support Courses

AH 111	Medical Terminology I	3
CIS 120	Computer Concepts	4
WR 121	Academic Composition	4

Core Courses

HIT 103	Health Info Systems/Procedures	5
HIT 104	Health Data Content/Structure	5
HIT 180	HIPAA Management	2

Other Required Courses

AH 112	Medical Terminology II	3
BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
MTH 031	Health Care Math	3
	Total Credits	**37**

ADVISING NOTES

Students are encouraged to consult their academic advisor if they have transfer credits and/or are not able to attend full time in order to determine an appropriate course schedule. Additionally, students should reference the course descriptions to determine required lab hours.

Medical Billing Specialist
Certificate of Completion

PROGRAM DESCRIPTION

The Medical Billing Specialist Certificate prepares the student to work in the insurance industry. Students receive training in the legal aspects of medical records, with hands-on training using current computer technology in medical records and medical billing. Employment may be found working for physicians, dentists, chiropractors, in assisted living facilities, with insurance companies, hospitals, clinics and even law offices. Job descriptions may include customer service regarding benefits and claims, processing medical claims efficiently, handling patient invoices and obtaining reimbursement for patients and/or doctors.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- Required:
  - Total cost depends upon preparatory coursework and extent of completion within the program - certificate/degree. Additional costs estimated to be approximately $2,500 include textbooks, technology fees, Directed Practice travel expense, OrHIMA Convention, criminal history check, etc.
- Recommended:
  - Students are strongly encouraged to have access to a home computer with high-speed internet access.

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Required:
  - Prior to enrolling in HIT 103 Health Info Systems/Procedures, students must pass CIS 120 Computer Concepts, AH 111 Medical Terminology I and WR 121 Academic Composition with a grade of "C" or better.
- Recommended:
  - Keyboarding: 40 WPM minimum
  - Study skills
  - Writing skills
  - Reading with emphasis on critical thinking and analytical skills
  - Computer/technology skills (essential)

Other Entrance Requirements
- Required:
  - Students entering the HIT program are required to have a criminal history check prior to enrolling in HIT 103 Health Info Systems/

Procedures. A student may be prevented from entering the program if there is a felony conviction on their record.

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Support Courses

AH 111	Medical Terminology I	3
CIS 120	Computer Concepts	4
WR 121	Academic Composition	4

Core Courses

HIT 103	Health Info Systems/Procedures	5
HIT 104	Health Data Content/Structure	5
HIT 131A	Document Management and Tech	3
HIT 180	HIPAA Management	2
HIT 182	Introduction to Medical Coding	4
HIT 184	Advanced Pathophysiology	5
HIT 193	Directed Practice I	2
HIT 201	Legal Aspects of Health Care	3
HIT 205	Intro Medical Record Analysis	3
HIT 284	Classification & Reimb Systems	5
HIT 296	Ambulatory Data Systems	3

Other Required Courses

AH 112	Medical Terminology II	3
BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
BI 233	Human Anatomy and Physiology III	4
MTH 031	Health Care Math	3
SP 111	Fundamentals Public Speaking	4
Choose one course from the following:		3
SP 218	Interpersonal Communication	
BA 285	Business Human Relations	
PSY 101	Applied Psychology	
	Total Credits	**76**

ADVISING NOTES

Students are encouraged to consult their academic advisor if they have transfer credits and/or are not able to attend full time in order to determine an appropriate course schedule. Additionally, students should reference the course descriptions to determine required lab hours.

Medical Office Specialist
Certificate of Completion

PROGRAM DESCRIPTION

The Medical Office Specialist Certificate program prepares the student to secure entry-level employment as a medical office specialist. With coursework in medical terminology, anatomy, physiology, health data content and systems, computer technology, disease, beginning coding and HIPAA, students gain the knowledge and skills necessary to begin a successful office career in the health services field. Employment may range from a single physician office to a large hospital organization. Job descriptions may include maintaining medical records and accounts, word processing, basic accounting, scheduling, professional communications, and general operations of a health care facility.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)

Material Costs
- Required:
  - Total cost depends upon preparatory coursework and extent of completion within the program - certificate/degree. Additional costs

estimated to be approximately $2,500 include textbooks, technology fees, Directed Practice travel expense, OrHIMA Convention, criminal history check, etc.
- Recommended:
  - Students are strongly encouraged to have access to a home computer with high-speed internet access.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Prior to enrolling in HIT 103 Health Info Systems/Procedures, students must pass CIS 120 Computer Concepts, AH 111 Medical Terminology I and WR 121 Academic Composition with a grade of "C" or better.

Other Entrance Requirements
- Recommended:
  - Keyboarding: 40 WPM minimum
  - Study skills
  - Writing skills
  - Reading with emphasis on critical thinking and analytical skills
  - Computer/technology skills (essential)
- Required:
  - Students entering the HIT program are required to have a criminal history check prior to enrolling in HIT 103 Health Info Systems/ Procedures. A student may be prevented from entering the program if there is a felony conviction on their record.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Support Courses

AH 111	Medical Terminology I	3
CIS 120	Computer Concepts	4
WR 121	Academic Composition	4

Core Courses

HIT 103	Health Info Systems/Procedures	5
HIT 104	Health Data Content/Structure	5
HIT 131A	Document Management and Tech	3
HIT 180	HIPAA Management	2
HIT 182	Introduction to Medical Coding	4
HIT 184	Advanced Pathophysiology	5

Other Required Courses

AH 112	Medical Terminology II	3
BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
BI 233	Human Anatomy and Physiology III	4
MTH 031	Health Care Math	3
Choose one course from the following:		3
SP 218	Interpersonal Communication	
BA 285	Business Human Relations	
PSY 101	Applied Psychology	
	Total Credits	**56**

ADVISING NOTES
Students are encouraged to consult their academic advisor if they have transfer credits and/or are not able to attend full time in order to determine an appropriate course schedule. Additionally, students should reference the course descriptions to determine required lab hours.

HISTORY
History
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The history discipline illuminates and analyzes the human past through primary and secondary evidence. History majors and minors learn to think with rigor, to write with clarity and precision, to research, organize and assess evidence and to interpret complex information. History majors develop a foundational skill set that opens the way to careers in such fields as education, government, international work, marketing, public relations, non-profit, business, journalism, museum work and law.

Many arts and science disciplines can make this claim, but history does so while offering a boundless variety of material for analysis including the diversity of human experience. Themes in history courses include politics, ethnicity, wars, sexuality, music, social class, religion, ideas and other distinctive topics that reveal the human experience at various times and places. Not only is the study of history useful for professional life, it provides a compelling context for personal enrichment and lifelong learning.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters	9-12
Choose at least three courses from at least two prefixes	

Social Science	12-16
Choose at least four courses from at least two prefixes[2]	

Recommend: HST 101, HST 102, HST 103, HST 104, HST 105, HST 106, HST 201, HST 202, or HST 203

Science/Math/Computer Science	12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science	

Electives	39
Choose college-level courses to bring total credits to 90 quarter hours[3]	
Total Credits	**90-106**

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] History majors are advised to choose two survey courses with a History prefix in European, World or American History.
[3] History courses at COCC are divided into three general areas: World, European and American history. History majors are advised to take at least two courses from each area during the course of earning an AAOT (including the social science requirement) and then choose any college-level courses that brings the total credits to 90 quarter hours.

European History: HST 235 Sexuality in 20th Century Europe, HST 270 20th Century European History.

World History: HST 258 Colonial Latin American Hist, HST 259 Modern Latin American History, HST 260 History of Islamic Civilizations, HST 290 East Asian History, HST 291 East Asian History, HST 292 East Asian History

American History: HST 204 History of the Civil War, HST 207 History of the American West, HST 218 Native American History, HST 225 US Women's History, HST 242 History of the Pacific NW

ADVISING NOTES

Students pursuing a BA after transfer should consider completing to the third term of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the Arts and Letters requirement. For specific details, speak with an advisor.

Oregon public universities that offer a bachelor's degree in history include Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon and Western Oregon University. Most of Oregon's private universities also offer BA programs in history.

Oregon State University – Cascades offers related majors in American Studies, Social Science and Liberal Studies, a minor in Art History and a Master of Arts in Teaching graduate program.

HUMAN SERVICES

Human Services
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Human Services programs prepare students to work for organizations that serve people in need. Students learn the theories, principles and practice of providing services. Human Services jobs can include drug abuse counselor, youth worker, mental health aide or probation officer and provide services to schools, prisons, government agencies and nonprofit groups.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes[2]
Recommend: HS 206, HS 208, HS 209

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: HS 224

Electives   39
Choose enough elective credits to reach a minimum total of 90 overall degree credits[3]

         Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] HS 208 Multicultural Issues Hum Serv is recommended to meet cultural literacy requirement.
[3] Other Addiction Studies/Counseling Certificate courses are related courses to consider; 32 credits may be applied toward elective credits.

ADVISING NOTES
Locally, OSU-Cascades offers a bachelor's degree with a major in Human Development and Family Science, Human Services option. This degree requires careful and accurate planning of the first 90 credits. Details can be found at osucascades.edu/academics/hdfs.

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the Arts and Letters requirement.

Addiction Studies and Human Services
Associate of Applied Science

PROGRAM DESCRIPTION
The AAS degree builds on the certificate of completion (which qualifies a student to sit for the Oregon Certified Alcohol and Drug Counselor (CADC) I exam) and prepares students academically for the CADC II certification.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Travel costs for practicum, three terms, costs based on location
- State Board exams (ACCBO): $50 application fee; $220 exam fee
- Videotaping fees for two terms: approximately $50
- Background check for practicum placement: approximately $50

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - None

- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement OR completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
  - Students should have basic computer competency skills.

Other Entrance Requirements
- Must pass a Criminal Background Check (CBC) as a condition of acceptance into a practicum for training. Students who do not pass the CBC may not be eligible to complete training at affiliated practicum sites, to sit for certification exams, or to be hired for some professional positions. Students with questions about their history should contact the appropriate state board or the program director.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses with the HS prefix must be completed with a grade of C or higher.

Additional Requirements
- A student may be considered ineligible for continued enrollment in the program if the student has failed to satisfactorily complete a given Human Services/Addictions Studies course after re-enrolling in that course once (one time).

PROGRAM COURSE REQUIREMENTS
Core Courses

HS 101	Orientation to Human Services	3
HS 161	Ethics for Human Services	4
HS 162	Effective Helping Skills I	4
HS 180	Addictions, HIV and Other	2
HS 200	Addictive Behavior	3
HS 201	Families and Addictions	3
HS 205	Youth and Addictions	3
HS 206	Group Counseling Skills for Human Services	4
HS 208	Multicultural Issues Hum Serv	4
HS 209	Introduction to Psychological Trauma: Theory and Practice	4
HS 210	Co-Occurring Disorders	4
HS 224	Psychopharmacology	4
HS 250	Process Addictions	4
HS 260	Counseling Theories	4
HS 262	Effective Helping Skills II	4
HS 263	Counseling the Chemically Dependent Client	3
HS 266	Case Management for the Chemically Dependent Client	4
HS 290	Introduction to Practicum in Human Services	1
HS 291	Practicum in Human Services I	4
HS 292	Practicum in Human Services II	4
HS 293	Practicum in Human Service III	4

Other Required Courses

Discipline Studies Electives [1]		3-5
Health	(3 credits with HHP or HHPA prefix) [2]	3
MTH 031	Health Care Math (or higher)	3-4
Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

Total Credits 94-98

[1] Choose courses from the Discipline Studies list that do not have an HS prefix, and that have different prefixes from each other. Choose enough credits to reach the 90 credit minimum.

[2] HHPA activity courses (1 credit each) are not to be duplicated.

Addiction Studies and Human Services
Certificate of Completion

PROGRAM DESCRIPTION
The certificate of completion provides the coursework and 1,000 hours of supervised experience that are required to qualify to sit for the Oregon Certified Alcohol and Drug Counselor (CADC) I exam. The certificate also provides coursework in the addictions field to other human services and criminal justice workers who help addicted persons and their families.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Travel costs for practicum, three terms, costs based on location
- State Board exams (ACCBO): $50 application fee; $220 exam fee
- Videotaping fees for two terms: approximately $50
- Background check for practicum placement: approximately $50

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - None
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II / WR 095 Basic Writing II ("C" or better)
  - Students should have basic computer competency skills.

OTHER ENTRANCE REQUIREMENTS
- Must pass a Criminal Background Check (CBC) as a condition of acceptance into a practicum for training. Students who do not pass the CBC may not be eligible to complete training at affiliated practicum sites, to sit for certification exams, or to be hired for some professional positions. Students with questions about their history should contact the appropriate state board or the program director.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses must be completed with a grade of C or higher.

Additional Requirements
- A student may be considered ineligible for continued enrollment in the program if the student has failed to satisfactorily complete a given Human Services/Addictions Studies course after re-enrolling in that course once (one time).

PROGRAM COURSE REQUIREMENTS
Core Courses

HS 101	Orientation to Human Services	3
HS 161	Ethics for Human Services	4
HS 162	Effective Helping Skills I	4
HS 180	Addictions, HIV and Other	2
HS 200	Addictive Behavior	3
HS 201	Families and Addictions	3
HS 205	Youth and Addictions	3
HS 206	Group Counseling Skills for Human Services	4
HS 208	Multicultural Issues Hum Serv	4
HS 209	Introduction to Psychological Trauma: Theory and Practice	4
HS 210	Co-Occurring Disorders	4
HS 224	Psychopharmacology	4
HS 250	Process Addictions	4
HS 260	Counseling Theories	4
HS 262	Effective Helping Skills II	4
HS 263	Counseling the Chemically Dependent Client	3
HS 266	Case Management for the Chemically Dependent Client	4
HS 290	Introduction to Practicum in Human Services	1
HS 291	Practicum in Human Services I	4

| HS 292 | Practicum in Human Services II | 4 |
| HS 293 | Practicum in Human Service III | 4 |

Other Required Courses

MTH 031	Health Care Math (or higher)	3-4
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

Total Credits 85-86

HUMANITIES/FILM

English/Literature
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

The Associate of Arts Oregon Transfer (AAOT) degree meets the state of Oregon transfer degree requirements, allowing students to transfer to an Oregon public university and some out-of-state universities having met all lower-division general education requirements. With appropriate course planning, all lower-division English/Literature major requirements may also be met. Students should work closely with an advisor to select the best degree option and to review specific transfer requirements.

English majors with a solid humanities foundation and strong writing, reading, critical thinking and research skills, are sought after in many careers, including advertising, business, public administration, communication and media, computer-based information and education, software and web development, social services, government civil service, law and criminal justice, and teaching/education.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

| 3 credits with HHP or HHPA prefix [1] | | 3 |

Mathematics

| MTH 105 | Math in Society (or higher) | 4 |

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

| WR 121 | Academic Composition | 4 |
| WR 122 | Argument, Research and Multimodal Composition | 4 |

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters — 9-12
Choose at least three courses from at least two prefixes [2]
Recommend: ENG 204 and ENG 205 or ENG 253 and ENG 254

Social Science — 12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science — 12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives — 39
Choose enough electives to reach 90 credits.
Recommend: ENG 201, ENG 202, ENG 204, ENG 205, ENG 253, ENG 254

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Plus one additional course from the Arts and Letters Discipline Studies list with a different prefix.

ADVISING NOTES

Lower-division requirements for majors, minors and related specializations in English/Literature vary among four-year institutions. To make wise elective course choices, students are advised to work closely with their advisors, consult college catalogs of the destination institution to which they wish to transfer and determine whether one or more of the following courses should be elected to fulfill their degree objectives.

Education programs may require or recommend:
ENG 221

English/Literature and Humanities degree programs may also require or recommend one of more courses in:
Western World Literature
ENG 107, ENG 108, ENG 109

Non-Western World Literature
HUM 210, HUM 211, HUM 212, HUM 213

American Multiculturalism
HUM 210, HUM 230, HUM 240, HUM 255, HUM 256

Introductory genre courses in Literature, Film, Popular Culture and/or Women's Studies courses
ENG 104, ENG 105, ENG 106, ENG 212, ENG 232, ENG 250, ENG 256, ENG 260, FA 101, FA 125, FA 257, HUM 105, HUM 106, HUM 261, HUM 262, HUM 263, HUM 264, HUM 265, HUM 267, HUM 268, HUM 269, WS 101

Creative Writing Courses
WR 240, WR 241, WR 242, WR 243

Humanities
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

The humanities encompass diverse subjects concerned with study of human experience and communication; philosophy, values, and beliefs; language arts and cultural traditions -- of the past, present, and future, in Western and non-Western cultures. The Associate of Arts Oregon Transfer (AAOT) with a focus in humanities includes courses that are commonly required for this major and meets lower division general education requirements at all Oregon public universities.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

| 3 credits with HHP or HHPA prefix [1] | | 3 |

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science

Electives   39
Choose enough elective credits to reach a minimum
total of 90 overall degree credits

                                    Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES
Transfer students seeking a bachelor's degree in specific or interdisciplinary
humanities fields are advised to select general education/discipline
studies and elective courses that will also fulfill major and minor
requirements at the destination university to which they intend to transfer.
COCC transfer students are encouraged to consult college catalogs and
work closely with their advisors.

Liberal Arts/Liberal Studies
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The Associate of Arts Oregon Transfer (AAOT) degree meets the state
of Oregon transfer degree requirements, allowing students to transfer
to an Oregon public university and some out-of-state universities having
met all lower-division general education requirements. With appropriate
course planning, all lower-division major requirements may also be met.
Students should work closely with an advisor to select the best degree
option and to review specific transfer requirements.

Liberal studies, also known as liberal arts, is a program of study in higher
education that varies between institutions but generally encompasses a
broad array of arts and letters, social science, and science courses. As
a major, liberal studies frequently encourages connections between the
disciplines and includes a focus on strong communication and critical
thinking skills. Some schools define a variety of liberal studies choices for
students, while others, like Oregon State University-Cascades, support
students to self-design a major around a theme. This major is a good
choice for students who have specific career or personal goals, who enjoy
a wide range of disciplines, and who appreciate the flexibility provided.
The flexibility in the degree makes it difficult to provide guidance without
identifying a transfer institution. For this reason, students should check
with each school to ensure that the latest transfer information is used
when designing their program. The guidance below focuses on general
education requirements and using electives to meet BA/BS requirement
and begin to build a theme.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate
  or degree.
• All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science

Electives   39
Choose enough elective credits to reach a minimum
total of 90 overall degree credits

                                    Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated

ADVISING NOTES
Students are encouraged to consider meeting BA or BS requirements for
their transfer institution in the first two years. This requirement varies, but
frequently the BA requirement is one or two years of a foreign language
and the BS requirement is additional math (or math, science and
computer science).

In choosing electives, students should consider their future liberal
studies theme.

MANUFACTURING TECHNOLOGY
Manufacturing Technology
Associate of Applied Science

PROGRAM DESCRIPTION
The Manufacturing Technology Associate of Applied Science (AAS)
degree and the two certificates of completion are designed to prepare
students for technician-level employment in a variety of
manufacturing environments.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)
Material Costs
- Welding personal protective equipment and tools, approximately $400

Enrollment Fees
- Fees on specific MFG courses (estimated $1100 total)
.

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Recommended:
  - High School Diploma or GED
  - Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or higher)
  - Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation.
  - Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Requirements [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Welding Technology I	3
MFG 105	Welding Technology II	3
MFG 107	Welding Technology III	3
MFG 109	Lean Practices	2
MFG 110	Manufacturing Processes I	3
MFG 112	Manufacturing Processes II	3
MFG 114	Manufacturing Processes III	3
MFG 115	Design Processes I	2
MFG 116	Manufacturing Electrical Systems	2
MFG 118	Fluid Power Systems I	2
MFG 133	Quality Assurance	3
MFG 160	Materials Engineering	2

Manufacturing Electives[1]
Choose 38 elective credits from the list below: 38
Recommend: CIS 135S1, MFG 102, MFG 201, MFG 202, MFG 203, MFG 205, MFG 210, MFG 211, MFG 213, MFG 214, MFG 216, MFG 230, MFG 232, MFG 234, MFG 236, MFG 238, MFG 239, MFG 241, MFG 242, MFG 243, MFG 244, MFG 245, MFG 246, MFG 250, MFG 254, MFG 262, MFG 264, MFG 266, MFG 267, MFG 271, MFG 272, MFG 273, MFG 274, MFG 275, MFG 276, MFG 281, MFG 282, MFG 283, MFG 284, MFG 285, MFG 286, MFG 287, MFG 288, MFG 289, MFG 290, MFG 291

MFG 280	CWE Manufacturing	3

Other Requirements

BA 285	Business Human Relations	3
or PSY 101	Applied Psychology	
or SP 218	Interpersonal Communication	
CIS 070	Intro to Computers: Windows (or higher)	2
CIS 120	Computer Concepts (or higher)	4
HHP 252A	Fitness/First Aid	3
MTH 085	Technical Mathematics I (or higher)	4
SP 219	Small Group Communication	4
SP 250	Listening	1
or SP 252	Team Skills	
or SP 253	Conflict Management	
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**100**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or lab materials (see class schedule for individual courses and fees).

ADVISING NOTES

Nearly all MATC courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than most other COCC programs. The MATC hours of operation provide students with ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework is identified for them. With the exception of classes in a series (e.g. Manufacturing Processes I, II, III) or those with specific prerequisites (as identified in the catalog) most classes can be taken in any order, provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any MATC program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.

CNC Machining
Certificate of Completion

PROGRAM DESCRIPTION

The CNC Machining one-year certificate of completion program is a self-directed, outcome-based program designed to prepare students for technician-level employment in manufacturing environments using CNC equipment.

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)
Material Costs
- Welding personal protective equipment and tools, approximately $400

Enrollment Fees
- Fees on specific MFG courses ($410 total)

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Required:
  - None
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or higher)
  - Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation
  - Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

Core Courses [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Welding Technology I	3
MFG 110	Manufacturing Processes I	3
MFG 112	Manufacturing Processes II	3
MFG 114	Manufacturing Processes III	3
MFG 115	Design Processes I	2

MFG 133	Quality Assurance	3
MFG 202	Metals Preparation	2
MFG 211	CNC Mill Operator	2
MFG 213	CNC Turning Operator	2
MFG 230	CNC Programming Mill	2
MFG 232	CNC Programming Lathe	2
MFG 234	CAD/CAM Mill	2
MFG 236	CAD/CAM Lathe	2

Other Required Courses

CIS 070	Intro to Computers: Windows (or higher)	2
MTH 085	Technical Mathematics I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**44**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or lab materials (see class schedule for individual courses and fees).

ADVISING NOTES

Nearly all MATC courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than most other COCC programs. The MATC hours of operation provide students with ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework is identified for them. With the exception of classes in a series (e.g. Manufacturing Processes I, II, III) or those with specific prerequisites (as identified in the catalog) most classes can be taken in any order, provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any MATC program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.

Industrial Maintenance
Certificate of Completion

PROGRAM DESCRIPTION

The Industrial Maintenance one-year certificate of completion program is a self-directed, outcome-based program designed to prepare students for technician-level employment in industrial maintenance in a manufacturing environment.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Welding personal protective equipment and tools, approximately $400

Enrollment Fees
- Fees on specific MFG courses ($150 total)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or higher)
  - Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation
  - Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.

- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 102	Blueprint Reading Sheet Metal	2
MFG 103	Welding Technology I	3
MFG 109	Lean Practices	2
MFG 110	Manufacturing Processes I	3
MFG 116	Manufacturing Electrical Systems	2
MFG 118	Fluid Power Systems I	2
MFG 160	Materials Engineering	2
MFG 241	Electric Motor Control	2
MFG 242	Programmable Logic Controllers I	2
MFG 243	Industrial Sensors	2
MFG 244	Programmable Logic Controllers II	2
MFG 245	Electrical Control/Fluid Power	2
MFG 246	Mechanical Troubleshooting	2
MFG 267	Oxygen-Fuel and Plasma Cutting	2
MFG 289	Material Handling-Fork Lift Safety	1

Other Required Courses

CIS 070	Intro to Computers: Windows (or higher)	2
MTH 085	Technical Mathematics I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**44**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or lab materials (see class schedule for individual courses and fees).

ADVISING NOTES

Nearly all MATC courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than most other COCC programs. The MATC hours of operation provide students with ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework is identified for them. With the exception of classes in a series (e.g. Manufacturing Processes I, II, III) or those with specific prerequisites (as identified in the catalog) most classes can be taken in any order, provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any MATC program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.

Manual Machining
Certificate of Completion

PROGRAM DESCRIPTION

The Manual Machining one-year certificate of completion program is a self-directed, outcome-based program designed to prepare students for technician-level employment in manufacturing environments using manual machining equipment.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Welding personal protective equipment and tools, approximately $400

Enrollment Fees
- Fees on specific MFG courses ($450 total)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or higher)
  - Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation
  - Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Welding Technology I	3
MFG 110	Manufacturing Processes I	3
MFG 112	Manufacturing Processes II	3
MFG 114	Manufacturing Processes III	3
MFG 115	Design Processes I	2
MFG 133	Quality Assurance	3
MFG 202	Metals Preparation	2
MFG 203	Layout	2
MFG 205	Drill Press	2
MFG 210	Vertical Milling	2
MFG 214	Lathe Operator I	2
MFG 216	Lathe Operator II	2

Other Required Courses

CIS 070	Intro to Computers: Windows (or higher)	2
MTH 085	Technical Mathematics I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**42**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or lab materials (see class schedule for individual courses and fees).

ADVISING NOTES
Nearly all MATC courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than most other COCC programs. The MATC hours of operation provide students with ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework is identified for them. With the exception of classes in a series (e.g. Manufacturing Processes I, II, III) or those with specific prerequisites (as identified in the catalog) most classes can be taken in any order, provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any MATC program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.

Manufacturing Technology I
Certificate of Completion

PROGRAM DESCRIPTION
The one-year certificate of completion in Manufacturing Technology is designed to prepare students for technician-level employment in a variety of manufacturing environments.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Welding personal protective equipment and tools, approximately $400

Enrollment Fees
- Fees on specific MFG courses ($740 total)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or higher)
  - Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation
  - Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Welding Technology I	3
MFG 105	Welding Technology II	3
MFG 107	Welding Technology III	3
MFG 109	Lean Practices	2
MFG 110	Manufacturing Processes I	3
MFG 112	Manufacturing Processes II	3
MFG 114	Manufacturing Processes III	3
MFG 115	Design Processes I	2
MFG 116	Manufacturing Electrical Systems	2
MFG 118	Fluid Power Systems I	2
MFG 133	Quality Assurance	3
MFG 160	Materials Engineering	2

Other Required Courses

BA 285	Business Human Relations	3
or PSY 101	Applied Psychology	
or SP 218	Interpersonal Communication	
CIS 070	Intro to Computers: Windows (or higher)	2
MTH 085	Technical Mathematics I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**47**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or lab materials (see class schedule for individual courses and fees).

ADVISING NOTES
Nearly all MATC courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than most other COCC programs. The MATC hours of operation provide students with ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework

is identified for them. With the exception of classes in a series (e.g. Manufacturing Processes I, II, III) or those with specific prerequisites (as identified in the catalog) most classes can be taken in any order, provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any MATC program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.

Manufacturing Technology II
Certificate of Completion

PROGRAM DESCRIPTION
The Manufacturing Technology two-year certificate of completion program is a self-directed, outcome-based program designed to prepare students for technician-level employment in a variety of manufacturing environments.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
• Welding personal protective equipment and tools, approximately $400

Enrollment Fees
• Fees on specific MFG courses (estimate $1100 total)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
• Recommended:
   • High school diploma or GED
   • Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or higher)
   • Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation
   • Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
• All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Welding Technology I	3
MFG 105	Welding Technology II	3
MFG 107	Welding Technology III	3
MFG 109	Lean Practices	2
MFG 110	Manufacturing Processes I	3
MFG 112	Manufacturing Processes II	3
MFG 114	Manufacturing Processes III	3
MFG 115	Design Processes I	2
MFG 116	Manufacturing Electrical Systems	2
MFG 118	Fluid Power Systems I	2
MFG 133	Quality Assurance	3
MFG 160	Materials Engineering	2

Manufacturing Electives: [1]
Choose at least 38 credits from the list below: 38
Recommend: CIS 135S1, MFG 102, MFG 201, MFG 202, MFG 203, MFG 205, MFG 210, MFG 211, MFG 213, MFG 214, MFG 216, MFG 230, MFG 232, MFG 234, MFG 236, MFG 238, MFG 239, MFG 241,

MFG 242, MFG 243, MFG 244, MFG 245, MFG 246, MFG 250, MFG 254, MFG 262, MFG 264, MFG 266, MFG 267, MFG 271, MFG 272, MFG 273, MFG 274, MFG 275, MFG 276, MFG 281, MFG 282, MFG 283, MFG 284, MFG 285, MFG 286, MFG 287, MFG 288, MFG 289, MFG 290, MFG 291

Other Required Courses

BA 285	Business Human Relations	3
or PSY 101	Applied Psychology	
or SP 218	Interpersonal Communication	
CIS 070	Intro to Computers: Windows (or higher)	2
MTH 085	Technical Mathematics I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**85**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or lab materials (see class schedule for individual courses and fees).

ADVISING NOTES
Nearly all MATC courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than most other COCC programs. The MATC hours of operation provide students with ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework is identified for them. With the exception of classes in a series (e.g. Manufacturing Processes I, II, III) or those with specific prerequisites (as identified in the catalog) most classes can be taken in any order, provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any MATC program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.

Quality Assurance
Certificate of Completion

PROGRAM DESCRIPTION
The Quality Assurance one-year certificate of completion program is a self-directed, outcome-based program designed to prepare students for technician-level employment in manufacturing in the quality assurance field.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
• Welding personal protective equipment and tools, approximately $400

Enrollment Fees
• Fees on specific MFG courses ($260 total)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
• Recommended:
   • High school diploma or GED
   • Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or better)
   • Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation
   • Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.

- All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 102	Blueprint Reading Sheet Metal	2
MFG 103	Welding Technology I	3
MFG 109	Lean Practices	2
MFG 110	Manufacturing Processes I	3
MFG 112	Manufacturing Processes II	3
MFG 115	Design Processes I	2
MFG 133	Quality Assurance	3
MFG 160	Materials Engineering	2
MFG 202	Metals Preparation	2
MFG 203	Layout	2
MFG 238	Optical Comparator	1
MFG 239	Coordinate Measurement Machine	1
MFG 254	Manufacturing Jigs and Fixtures	2
MFG 262	Welding Inspection/Quality Control	2

Other Required Courses

CIS 070	Intro to Computers: Windows (or higher)	2
MTH 085	Technical Mathematics I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**43**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or
lab materials (see class schedule for individual courses and fees).

ADVISING NOTES
Nearly all MATC courses are self-directed, outcome-based curricula.
This provides students with a greater degree of flexibility than most other
COCC programs. The MATC hours of operation provide students with
ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate
or degree outcome with their advisor and a sequence of coursework
is identified for them. With the exception of classes in a series (e.g.
Manufacturing Processes I, II, III) or those with specific prerequisites
(as identified in the catalog) most classes can be taken in any order,
provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen
career upon graduation. Often only selected credits are considered
transferable to public or private baccalaureate institutions. Prior to
starting any MATC program, students are advised to contact the
institution to which they intend to transfer and identify what credits
may be transferable.

Welding
Certificate of Completion

PROGRAM DESCRIPTION
The Welding one-year certificate of completion program is a self-directed,
outcome-based program designed to prepare students for technicianlevel
employment in manufacturing environments using welding equipment.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Welding personal protective equipment and tools, approximately $400

Enrollment Fees
- Fees on specific MFG courses ($740 total)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Recommended:
  - High school diploma or GED
  - Minimum placement scores resulting in MTH 020 Pre-Algebra
    placement or prior completion of MTH 010 Developmental
    Mathematics or higher ("C" or higher)
  - Successful completion of or current enrollment in MATC new-student
    orientation class MFG 100 MATC Orientation
  - Recommended completion of CIS 070 Intro to Computers: Windows
    or equivalent skills

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate
  or degree.
- All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses [1]

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Welding Technology I	3
MFG 105	Welding Technology II	3
MFG 107	Welding Technology III	3
MFG 110	Manufacturing Processes I	3
MFG 202	Metals Preparation	2
MFG 262	Welding Inspection/Quality Control	2
MFG 267	Oxygen-Fuel and Plasma Cutting	2
MFG 271	SMAW I	2
MFG 272	GMAW I	2
MFG 273	SMAW II	2
MFG 274	GMAW II	2
MFG 281	GTAW I	2
MFG 282	FCAW I	2
MFG 283	GTAW II	2
MFG 284	FCAW II	2

Other Required Courses

MTH 085	Technical Mathematics I (or higher)	4
WR 060	Rhetoric/Critical Thinking I (or higher)	4
	Total Credits	**45**

[1] Most manufacturing courses carry a $25-$75 fee to cover software or
lab materials (see class schedule for individual courses and fees).

ADVISING NOTES
Nearly all MATC courses are self-directed, outcome-based curricula.
This provides students with a greater degree of flexibility than most other
COCC programs. The MATC hours of operation provide students with
ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate
or degree outcome with their advisor and a sequence of coursework
is identified for them. With the exception of classes in a series (e.g.
Manufacturing Processes I, II, III) or those with specific prerequisites
(as identified in the catalog) most classes can be taken in any order,
provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen
career upon graduation. Often only selected credits are considered
transferable to public or private baccalaureate institutions. Prior to
starting any MATC program, students are advised to contact the
institution to which they intend to transfer and identify what credits
may be transferable.

MASSAGE THERAPY

Massage Therapy
Associate of Applied Science

PROGRAM DESCRIPTION
The Massage Therapy program focuses on integrating the sciences relating to the human body with the theories and practice of massage therapy. Massage therapy students develop many skills that include a variety of massage techniques and modalities, methods to maintain client and business records, understanding the importance of client/practitioner boundaries, client communication skills and the use of universal sanitation practices.

The Associate of Applied Science (AAS) degree includes the Certificate of Completion in massage therapy and will qualify a student to sit for the licensing exams as required by the Oregon Board of Massage Therapists. The AAS builds skills for graduates to perform a wide variety of massage therapy modalities as well as business competencies.

ACCREDITATION
Commission on Massage Therapy Accreditation (COMTA)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Massage table ($400-$700)
- Black COCC logo polo shirt ($40)

Enrollment Fees
- $17 per credit for first year LMT prefix courses
- $25 per credit for all other LMT prefix courses

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Minimum placement score into MTH 020 Pre-Algebra or complete MTH 010 Developmental Mathematics or higher ("C" or better)
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
- Recommended:
  - BI 121 Anatomy and Function I or BI 122 Anatomy and Function II, or BI 231 Human Anatomy and Physiology I

Other Entrance Requirements
- Required:
  - Must be a minimum of 18 years of age
  - Earned high school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- Verification of contact hours is required by the Oregon Board of Massage Therapists licensing requirements. Students must meet the Oregon Board of Massage Therapists attendance requirement of 90% contact hour completion for each LMT course contact hours as identified on all LMT course syllabi.
- Students are required to adhere to the professional conduct standards outlined within the student handbook.

PROGRAM COURSE REQUIREMENTS
Core Courses

Choose one option from the following:		8-12
Option 1:		
BI 121	Anatomy and Function I	
& BI 122	Anatomy and Function II	
Option 2:		
BI 231	Human Anatomy and Physiology I	
& BI 232	Human Anatomy and Physiology II	
& BI 233	Human Anatomy and Physiology III	
BA 214	Business Communications	3
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
LMT 113	Kinesiology: Massage Ther I	4
LMT 118	Kinesiology for Massage Therapy II	4
LMT 124	Kinesiology for Massage Therapy III	4
LMT 130	Massage Fundamentals	2
LMT 135	Managing a Massage Practice	3
LMT 140	Pathology for Massage Therapy	4
LMT 145	Massage I	4
LMT 150	Massage II	4
LMT 155	Eastern Theory & Practice	2
LMT 160	Hydrotherapy	1
LMT 170	Professional Ethics & Rules	2
LMT 175	Swedish Relaxation Clinic	2
LMT 180	Therapeutic Clinic	3
LMT 200	Level Electives	17
LMT 210	Community Outreach	2
LMT 245	Effective Office Decisions	2

Other Required Courses

Two Courses from the Discipline Studies List		6-10
Choose one of the following:		3-4
HHP 252A	Fitness/First Aid or	
Any one course listed below and an activity/health module:		
HHP 231	Human Sexuality	
HHP 242	Stress Management	
HHP 258	Holistic Wellness	
HHP 266	Nutrition for Health	
HHP 295	Health and Fitness	
MTH 020	Pre-Algebra (or higher)	4
SP 218	Interpersonal Communication	3
or BA 178	Customer Service	
WR 121	Academic Composition	4
	Total Credits	**91-104**

ADVISING NOTES
Students are offered two opportunities to enter the Massage Therapy program each year including a Fall day-program start and a Spring evening-program start. Each program start requires the block of courses to be completed before moving to the next sequence of related courses. Students may take non-massage therapy courses (any course that does not begin with a LMT prefix) at any time prior to enrollment into the LMT program or during enrollment in the LMT program if time is available.

Massage Therapy
Certificate of Completion

PROGRAM DESCRIPTION
The Massage Therapy program focuses on integrating the sciences relating to the human body with the theories and practice of massage therapy. Massage therapy students develop many skills that include a variety of massage techniques and modalities, methods to maintain client and business records, understanding the importance of client/practitioner boundaries, client communication skills and the use of universal sanitation practices.

ACCREDITATION
Commission on Massage Therapy Accreditation (COMTA)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Massage table ($400-$700)
- Black COCC logo polo shirt ($40)

Enrollment Fees
- $17 per credit for first year LMT prefix courses
- $25 per credit for all other LMT prefix courses

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Minimum placement score into MTH 020 Pre-Algebra or complete MTH 010 Developmental Mathematics or higher ("C" or better)
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II ("C" or better)
- Recommended:
  - BI 121 Anatomy and Function I or BI 122 Anatomy and Function II, or BI 231 Human Anatomy and Physiology I.

Other Entrance Requirements
- Required:
  - Must be a minimum of 18 years of age
  - Earned high school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- Verification of contact hours is required by the Oregon Board of Massage Therapists licensing requirements. Students must meet the Oregon Board of Massage Therapists attendance requirement of 90% contact hour completion for each LMT course contact hours as identified on all LMT course syllabi.
- Students must adhere to the professional conduct standards outlined within the student handbook.

PROGRAM COURSE REQUIREMENTS
Core Courses

Choose one option from the following:		8-12
Option 1:		
BI 121	Anatomy and Function I	
& BI 122	Anatomy and Function II	
Option 2:		
BI 231	Human Anatomy and Physiology I	
& BI 232	Human Anatomy and Physiology II	
& BI 233	Human Anatomy and Physiology III	
LMT 113	Kinesiology: Massage Ther I	4
LMT 118	Kinesiology for Massage Therapy II	4
LMT 124	Kinesiology for Massage Therapy III	4
LMT 130	Massage Fundamentals	2
LMT 135	Managing a Massage Practice	3
LMT 140	Pathology for Massage Therapy	4
LMT 145	Massage I	4
LMT 150	Massage II	4
LMT 155	Eastern Theory & Practice	2
LMT 160	Hydrotherapy	1
LMT 170	Professional Ethics & Rules	2
LMT 175	Swedish Relaxation Clinic	2
LMT 180	Therapeutic Clinic	3

Other Required Courses

MTH 020	Pre-Algebra (or higher)	4
SP 218	Interpersonal Communication	3
or BA 178	Customer Service	
WR 121	Academic Composition	4
	Total Credits	**58-62**

ADVISING NOTES
Students are offered two opportunities to enter the Massage Therapy program each year including a Fall day-program start and a Spring evening-program start. Each program start requires the block of courses to be completed before moving to the next sequence of related courses. Students may take non-massage therapy courses (any course that does not begin with a LMT prefix) at any time prior to enrollment into the LMT program or during enrollment in the LMT program if time is available.

MATHEMATICS
Mathematics
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
The study of mathematics develops analytic and quantitative skills which are valuable in today's data-driven economy. The Associate of Arts Oregon Transfer (AAOT) with a focus in mathematics includes courses that are commonly required for a math major and meets lower division general education requirements at all Oregon public universities. A bachelor's degree with a major in math is great preparation for graduate school (such as schools of law, medicine, education, or business) as well as direct employment in industry, government, research and business.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]	3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters	9-12

Choose at least three courses from at least two prefixes

Social Science	12-16

Choose at least four courses from at least two prefixes

Science/Math/Computer Science 12-20

Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science
Recommend: MTH 112, PH 211, PH 212, PH 213

Electives 39

Choose enough electives to reach the 90 minimum required credits.
Recommend: CIS 122, MTH 113, MTH 231, MTH 243, MTH 244, MTH 251, MTH 252, MTH 253, MTH 254, MTH 255, MTH 256[2]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated
[2] Related courses to consider: CIS 120 Computer Concepts, MTH 105 Math in Society, MTH 245 Mathematics for Management, Life and Social Sciences.

MEDICAL ASSISTANT
Medical Assistant
Certificate of Completion

PROGRAM DESCRIPTION

The Medical Assistant program is a five- to six-term program that trains individuals to assist with clinical and administrative procedures in outpatient medical settings under the direction of a health care provider. Medical Assistant program courses begin once per year in the Fall. All program courses offered each term must be taken together and in sequence. Upon successful completion of the program, students receive a certificate of completion from COCC and are eligible to submit an application to sit for the AAMA Certified Medical Assistant (CMA) certification examination. Upon passing the AAMA exam, medical assistants earn the CMA.

ACCREDITATION

The Central Oregon Community College Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs, CAAHEP, upon the recommendation of the Medical Assisting Education Review Board, MAERB.

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 North, Suite 158
Clearwater, FL 33763
caahep.org | 727.210.2350

PROGRAM COSTS

(beyond standard tuition/fees and textbooks)
Material Costs
Due to the rapidly changing nature of health care and associated costs, the following are only estimates and are subject to change.
- Stethoscope $30
- Blood pressure cuff $20
- Uniform and watch with second hand $75
- Books average $200-300 per term (will be more during first term of core MA courses, but generally less during subsequent terms)
- Course and lab packets $15 per term
- Immunizations & titers $0-685 (some may be covered by insurance or subsidized by other funding sources)
- Immunizations tracking $10
- Criminal background check $65
- Urine drug screen $45

Enrollment Fee
- Lab fees $ 660

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Required:
  - A high school diploma, GED, or a high school transcript noting successful graduation
  - Completion of all prerequisite classes with a grade of "C" or better.

Other Entrance Requirements
- Required:
  - Must be 18 years of age or older
  - Criminal History Check and 10-Panel Drug Screen with vendor chosen by COCC. See cocc.edu/programs/medical-assistant for more details.
  - Documentation of current immunizations: TB Blood Titer, MMR, Hep B, Varicella, Tdap, Flu
  - American Heart Association or American Red Cross "Basic Life Support for Healthcare Providers" CPR (BLS) and first aid training will need to be completed prior to entrance into practicum if not completed in MA140. Students will be given the option to complete both CPR and first aid certification in MA140.
  - Additional immunizations or background checks may be required by practicum sites at the student's expense.
  - Refer to cocc.edu/programs/medical-assistant for program technical standards (physical, medical, safety and other requirements that an individual must meet in order to be eligible for admission).

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

Additional Requirements
- Students must maintain an average of 75% on tests and 75% overall in each class to progress to subsequent core program classes. Students must pass 75% of lab skills check-offs on the first attempt to progress to subsequent core program classes. Students must demonstrate medication administration proficiency through a high score on a drug calculation exam prior to entering practicum. Students must complete 100% of psychomotor and affective competencies as identified by the program's accrediting body and complete a minimum of 160 hours of practicum to complete the program.

PROGRAM COURSE REQUIREMENTS

Prerequisite Courses

AH 111	Medical Terminology I	3
AH 112	Medical Terminology II	3
AH 113	Introduction Study of Disease	5
Choose one option from the following:		8-12
Option 1:		
BI 121	Anatomy and Function I	
& BI 122	Anatomy and Function II	
Option 2:		
BI 231	Human Anatomy and Physiology I	
& BI 232	Human Anatomy and Physiology II	
& BI 233	Human Anatomy and Physiology III	
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
MTH 095	Intermediate Algebra	4
SP 218	Interpersonal Communication	3
WR 121	Academic Composition	4

Other Required Courses

CIS 010	Computer Keyboarding	1

Core Courses

MA 110	Introduction to Clinical Medical Assisting	7
MA 111	Introduction to Professional Medical Assisting	5
MA 120	Clincal Medical Assisting II	7
MA 121	Administrative Medical Assisting	5
MA 137	Application of Professional Medical Assisting	4
MA 140	Nutrition, CPR and First Aid for Medical Assistants	3
MA 147	Medical Assisting Practicum	5
MA 150	Pharmacology for Medical Assistants	3

Total Credits 70-78

ADVISING NOTES

Program (MA) courses begin once per year in fall term. Students wishing to register in the fall MA cohort must meet the basic prerequisite competencies and may register according to seat availability on a first-come, first-served basis, determined by the priority registration schedule.

Students who leave or are dropped from the program may re-enter the next fall with the permission of the program director. In rare cases, a student may re-enter at a different point in the program on a space available basis and with permission from the director of the program. Students may be required to repeat demonstrations of previous competencies to ensure they retained the required skills and knowledge to progress in the program.

This certificate is designed for students planning to enter their chosen career upon graduation. Often, only selected credits are considered transferable to public or private baccalaureate institutions.

MUSIC
Music
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

The mission of COCC's Music program is to provide the opportunity for music majors pursuing a transfer degree (and those simply interested in music) to take the core courses that are typically required in the first two years of a bachelor's of music program. This includes music fundamentals, class piano, two years of music theory and musicianship and a listening-based class called Understanding Music. Additionally, most music schools require participation in a major ensemble and private lessons in voice or instrument every term. To that end, we have no fewer than six ensembles in which a student can participate, including the Cascade Chorale, College Choir, Central Singers, Big Band Jazz, Cascade Winds Symphonic Band and Central Oregon Symphony.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105	Math in Society (or higher)	4

Oral Communication
Choose one course from the following: 3-4
SP 111	Fundamentals Public Speaking
SP 114	Argumentation & Discourse
SP 115	Intro Intercultural Commun
SP 218	Interpersonal Communication
SP 219	Small Group Communication

Writing
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes
Recommend: MUS 101, MUS 201, MUS 111[2]

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Choose enough electives to reach the minimum of
90 credits for the AAOT [3]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Additional MUS courses are related courses to consider and will be applied to the AAOT as elective credits.
[3] Music majors should participate in a performing ensemble each term and take Musicianship IA, IB, IC, IIA, IIB and IIC, Music Theory IA, IB, IC, IIA, IIB and IIC and have proficient keyboard skills, which can be gained by taking Piano Class I, II and III.

ADVISING NOTES

MUS 201 Understanding Music, MUS 202 Understanding Music and MUS 203 Understanding Music, while not required, are excellent survey courses of music history, providing a solid background for future in-depth studies of music history.

Private lessons, (applied voice, violin, trombone, et cetera), while not required for the AAOT degree, are an integral part of the music major. Studying with a private teacher will foster individual growth, technique development, provide a solid background in solo repertoire, proper language enunciation as well as in-depth studies of music genres. A second year of a world language is also recommended.

All music schools have slightly different requirements and expectations of their music majors. While it is true that an Oregon college or university will accept the AAOT degree as a package, which allows students to transfer with junior class status, most music schools will not accept a direct transfer of credits for courses intended specifically for music majors, such as Music Theory. Instead, they will test students upon arrival to see what they have learned in their previous courses and then place them at the appropriate level for their program. It has been our experience that students who perform well in COCC music theory and musicianship courses regularly meet or exceed the requirements to continue on with the next level of study at the transfer institution (i.e., students who have completed the first year of theory typically test into the second year of theory at their new school).

NURSING
Nursing
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

COCC students may choose from several paths to transfer into upper-division Bachelor of Science in Nursing (BSN) programs. This AAOT path includes nursing school prerequisites for applying to the majority of Oregon's BSN programs.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA Prefix [1]   3
Recommend: HHP 295

Mathematics
MTH 105   Math in Society (or higher)   4
Recommend: MTH 111

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes
Recommend: ARH 201 or ARH 202 or ARH 203, ENG 107
or ENG 108 or ENG 109, PHL 202

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: ANTH 103, PSY 201, PSY 215, SOC 201

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science
Recommend: BI 231, BI 232, BI 233, FN 225 or HHP 240

Electives   39
Choose enough elective credits to reach a minimum
total of 90 overall degree credits[2]
Recommend: BI 101, BI 234, CH 104, CIS 120, MTH 243
                            Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Students should take two terms of the same world language. Students
    who completed two years of the same world language in high school
    with a "C" or better, may choose 8 elective credits numbered 100+
    instead of world language.

ADVISING NOTES
Oregon has six baccalaureate degree programs (offered at nine
universities or colleges). For specific information, contact the school. The
following programs are approved by the Oregon State Board of Nursing.

Concordia University
cu-portland.edu/hhs/undergraduate/nursing

George Fox University
georgefox.edu/academics/undergrad/departments/nursing/index.html

Linfield-Good Samaritan School of Nursing
linfield.edu/portland - also offers an online RN-to-BSN program

Oregon Health & Science University (OHSU) School of Nursing-Portland
ohsu.edu/xd/education/schools/school-of-nursing

OHSU School of Nursing at Eastern Oregon University
eou.edu/ohsu

OHSU School of Nursing at Oregon Institute of Technology
oit.edu/academics/degrees/nursing

OHSU School of Nursing at Southern Oregon University
ohsu.edu/xd/education/schools/school-of-nursing/about/campuses/
ashland-campus-page.cfm

OHSU School of Nursing at Western Oregon University
ohsu.edu/xd/education/schools/school-of-nursing/about/campuses/
monmouth-campus.cfm

University of Portland School of Nursing
nursing.up.edu

Walla Walla University School of Nursing
wallawalla.edu/nursing

Nursing (RN)
Associate of Applied Science

PROGRAM DESCRIPTION
Students enrolled in Nursing can exit after the first year with preparation
to be a practical nurse (PN) or after the second year with preparation
to be a registered nurse (RN). The Practical Nursing certificate qualifies
students to take the NCLEX-PN national licensure examination and
apply for licensure as a practical nurse (PN) from a State Board of
Nursing. Students who successfully complete the first year of nursing
courses may continue into the RN sequence of courses without additional
application requirements.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
* Nursing textbooks and online resources $1,750
* Specialized clothing or uniform $150
* Tools and equipment $80
* State exam/licensure fee $520 ($160 LPN-OR, $160 RN-OR, $200
  NCLEX exam cost)
* State fingerprinting fee $129 ($64.50 LPN, $64.50 RN)
* Background check and drug screen (VCI) $120
* Immunizations and screenings (VCI) $300
* CPR certification $50

Enrollment Fees
* Nursing courses $450 per term fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
* Required:
    * Selective admission, see website for more details.
    * Nursing program application, scores from the Test of Essential
      Academic Skills (TEAS-V)™, scores from the Health Science
      Reasoning Test—Associate Degree (HSRT—AD) test and completion
      of program prerequisite courses.
    * Applications are accepted annually during Spring term for admission
      to the Nursing program the following Fall term.
* Must be completed with a "C" grade or better, with a cumulative GPA
  of 3.0 or higher:
    * BI 231 Human Anatomy and Physiology I
    * BI 232 Human Anatomy and Physiology II
    * BI 233 Human Anatomy and Physiology III
    * BI 234 Microbiology
    * MTH 105 Math in Society (or higher)
    * WR 121 Academic Composition
    * CIS 120 Computer Concepts or Computer Competency Test
    * Chemistry, Biology (Anatomy and Physiology and Microbiology) and
      Computer and Information Systems courses must be no older than
      five years at the time of application.
* Recommended:
    * Students are recommended to complete the following courses prior
      to admission to be better prepared for nursing courses and because
      points are awarded for completion of these additional courses during

the application process. Students must complete these courses with a "C" grade or better.
- CH 104 Introduction to Chemistry I or CH 221 General Chemistry I
- FN 225 Human Nutrition or HHP 240 Science of Nutrition
- PSY 215 Developmental Psychology
- WR 122 Argument, Research and Multimodal Composition or WR 227 Technical Writing

Other Entrance Requirements
- Required:
  - Must have in-district residency status
  - Must provide documentation of completion of immunizations and screenings listed on the nursing website.
  - Must have current Healthcare provider CPR certification (and must be maintained throughout the duration of the program).
  - Complete Criminal History Checks (CHC) as a condition of their acceptance into the Nursing program; see website for details.
  - Must complete a 10 panel urine drug screen with Verified Credentials, Inc.

PROGRAM PERFORMANCE STANDARDS
Academic Requirement
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.
- Greater than or equal to a 3.0 cumulative GPA for BI 231 Human Anatomy and Physiology I, BI 232 Human Anatomy and Physiology II, BI 233 Human Anatomy and Physiology III, BI 234 Microbiology, WR 121 Academic Composition and MTH 105 Math in Society (or higher).
- Once admitted to the Nursing program, students must pass Nursing Theory greater than or equal to a 76.55 percent or 77 percent to pass the Nursing course and pass practicum (LRC and Clinical) to remain in the Nursing program.

Additional Requirements
- Must adhere to the Nurse Practice Act of the state of Oregon.
- Additionally, students are required to consistently meet the outcomes, technical standards, policies and/or safety standards of the program and College. Failure to do so may result in probation or removal from the program. It is the COCC student's responsibility to know and abide by the Nursing Program and College policies including Student Rights and Responsibilities which can be found at cocc.edu/student-life.

PROGRAM COURSE REQUIREMENTS
Prerequisite Courses

BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
BI 233	Human Anatomy and Physiology III	4
BI 234	Microbiology	4
CIS 120	Computer Concepts (or Computer Competency Test)	0-4
MTH 105	Math in Society (or higher)	4
WR 121	Academic Composition	4

Support Courses

CH 104 or CH 221	Introduction to Chemistry I General Chemistry I	5
FN 225 or HHP 240	Human Nutrition Science of Nutrition	3-4
PSY 215	Developmental Psychology	4
WR 122 or WR 227	Argument, Research and Multimodal Composition Technical Writing	4

Core Courses

NUR 106	Nursing I	12
NUR 107	Nursing II	10
NUR 108	Nursing III	11
NUR 206	Nursing IV	11
NUR 207	Nursing V	10
NUR 208	Nursing VI	9
	Total Credits 103-108	

ADVISING NOTES
Students seeking transfer admission into COCC's Nursing program must meet with the pre-admission advisor and advanced placement program coordinator to determine eligibility prior to entry. Students transferring out of COCC should know that often only selected credits from a community college program are considered transferrable to public or private baccalaureate institutions.

Practical Nursing
Certificate of Completion

PROGRAM DESCRIPTION
Students enrolled in Nursing can exit after the first year with preparation to be a practical nurse (PN) or after the second year with preparation to be a registered nurse (RN). The Practical Nursing certificate qualifies students to take the NCLEX-PN national licensure examination and apply for licensure as a practical nurse (PN) from a State Board of Nursing. Students who successfully complete the first year of nursing courses may continue into the RN sequence of courses without additional application requirements.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Nursing textbooks $1,500
- Nursing course supplies $90 first year, $45 second year
- Specialized clothing or uniform $150
- Tools and equipment $80
- State exam/licensure fee $520 ($160 LPN-OR, $160 RN-OR, $200 NCLEX exam cost)
- State fingerprinting fee $129 ($64.50 LPN, $64.50 RN)
- Background check (VCI) $55
- Drug screen (VCI) $45-60
- Immunizations & screenings (VCI) $300
- CPR certification $50

Enrollment Fees
- Nursing courses $450 per term fee

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Nursing program application, scores from the Test of Essential Academic Skills (TEAS-V)™, short-answer essay questions and completion of program prerequisite courses.
  - Applications are accepted annually during Spring term for admission to the Nursing program the following Fall term.
- Must be completed with a "C" grade or better, with a cumulative GPA of 3.0 or higher:
  - BI 231 Human Anatomy and Physiology I
  - BI 232 Human Anatomy and Physiology II
  - BI 233 Human Anatomy and Physiology III
  - BI 234 Microbiology
  - MTH 105 Math in Society (or higher)
  - WR 121 Academic Composition
  - CIS 120 Computer Concepts or Computer Competency Test
  - Chemistry, Biology (Anatomy and Physiology and Microbiology) and Computer and Information Systems courses must be no older than five years at the time of application.
- Recommended:
  - Students are recommended to complete the following courses prior to admission to be better prepared for nursing courses and because points are awarded for completion of these additional courses during the application process. Students must complete these courses with a "C" grade or better.
  - CH 104 Introduction to Chemistry I or CH 221 General Chemistry I
  - FN 225 Human Nutrition or HHP 240 Science of Nutrition
  - PSY 215 Developmental Psychology

- WR 122 Argument, Research and Multimodal Composition or WR 227 Technical Writing

Other Entrance Requirements
- Required:
  - Must have in-district residency status
  - Must provide documentation of completion of immunizations and screenings listed on the website.
  - Must have current Healthcare provider CPR certification (and must be maintained throughout the duration of the program).
  - Complete Criminal History Checks (CHC) as a condition of their acceptance into the Nursing program; see website for details.
  - Must complete a 10 panel urine drug screen with Verified Credentials, Inc.

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.
- Greater than or equal to a 3.0 cumulative GPA for BI 231 Human Anatomy and Physiology I, BI 232 Human Anatomy and Physiology II, BI 233 Human Anatomy and Physiology III, BI 234 Microbiology, WR 121 Academic Composition and MTH 105 Math in Society or higher.
- Once admitted to the Nursing program, students must pass Nursing Theory greater than or equal to a 76.55 percent or 77 percent to pass the Nursing course and pass practicum (LRC and Clinical) to remain in the Nursing program.

Additional Requirements:
- Must adhere to the Nurse Practice Act of the state of Oregon.
- Additionally, students are required to consistently meet the outcomes, technical standards, policies and/or safety standards of the program and College. Failure to do so may result in probation or removal from the program. It is the COCC student's responsibility to know and abide by the Nursing Program and College policies including Student Rights and Responsibilities which can be found at cocc.edu/student-life.

PROGRAM COURSE REQUIREMENTS
Prerequisite Courses

BI 231	Human Anatomy and Physiology I	4
BI 232	Human Anatomy and Physiology II	4
BI 233	Human Anatomy and Physiology III	4
BI 234	Microbiology	4
CIS 120	Computer Concepts	4
MTH 105	Math in Society (or higher)	4
WR 121	Academic Composition	4

Support Courses

PSY 215	Developmental Psychology	4

Core Courses

NUR 106	Nursing I	12
NUR 107	Nursing II	10
NUR 108	Nursing III	11
	Total Credits	**65**

ADVISING NOTES
Students seeking transfer admission into COCC's Nursing program must meet with the pre-admission advisor and advanced placement program coordinator to determine eligibility prior to entry. Students transferring out of COCC should know that often only selected credits from a community college program are considered transferrable to public or private baccalaureate institutions.

Upon completion of the COCC Practical Nurse (first year Nursing) certificate program, students may continue to the second year of COCC's Nursing program or seek admission or advanced placement at other Oregon community colleges with whom COCC has partnerships. Articulation agreements are in place for graduates of the AAS degree Nursing program wanting to continue on to a Bachelor of Science in Nursing degree with Linfield College and Oregon Health Sciences University. Several other universities and colleges in Oregon and Washington offer RN-BSN completion. A co-admission agreement is in place with Linfield College for students admitted to the COCC Nursing program.

NURSING ASSISTANT
Nursing Assistant
Certificate of Completion

PROGRAM DESCRIPTION
The Nursing Assistant program is a three-term program that trains individuals to perform authorized duties of the Nursing Assistant in acute care, sub-acute care and skilled nursing facilities and in other health care settings. Upon successful completion of all required support courses, Nursing Assistant level 1 with successful certification by the Oregon State Board of Nursing and CNA level 2, students are awarded a certificate of completion from COCC. The COCC Nursing Assistant level 1 and CNA level 2 courses are approved by the Oregon State Board of Nursing (971.673.0685 or oregon.gov/osbn).

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Stethoscope $30
- Uniform $30-$80
- Books $500 per term
- Course and lab packets $100 per term
- Immunizations & titers $600
- Immunizations tracking $10
- Criminal background check $55
- Urine drug screen $45
- Nursing Assistant Competency Examination $106
- Electronic fingerprinting $65
- AHA BLS Provider CPR card $60

PROGRAM ENTRANCE REQUIREMENTS
Other Entrance Requirements
- Required:
  - Documentation of current immunizations (CDC adult schedule) by the assigned due date.
  - Complete Criminal History Checks (CHC) as a condition of enrollment in NUR 103 Nursing Assistant and NUR 104 CNA Level 2; see website for details.
  - Students must complete a 10-panel urine drug screen, with Verified Credentials, Inc., prior to entry into the Nursing Assistant Program. With the exception of certain prescribed medications, students with a positive drug screen which prevents them from attending clinical, will be disqualified from entering the program. Please refer to the Nursing Assistant Handbook for more detailed information.
  - Successful acquisition of a current American Heart Association (ILCOR compliant) BLS Provider CPR card by the assigned due date.

PROGRAM PERFORMANCE STANDARDS
- Academic Requirements
  - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
  - All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

HD 101 or HD 100CS	Study Strategies College Success	3
HD 109	Effective Job Search Strategies	2
HHP 248 or HHP 210	Health Psychology Intro to Health Care System	3-4
NUR 103	Nursing Assistant	7

| NUR 104 | CNA Level 2 | 6 |
| PSY 215 | Developmental Psychology | 4 |

Other Required Courses

CIS 120	Computer Concepts (or Computer Competency Test)	0-4
MTH 020	Pre-Algebra [1]	4
or MTH 058	Math Literacy I	
SP 218	Interpersonal Communication	3
WR 065	Rhetoric/Critical Thinking II	4
or WR 121	Academic Composition	
	Total Credits 36-41	

[1] Or higher than MTH 058

ADVISING NOTES

This certificate is designed for students planning to enter the workforce upon graduation; most courses are not intended to transfer. However, some courses may be transferable to public or private baccalaureate institutions for students who choose to pursue higher degrees.

The courses in the Nursing Assistant program should be carefully planned. Students must successfully complete NUR 103 before they can enroll in NUR 104. For patient and personnel safety reasons, students are discouraged from working more than 20 hours or working a night shift during the term(s) they are taking NUR 103 and NUR 104. Please contact the Nursing Assistant program director and/or CAP Services for questions regarding the program.

OUTDOOR LEADERSHIP

Outdoor Leadership
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

The COCC outdoor leadership program is grounded in the principles of lifelong learning, environmental stewardship, personal growth and leadership. The program emphasizes experiential methodologies to combine theory and practice in a strong field-based curriculum. Students will develop current and accepted skills,understand comprehensive knowledge and standards in the professional field, while being taught by highly skilled and knowledgeable faculty who exemplify the highest level of standards, integrity and ethics.

The general area of outdoor leadership includes specific careers in outdoor recreation, outdoor education, wilderness therapy and tourism and leisure enterprises. A student can earn an AAOT or AS degree with a focus in outdoor leadership at COCC to prepare to transfer to a baccalaureate institution to pursue a higher degree in any one of the areas mentioned above.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

| 3 credits with HHP or HHPA prefix [1] | 3 |

Mathematics

| MTH 105 | Math in Society (or higher) | 4 |

Oral Communication
Choose one course from the following: 3-4

SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Choose enough elective credits to reach a minimum total of 90 overall degree credit[2]
Recommend: FOR 240A, FOR 251, FOR 255, GEOG 212, OL 111, OL 171, OL 194AA, OL 207, OL 244, OL 255, OL 263, OL 271, OL 273, OL 280, OL 294AC, OL 294CA, OL 294MB, OL 294RC, OL 294WG

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Elective courses must be numbered 100 or above and can be any combination of general electives, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP activity courses (15 credits maximum).

ADVISING NOTES

The OL program models a cohort program, whereby students complete a set of courses each term with a single peer group. It is advised that students complete as much pf their general education requirements prior to beginning their OL courses.

Students begin their OL work in the Fall, completing a set of introductory/fundamental courses. Fall is particularly special as students attend class for the entirety of the term, in an outdoor classroom, every day of the week and complete an 8 day expedition in November. Once students begin in the Fall, they complete a prescribed set of courses in both the following Winter and Spring terms. During Winter term, students work on advanced theory and application courses, gaining more extensive understanding about the practices of professional outdoor leaders. Finally, in Spring, students complete advanced skills courses, aimed at developing students' practice of professional standards within specific activities.

First year completion requirements for enrollment into the second year level include: completion of the OL prefix courses (OL 271 Facilitating Group Experiences, OL 273 Outdoor Recreation Leadership, OL 280 Co-op Work Experience-OL, OL 294 guide courses) with a grade of "C" or better; completion of a minimum of 36 college credits made up, in part, by the above courses, appropriate prerequisites. See advisor for details.

Outdoor Leadership (OSU Transfer) Emphasis AS
Associate of Science

FOCUS AREA DESCRIPTION
This associate of science degree is designed specifically for transfer to OSU-Cascades and their Tourism and Outdoor Leadership bachelor's degree program. The COCC outdoor leadership program is grounded in the principles of lifelong learning, environmental stewardship, personal growth and leadership. The program emphasizes experiential methodologies to combine theory and practice in a strong field-based curriculum. Students will develop current and accepted skills, understand comprehensive knowledge and standards in the professional field, while being taught by highly skilled and knowledgeable faculty who exemplify the highest level of standards, integrity and ethics.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Baccalaureate Core

HP 295	Health and Fitness	3
Choose one course from the Mathematics list [1]		4
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
SP 111	Fundamentals Public Speaking	4

Perspectives Courses[1, 2]
Choose one course from each of the following categories:

Physical Science[1]	4-5
Biological Science[1]	4-5
Physical or Biological Science[1]	4-5
Western Culture[1]	3-4
Cultural Diversity[1]	4
Literature and the Arts[1]	3-4
Social Processes and Institutions[1]	3-4
Difference, Power and Discrimination[1]	4

PROGRAM REQUIREMENTS

BA 101	Intro to Business	4
FOR 255	Resource Interpretation	3
OL 111	Introduction to Outdoor Leadership	3
OL 171	Technical Skills for Outdoor Leadership	2
OL 207	Seminar in Outdoor Leadership	2
OL 244	Psych. of Risk & Adventure	3
OL 255	Outdoor Living Skills	5
OL 263	Basic Wilderness Life Support	5
OL 271	Facilitating Group Experiences	5
OL 273	Outdoor Recreation Leadership	5
OL 280	Co-op Work Experience-OL	2
Choose one guide course from the following list:		3
OL 294AC	Alpine Climbing	
OL 294CA	Canoe Instructing and Guiding	
OL 294MB	Mountain Bike Guiding	
OL 294RC	Teaching Rock Climbing	
OL 294WG	Whitewater Raft Guiding	

Electives	4

Choose enough elective credits to reach a minimum of 94 overall degree credits [3]

Total Credits 94-100

[1] Select from the appropriate category in the OSU Baccalaureate Core course list in the COCC catalog.
[2] No more than two courses (or lecture/lab combinations) from any one department may be used by a student to satisfy the Perspectives category of the core. GEO courses listed under Physical Science are considered to be from a different department than GEO courses listed under any other Perspective category.
[3] Elective courses must be numbered 100 or above and can be any combination of general elective, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP activity classes (15 credits maximum).

ADVISING NOTES
The OL program models a cohort program, whereby students complete a set of courses each term with a single peer group. It is advised that students complete as much of their general education requirements prior to beginning their OL courses.

Students begin their OL work in the Fall, completing a set of introductory/fundamental courses. Fall is particularly special as students attend class for the entirety of the term, in an outdoor classroom, everyday of the week and complete an 8 day expedition in November. Once students begin in the Fall, they complete a prescribed set of courses in both the following Winter and Spring terms. During Winter term, students work on advanced theory and application courses, gaining more extensive understanding about the practices of professional outdoor leaders. Finally, in Spring, students complete advanced skills courses, aimed at developing students' practice of professional standards within specific activities.

First year completion requirements for enrollment into the second year level include: completion of the OL prefix courses (OL 271 Facilitating Group Experiences, OL 273 Outdoor Recreation Leadership, OL 280 Co-op Work Experience-OL, OL 294 guide course) with a grade of "C" or better; completion of a minimum of 36 college credits made up, in part, by the above courses, appropriate prerequisites. See advisor for details.

PHARMACY TECHNICIAN
Pharmacy Technician
Certificate of Completion

PROGRAM DESCRIPTION
The Pharmacy Technician training program prepares individuals for employment in the pharmacy industry. Pharmacy technicians are skilled workers who are educated and trained to work in a pharmacy and assist in all areas of the pharmacy not requiring the professional judgment of the registered pharmacist. Some current practice areas for the pharmacy technician include retail, hospital, manufacturing, disease state management and mail order and insurance claim specialists. The pharmacy technician processes prescriptions and medication orders and plays an integral role in maintaining the pharmacy department.

Courses in the Pharmacy Technician program are offered in an online and hybrid format. The curriculum focuses on the abilities needed to assist the pharmacist and provide the skills necessary to process prescriptions accurately, participate in administration and management of a pharmacy and maintain inventory. Topics of study include medical terminology, anatomy and functions of the human body, therapeutic classification and drug names, pharmacy procedures, pharmaceutical calculations, pharmacy law and interpersonal communication. Students will have a working knowledge of sterile technique, standards of practice, quality assurance and patient confidentiality. In addition, students will develop and practice communication skills needed to function in a professional setting. In order to gain workplace experience, students will also participate in a hospital and retail pharmacy practicum.

The Pharmacy Technician certificate program prepares students to pass the National Pharmacy Technician Certification exam required by the Oregon Board of Pharmacy to practice as a pharmacy technician in the state of Oregon.

ACCREDITATION
American Society of Health-System Pharmacists (ASHP)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- In some cases $150 to $300 for fees associated with required immunizations and tuberculosis screening
- $45-65 drug screening
- $55 background check
- $65 for American Heart Association CPR for Health Care Providers certificate
- Distance students will be responsible for the cost of travel and expenses to the COCC campus for the two lecture labs in the Fall and Winter terms.

Enrollment Fees
- Program fee of $150 per term (or a total of $450 for the three-term pharmacy technician cohort)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - MTH 058 Math Literacy I, MTH 065 Algebra II or higher or minimum placement into MTH 095 Intermediate Algebra (4 credits)
  - Recommended pathway MTH 010 Developmental Mathematics (if needed), MTH 058 Math Literacy I, MTH 098 Math Literacy II
  - WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II or minimum placement scores resulting in WR 121 Academic Composition placement (4 credits)
  - Complete COCC's online orientation available at cocc.edu/onlineorientation.

Other Entrance Requirements
- Required:
  - A high school diploma, a high school transcript noting successful graduation, or a GED
  - 18 years of age or older
  - All COCC students enrolled in Pharmacy Technician Program (which includes requirements for practical experience) may have to pass Criminal History Checks (CHC) as a condition of their acceptance into a medical or other facility for training. Students who do not pass the CHC may not be eligible to complete training at affiliated practicum sites, to sit for licensure or certification exams, or to be hired for some professional positions. Students who believe that their past history may interfere with their ability to complete the program of study or to obtain licensure or certification in their chosen field should contact the appropriate state board or the program director.
  - 10 panel drug screen completed as a condition of acceptance into the program. Students must complete a 10 panel urine drug screen with the vendor chosen by COCC prior to entry into the Pharmacy Technician Program. With the exception of certain prescribed medications, students with a positive drug screen, which prevents them from attending clinical, will be disqualified from entering the program. Please refer to the Pharmacy Technician Handbook website for more detailed information cocc.edu/programs/pharmacy-tech/pharmacy-tech-advising-information.
  - Documentation of current immunizations (MMR, Tdap, Varicella, Hep B, Flu, TB, Blood Titer)
  - American Heart Association Health Care Provider or American Red Cross CPR card

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All prerequisites courses must be completed with a grade of C or higher.

Additional Requirements
- Students must maintain a minimum 2.0 GPA while enrolled in the Pharmacy Technician program. Students who do not meet this standard may be dismissed from the program.
- If a student is arrested for any reason while in the Pharmacy Technician program it should be reported to the program director immediately. The information will be reviewed and may affect the student's ability to obtain a pharmacy technician license. If a student is unable to obtain a pharmacy technician license he/she will be unable to complete the practicum and will be dismissed from the Pharmacy Technician program.

PROGRAM COURSE REQUIREMENTS
Prerequisite Courses

AH 115	Cultural Responsiveness in Allied Health	3
MTH 095	Intermediate Algebra (or higher)	4
WR 121	Academic Composition	4

Core Courses

PHM 100	Pharmacy Technician Practice I	5
PHM 101	Pharmacy Tech Law and Ethics	3
PHM 110	Pharmacy Calculations	3
PHM 115	Retail Simulation Lab	2
PHM 120	Pharmacology I	5
PHM 130	Pharmacology II	5
PHM 140	Pharmacy Technician Practice II	5
PHM 145	Institutional Simulation Lab	2
PHM 181	Pharmacy Technician Seminar	2
PHM 190	Pharm Tech Practicum I	4
PHM 191	Pharm Tech Practicum II	4
	Total Credits	**51**

ADVISING NOTES
Program (PHM) courses begin once per year in fall term. Students wishing to register in the fall Pharmacy Technician cohort must meet the basic prerequisite competencies and may register according to seat availability on a first-come, first-served basis, determined by the priority registration schedule.

Once admitted to the program, students must obtain a two-year nonrenewable Pharmacy Technician License from the Oregon Board of Pharmacy. This license is required to participate in the Pharmacy Technician practicum courses. Applicants must have a high school diploma, a high school transcript noting successful graduation, or a GED and be at least 18 years of age. Application for the license will require a background check and fingerprinting. Students unable to obtain a pharmacy technician license will not be able to complete training at affiliated practicum sites or obtain employment in a pharmacy. Students who believe their personal history may interfere with their ability to obtain a license should contact the program director. Information for licensure is available from the Oregon Board of Pharmacy and can be found at pharmacy.state.or.us or by calling 971.673.0001.

Students must be flexible during the spring term to participate in the practicum. Students must perform a three-week block of practicum in a hospital or institution and a three-week block of practicum in a retail or community pharmacy. The practicum will be scheduled by the Pharmacy Technician department and the student must be free of commitments to complete the practicum.

Students must be at least 18 years of age, have a high school diploma, a high school transcript noting successful graduation, or a GED, have no criminal record and pass a National Pharmacy Technician Certification Exam to apply to the Oregon Board of Pharmacy for a Certified Pharmacy Technician License to practice as a pharmacy technician in Oregon.

This certificate is designed for students planning to enter the pharmacy technician field upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

POLITICAL SCIENCE
Political Science
Associate of Arts Oregon Transfer

PROGRAM DESCRIPTION
Political Science is a social science, which deals with the distribution of power and resources through systems of governance. The Associate of Arts Oregon Transfer (AAOT) with a focus in political science includes courses that are commonly required for this major and meets lower division general education requirements at all Oregon public universities.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes [2]
Recommend: PS 201, PS 204

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Choose enough electives to reach 90 credits
Recommend: PS 206

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Take another course from the Social Science Discipline Studies list that does not have a PS prefix.

ADVISING NOTES
Political Science courses do not need to be taken in sequence.

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the Arts and Letters requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor. It is recommended that students pursuing a political science major take additional social sciences courses to fulfill some of their elective credits. Economics, geography and history courses are particularly helpful in this regard.

PSYCHOLOGY
Psychology
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Psychology is a broad discipline that considers properties of the brain and seeks to understand humans as individuals and in groups. The Associate of Arts Oregon Transfer (AAOT) with a focus in psychology includes courses that are commonly required for this major and meets lower division general education requirements at all Oregon public universities.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105   Math in Society (or higher)   4

Oral Communication
Choose one course from the following: 3-4
SP 111   Fundamentals Public Speaking
SP 114   Argumentation & Discourse
SP 115   Intro Intercultural Commun
SP 218   Interpersonal Communication
SP 219   Small Group Communication

Writing
WR 121   Academic Composition   4
WR 122   Argument, Research and Multimodal Composition   4
or WR 227   Technical Writing

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: PSY 201, PSY 202

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Choose enough elective credits to reach a minimum
total of 90 overall degree credits

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.

ADVISING NOTES

If a student has graduated high school or earned a GED after 1997, two years of the same world language earned at the high school level or two quarters of the same world language at the undergraduate level is required for admittance to most Oregon public universities. For specific details, speak with an advisor.

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the Arts and Letters requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. In general, two 100-level or higher math courses beyond the foundational mathematics requirement fulfills the Bachelor of Science. These will also partially fulfill the Science/Math/Computer Science Discipline Studies requirement. Language beyond entrance requirements is not required.

Although students may take whichever science sequence they prefer, it is recommended to take BI 101 General Biology: Cells & Genes-BI 103 General Biology: Ecology or BI 231 Human Anatomy and Physiology I-BI 233 Human Anatomy and Physiology III due to the relevance these courses have to upper-division psychology courses.

PSY 204 Research Methods, PSY 213 Introduction to Physiological Psychology and PSY 227 Animal Behavior fulfill the science lab requirement if a sequence is not essential.

Students are advised to consider the following psychology courses as electives to gain further insight into the field and to help them determine what area of psychology they may be interested in pursuing: PSY 204 Research Methods, PSY 213 Introduction to Physiological Psychology, PSY 214 Personality Psychology, PSY 215 Developmental Psychology, PSY 216 Social Psychology, PSY 219 Abnormal Psychology, PSY 227 Animal Behavior, PSY 233 Psych of Violence & Aggression. With the exception of PSY 204 Research Methods, PSY 213 Introduction to Physiological Psychology and PSY 227 Animal Behavior (see Science/Math/Computer Science lab course fulfillment), these courses will also partially satisfy the Social Science AAOT requirements. Any other potential special topics courses that are offered from time to time will be electives as well.

Students who are considering clinical or counseling psychology might consider the following electives: EMT 195 Crisis Intervention, ED 265 Children at Risk, HS 161 Ethics for Human Services, HS 162 Effective Helping Skills I, HS 201 Families and Addictions, HS 206 Group Counseling Skills for Human Services, HS 209 Introduction to Psychological Trauma: Theory and Practice, HS 224 Psychopharmacology, HS 260 Counseling Theories and HS 262 Effective Helping Skills II. HS 224 Psychopharmacology will meet a non-lab Science/Math/Computer Science requirement. HS 206 Group Counseling Skills for Human Services and HS 208 Multicultural Issues Hum Serv will partially complete the Social Science requirement.

Psychology students will be required to take Statistics when they transfer. Although MTH 111 College Algebra is sufficient for the math requirement, advisors recommend taking one or both of MTH 243 Introduction to Probability and Statistics I and MTH 244 Introduction to Probability and Statistics 2 to finish the science requirement and to allow students to be exposed to statistics beforehand. However, for OSU, MTH 243 Introduction to Probability and Statistics I and MTH 244 Introduction to Probability and Statistics 2 currently do not fulfill the BS math requirements. PSY 204 Research Methods is also a good preparation for upper division statistics required for a PSY BA or BS.

Note that individual institutions may have additional requirements or will change the category that a course satisfies if the AAOT is not completed, or is transferred to an out-of-state college or university. For admission into a particular program, courses may be added. Students who plan to transfer should contact the institution they plan to attend to ensure they have fulfilled the specific requirements for their program.

Students have the option of pursuing a bachelor's degree in psychology through Oregon State University – Cascades (contact 541.322.3100) or through a distance program with Eastern Oregon University (contact EOU advisor, 541.385.1137); both programs are available in Central Oregon. Students planning to attend OSU should include in their AA degree the following OSU major requirements: BI 101 General Biology: Cells & Genes-BI 103 General Biology: Ecology, PSY 201 Mind and Brain, PSY 202 Mind and Society, WR 227 Technical Writing.

PUBLIC HEALTH
Public Health
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION

This Associate of Arts Oregon Transfer (AAOT) program is designed as a broad-based degree in public health for maximum transferability in the third year to Oregon State University's College of Public Health & Human Sciences Bachelor of Science in Public Health. This BSPH degree offers two tracks: 1) Health Promotion & Health Behavior and 2) Health Management & Policy.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS

Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS

General Education/Foundational

Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)[2]	4

Oral Communication

Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies

One course must be designated as Cultural Literacy.

Arts and Letters	9-12

Choose at least three courses from at least two prefixes

Social Science	12-16

Choose at least four courses from at least two prefixes
Recommend: HHP 100, HHP 210, HHP 248 and either PSY 201 or SOC 201

Science/Math/Computer Science	12-20

Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science [3]

PROGRAM DESCRIPTIONS

Electives   39
Choose enough elective credits to reach a minimum
total of 90 overall degree credits
Recommend: EC 201, HHP 231, HHP 240, HHP 267, HHP 268,
HHP 281, SOC 212

	Total Credits 90-106

[1] HHPA activity courses (1 credit each) which can not to be duplicated.
[2] For OSU's HPHB Track take MTH 105 Math in Society. For OSU's
    HM&P Track take MTH 111 College Algebra and MTH 245
    Mathematics for Management, Life, and Social Sciences
[3] For OSU's HPHB Track take BI 101 General Biology: Cells & Genes, BI
    102 General Biology: Evolution OR BI 103 General Biology: Ecology.
    For OSU's HM&P Track take BI 234 Microbiology

ADVISING NOTES
The following provides a list of the essential lower division core courses
for students intending to transfer to OSU's Bachelor of Science in Public
Health or to the new joint School of Public Health at Oregon Health
Sciences University and Portland State University. Students should always
check with specific universities to ensure the most current transfer
information is accessed when designing their program.

Public Health Core Courses for Both Tracks at OSU: HHP 100 Intro to
Public Health, HHP 210 Intro to Health Care System, HHP 248 Health
Psychology and MTH 243 Introduction to Probability and Statistics I.
In addition, the following courses are strongly recommended for the each
of the BSPH tracks at OSU.

Health Promotion & Health Behavior track (HBHB): MTH 105 Math
in Society, WR 122 Argument, Research and Multimodal Composition,
WR 227 Technical Writing, HHP 231 Human Sexuality, FN 225 Human
Nutrition and/or HHP 240 Science of Nutrition (for those wanting to
focus on Nutrition & Public Health) as well as HHP 268 Sustainable Food
and Nutrition, HHP 267 Wellness Coaching Fundamentals,
HHP 281 Practicum-HP/Public Health, PSY 201 Mind and Brain,
SOC 201 Introduction to Sociology, ES 101 Intro to Ethnic Studies and
SOC 212 Race, Class and Gender.

Health Management & Policy Track (HM&P): MTH 111 College
Algebra, MTH 245 Mathematics for Management, Life and Social
Sciences, WR 122 Argument, Research and Multimodal Composition,
WR 227 Technical Writing, CS 160 Computer Science Orientation,
BA 111 Applied Accounting I, EC 201 Microeconomics, EC 202
Macroeconomics, BI 234 Microbiology and any other courses listed
above for the HPHB Track.

SOCIOLOGY
Pre-Law
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Law school is graduate level study that does builds on a bachelor's
degree but does not require a specific major. The Associate of Arts
Oregon Transfer (AAOT) with a focus in pre-law includes courses
that are useful to a pre-law student and meets lower division general
education requirements at all Oregon public universities. Students are
encouraged to combine this focus with preparation for a major that they
find interesting and challenging and that develops skills in research and
writing, problem solving, oral communication and listening, organization
and exposure to law.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate
  or degree.
- All courses in the program must be completed with a grade of
  C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]	3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication
Choose one course from the following: 3-4

SP 111	Fundamentals Public Speaking
SP 114	Argumentation & Discourse
SP 115	Intro Intercultural Commun
SP 218	Interpersonal Communication
SP 219	Small Group Communication

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters	9-12

Choose at least three courses from at least two prefixes

Social Science	12-16

Choose at least four courses from at least two prefixes

Science/Math/Computer Science	12-20

Choose at least four courses from at least two prefixes including at least
three laboratory courses in biological and/or physical science

Electives	39

Choose any college-level course that brings the total credits to
90 quarter hours [2]

	Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] This may include up to 12 credits of Career and Technical Education
    courses designated by COCC as acceptable.

ADVISING NOTES
Most law schools have no requirements for a pre-law curriculum and will
accept a bachelor's degree in any major. Students should develop an
educational program that is broad, yet provides depth of understanding
in at least one subject area, along with fundamental insights into human
institutions and values. The emphasis should be on a degree program
that meets students' needs and interests, that students find challenging
and in which students will do their best work and will earn good grades.

Legal educators agree that the development of particular skills and habits
will contribute more to success in law school than a major in any one
subject. Therefore, coursework should focus on strengthening habits of
thoroughness, intellectual curiosity, scholarship, the ability to research a
topic, write concisely, analyze information and think critically. Verbal and
written communication skills are very important.

Courses in literature, language, composition, logic and linguistics are
directly concerned with the cultivation of these skills. In addition, lawyers
must be adept at problem solving and organizing information to support
a point of view. Courses in political science, economics, American and
British history, journalism, philosophy and business principles will provide
an opportunity to practice these skills and to gain an understanding of
social institutions and values.

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the Arts and Letters requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor.

Sociology
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
Sociology is the study of human social relationships and institutions and includes subject matter such as race, religion, families, government, and social change. The Associate of Arts Oregon Transfer (AAOT) with a focus in sociology includes courses that are commonly required for this major and meets lower division general education requirements at all Oregon public universities. A bachelor's degree with a major in sociology is great preparation for graduate school (such as schools of law and education) as well as direct employment in government, research and human services.

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health
3 credits with HHP or HHPA prefix [1]   3

Mathematics
MTH 105   Math in Society (or higher)   4
Recommend: MTH 111

Oral Communication
Choose one course from the following: 3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing
WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters   9-12
Choose at least three courses from at least two prefixes

Social Science   12-16
Choose at least four courses from at least two prefixes
Recommend: SOC 201, SOC 211, SOC 212, SOC 250

Science/Math/Computer Science   12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives   39
Choose any college-level course that brings the total credits to 90 quarter hours [2]

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable.

ADVISING NOTES
Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fulfill the arts and letters requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor.

Students are advised to consider the following sociology courses as electives to gain further insight into the field and to help them determine what area of sociology they may be interested in pursuing: SOC 208 Sport and Society, SOC 211 Social Deviance, SOC 212 Race, Class and Gender, SOC 215 Social Issues and Social Movements, SOC 219 Sociology of Religion, SOC 250 Sociology of Popular Culture and any other potential special topics courses that are offered from time to time.

Sociology students typically will be required to take Statistics when they transfer. Although MTH 111 College Algebra is sufficient for the math requirement, advisors recommend taking one or both of MTH 243 Introduction to Probability and Statistics I and MTH 244 Introduction to Probability and Statistics 2 to finish the science requirement and to allow students to be exposed to statistics beforehand.

Note that individual institutions may have additional requirements or will change the category that a course satisfies if the AAOT is not completed, or is transferred to an out-of-state college or university. For admission into a particular program, courses may be added. Students who plan to transfer should contact the institution they plan to attend to ensure they have fulfilled the specific requirements for their program.

STRUCTURAL FIRE SCIENCE
Structural Fire Science
Associate of Applied Science

PROGRAM DESCRIPTION
The AAS degree in Structural Fire Science is designed for students seeking a career in the fire service industry or upgrading their skills for current fire service employment. The AAS degree is designed for students planning to enter their chosen career upon graduation.

ACCREDITATION
International Fire Service Accreditation Congress (IFSAC)
Department of Public Safety Standards & Training (DPSST)
Fire & Emergency Services Higher Education (FESHE)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- CPR for Healthcare Provider card $55, must remain current throughout EMT class.
- Background check, immunization upload and 10-panel drug screen is required for all students entering into the EMT class at an approximate cost of $110.
- In some cases fees associated with immunizations can range from $20-$200.
- Fee for State Certification Testing and National Registry Test (currently $170-$350).
- Materials (boots, ear protection, gloves, etc.), $200-$350
- Other special equipment and clothing may be required as part of this program.

Enrollment Fees
- None

PROGRAM ENTRANCE REQUIREMENTS

Academic Entrance Requirements
- Recommended:
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II with a grade "C" or better
  - Minimum placement scores resulting in MTH 060 Algebra I/ MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra with a grade "C" or better
  - High school diploma or GED

Other Entrance Requirements
- Required:
  - Students must be 18 or older for state and national testing for EMT and affiliation with a fire agency. Students do NOT need to be 18 to begin taking SFS courses.
  - All COCC students seeking enrollment in the EMT course and/or agency affiliation that requires practical experience will have to pass a Criminal History Check (CHC) as a condition of their acceptance into a medical, fire or other facility for training. Students who do not pass the CHC may not be eligible to complete training at affiliated sites, to sit for licensure or certification exams, or to be hired for some professional positions. Students who believe their personal history may interfere with their ability to complete the program of study or to obtain licensure or certification in their chosen field should contact the appropriate state board or the program director.
  - Complete a 10 panel urine drug screen with Verified Credentials, Inc. With the exception of certain prescribed medications, students with a positive drug screen, which prevents them from attending clinical, will be disqualified from entering the program. Please refer to the Structure Fire Science website and/or program handbook for more detailed information.

PROGRAM PERFORMANCE STANDARDS

Academic Requirements:
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses with the program prefix must be completed with a grade of C or higher.

Additional Requirements
- All students will undergo drug screening, background check and immunization verification with the vendor approved by Central Oregon Community College, prior to entrance into the EMT courses, at their expense. Students will be administratively withdrawn from the program and the seat given to an alternate student if requirements are not initiated with the specified vendor by the due date indicated by the SFS program. Students with a positive urine drug screen will be disqualified from entering the EMT courses at Central Oregon Community College, with the exception of certain prescribed medications. The director of EMS/SFS will notify the student of positive drug screens and their resulting disqualification from the program. Students have a right to appeal the decision.
- Students must maintain a minimum 2.0 GPA while enrolled in the program and if affiliated and receiving a scholarship will be held to a higher GPA standard; students who do not meet this standard may be dismissed from the program. Students may also be dismissed if the student has violated a criminal or ethical standard.

PROGRAM COURSE REQUIREMENTS

Core Courses

EMT 151	EMT Basic Part A	5
EMT 152	EMT Basic Part B	5
SFS 101	Introduction to Emergency Services	4
SFS 102	Firefighter Safety & Survival	3
SFS 105	Fire Behavior & Combustion I	3
SFS 110	Bldg Const. for Fire Personnel	3
SFS 112	Public Ed. & Fire Prevention	3
SFS 120	Fixed Systems & Extinguishers	3
SFS 123	HazMat Awareness & Operations	3
SFS 133	Fire Entry Exams	3

SFS 210	Fire Investigation	3
SFS 212	Fire Codes and Ordinances	3
SFS 230	Rescue Practices	3
SFS 232	Fire Protection Hydraulics and Water Supply	4
SFS 275	Capstone: Tactics & Strategies	3
WF 215	S-215 Fire Operations in the Urban Interface	3

Choose 9 credits from the SFS Technical Electives: 9

AH 111	Medical Terminology I	
EMT 170	Emergency Response Communication/Documentation	
EMT 171	Emerg Response Pt Transport	
EMT 195	Crisis Intervention	
FOR 130	Chainsaw Use and Maintenance	
SFS 121	Fire Law	
SFS 122	Fire Department Budget	
SFS 205	Fire Behavior and Combustion II	
SFS 263	Human Behavior in Fire	
Any course with a WF prefix		

Other Required Courses

CH 104	Introduction to Chemistry I	4-5
or GS 105	Physical Science: Chemistry	
FOR 211	Supervision and Leadership	3
HHP 242	Stress Management	3
or HHP 266	Nutrition for Health	
or HHP 295	Health and Fitness	
HHPA Activity Course		1
MTH 065	Algebra II (or higher)[1]	4
PH 201	General Physics I	4-5
or GS 104	Physical Science: Physics	
Choose one of the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	
Discipline Studies Course		3-4
Choose one of the following:		
ANTH 103	Cultural Anthropology	
BI 234	Microbiology	
CJ 100	Survey of the Criminal Justice System	
OL 244	Psych. of Risk & Adventure	
PSY 201	Mind and Brain	
PSY 202	Mind and Society	
PSY 216	Social Psychology	
SOC 201	Introduction to Sociology	
WR 121	Academic Composition	4
WR 227	Technical Writing	4

Total Credits 96-100

[1] Students planning to earn a four-year degree should take MTH 105 or higher.

ADVISING NOTES

The program requires hands-on training in fire and emergency medical skills and NFPA Firefighter I certification which requires a significant amount of on-the-job training (OJT) by joining a fire agency that require students to work with and around mechanical equipment, ropes, fire pumps, fire hose and appliances, ladders, various apparatus and hand tools (both manual and powered). Most local fire agencies have student and volunteer positions. Students must apply and compete for these positions. Passing a written and physical agility exam is required for acceptance into these positions. Students desiring to complete a degree in Structural Fire Science and Paramedicine must follow a specific course of study. Please see the program director for information.

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Currently, the COCC Structural Fire Science program has articulation agreements with Eastern Oregon University.

Prior to taking the Emergency Medical Technician exam, students must answer background information questions concerning felony convictions, any regulatory discipline, ethical violations and mental competence. For more information, contact the SFS director at 541.383.7404.

The following are required for graduation in the SFS program and are only obtainable through affiliation in a fire agency:
• NFPA Firefighter I
• NFPA Hazmat Awareness & Operations
• I-200 FEMA or NWCG certified course

Upon Completion of EMT 151 EMT Basic Part A and EMT 152 EMT Basic Part B, student must pass the National Registry of EMT's written and Oregon Practical exams. Currently certified students do not need to retake the courses for the degree.

Students must hold a current EMT or higher Oregon certification for graduation with an SFS degree.

Fire Service Administration (EOU Transfer)
Associate of Science

FOCUS AREA DESCRIPTION
The AS degree is intended to prepare students to transfer to Eastern Oregon University's Fire Service Administration (FSA) degree and is designed for students seeking a career in the fire service industry or upgrading their skills for current fire service employment. The program meets or exceeds the required technical skills and knowledge necessary for employment in many fire service organizations throughout the country.

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
• Recommended:
  • Minimum placement scores resulting in WR 121 Academic Composition placement OR completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II (Grade "C" or better)
  • Minimum placement scores resulting in MTH 060 Algebra I/MTH 085 Technical Mathematics I placement OR completion of MTH 020 Pre-Algebra (Grade "C" or better)

Other Entrance Requirements
• Required:
  • All COCC students enrolled in the EMT course and/or seeking agency affiliation, or any course requiring practical experience, will have to pass a criminal history check (CHC) as a condition of their acceptance into a medical, fire or other facility for training. Information regarding CHC standards can be found at cocc.edu. Students who do not pass the CHC may not be eligible to complete training at affiliated sites, to sit for licensure or certification exams, or to be hired for some professional positions. Students who believe their personal history may interfere with their ability to complete the program of study or to obtain licensure or certification in their chosen field should contact the appropriate state board or the program director.
• Recommended:
  • High school diploma or GED
  • Students must be 18 or older for state and national testing for EMT and for affiliation with a fire agency. Students do NOT need to be 18 to begin taking SFS courses.
  • Documentation of completion of immunizations (Hepatitis B or release, current TB, MMR immunizations at least two of the three shots)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree. Students affiliated with a local Fire/EMS agency who are receiving a scholarship will be held to a higher GPA standard

depending on affiliation location. Students who do not meet this standard may be dismissed from the program.
• All courses must be completed with a C grade or higher.

Additional Requirements
• Students may also be dismissed if the student has violated a criminal or ethical standard or guideline established by the college and/or program.
• Prior to taking the National Register of EMT exam and applying for Oregon EMT licensure, students must answer background information questions concerning felony convictions, any regulatory discipline, ethical violations and mental competence on the state of Oregon EMS Licensure application. For more information, contact the Paramedicine/SFS director, 541.383.7404.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication

SP 111	Fundamentals Public Speaking	3-4
or SP 218	Interpersonal Communication	

Writing

WR 121	Academic Composition	4
WR 122	Argument, Research and Multimodal Composition	4
or WR 227	Technical Writing	

General Education/Discipline Studies

Aesthetics and Humanities [1]	3-4
Artistic Process and Creation [2]	6-8
Natural, Mathematical and Information Systems [3]	6-20
Social Science [4]	4
Recommend: ANTH 103, PSY 201, PSY 202, SOC 201	

PROGRAM REQUIREMENTS

FOR 211	Supervision and Leadership	3
or BA 285	Business Human Relations	
SFS 101	Introduction to Emergency Services	4
SFS 110	Bldg. Const. for Fire Personnel	3
SFS 112	Public Ed. & Fire Prevention	3
SFS 120	Fixed Systems & Extinguishers	3
SFS 205	Fire Behavior and Combustion II	3
SFS 212	Fire Codes and Ordinances	3
SFS 275	Capstone: Tactics & Strategies	3

Electives 31
Choose any course numbered 100 or above that brings the total credits to 90 quarter hours. This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable.
Recommend: SFS 121, SFS 122

Total Credits 90-108

[1] Choose one course from Eastern Oregon Education Transfer Guide Gen Ed-Aesthetics & Humanities List.
[2] Choose two courses with different subject prefixes. See Eastern Oregon General Education Transfer Guide Gen Ed-Art Process/Creation.
[3] Choose two courses with different subject prefixes, including at least one physical or biological science. See Eastern Oregon General Education Transfer Guide Gen Ed-Nat/Math/Info Sciences.
[4] Choose one course from the Eastern Oregon General Education Transfer Guide Gen Ed-Social Science.

ADVISING NOTES
This degree is designed for students who wish to transfer to Eastern Oregon University's Fire Service Administration degree upon completion. For more information on this bachelor degree program, please contact the Fire Programs director at 541.383.7404.

Most Fire Service Administration program-specific courses begin once per year in fall term; there are a few entry-level courses offered several times per year and non-program support courses can begin in a term other

than fall or if students need to build skills related to the prerequisites. As a general rule, all SFS specific courses should be taken in sequence in term offered during the second year of program. Exceptions can be made based on individual student education and experience.

The following are required for graduation in the FSA program and are only obtainable through affiliation in a fire agency:
• NFPA Firefighter 1
• NFPA Hazmat Awareness & Operations
• I-200 FEMA or NWCG certified course

The program requires hands-on training in fire and emergency medical skills and significant on-the-job training (OJT) by joining a fire agency. Most local fire agencies have student and volunteer positions. Students must apply and compete for these positions. Passing a physical training exam is required. Students are required to work with and around mechanical equipment, ropes, fire pumps, fire hose and appliances, ladders, various apparatus and hand tools (both manual and powered). Students need to be aware of the College insurance policy prior to participation in the program. A statement concerning College insurance policies is listed on all Structural Fire Science (SFS) degree syllabi. Students desiring to complete a dual degree – a degree in Paramedicine and a degree in SFS – must follow a specific course of study. Please see the program director for information.

For those pursuing only the AS Fire Service Administration degree, the following courses are recommended as electives. Only 12 CTE credits will count toward AS elective requirements. SFS 102 Firefighter Safety & Survival, SFS 105 Fire Behavior & Combustion I, SFS 210 Fire Investigation, SFS 232 Fire Protection Hydraulics and Water Supply, WF 215 S-215 Fire Operations in the Urban Interface.

For those pursuing the AAS Paramedicine degree as well as the AS Fire Service Administration degree, the following courses are recommended to count as electives. Only 12 CTE credits will count toward AS elective requirements. AH 111 Medical Terminology I, BI 231 Human Anatomy and Physiology I, BI 232 Human Anatomy and Physiology II, BI 233 Human Anatomy and Physiology III, EMT 151 EMT Basic Part A, EMT 152 EMT Basic Part B, EMT 170 Emergency Response Communication/Documentation, EMT 171 Emerg Response Pt Transport, EMT 195 Crisis Intervention.

In addition to standard tuition, student fees and textbooks, students should anticipate the following estimated program costs:
• CPR for Healthcare Provider card $55, must remain current throughout Basic and Paramedic classes
• Background check $55. This will be required prior to Basic and Paramedic classes
• EMT 151 EMT Part A: program uniform shirt $25; FISDAP account $30; lab equipment $27.50; badges $5
• EMT 152 EMT Part B: lab equipment $27.50
• Fee for State Certification Testing and National Registry Test, currently $170-$250
• Materials (boots, ear protection, gloves, etc.) $200-$350
• In some cases fees associated with immunizations $222
• Other special equipment and clothing may be required as part of this program.

VETERINARY TECHNICIAN
Veterinary Technician
Associate of Applied Science

PROGRAM DESCRIPTION
The Veterinary Technician Associate of Applied Science (AAS) degree is a two-year program designed to prepare students to take the Veterinary Technician National Examination (VTNE) to become a Certified Veterinary Technician (CVT). The Veterinary Technician program is accredited by the AVMA Committee on Veterinary Technician Education and Activities as a program for educating veterinary technicians.

The Veterinary Technician program provides education in subjects such as animal husbandry, nursing, nutrition, animal handling, parasitology, hematology, microbiology, radiology, pharmacology, anesthesiology, dental prophylaxis, surgical assisting, office procedures and includes externships designed to give students practical hands-on experience to build on the skills learned in the classroom.

ACCREDITATION
The Central Oregon Community College Veterinary Technician Program is accredited by the American Veterinarian Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA) as a program for educating veterinary technicians.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
• Criminal history check, drug screening, immunization verification $110
• In some cases, immunization cost for Tetanus and Rabies $100-$900
• Supplies, such as scrubs, lab jacket, coveralls, farm boots, stethoscope, thermometer, bandage scissors, wrist watch, name badge, calculator, laptop or tablet computer $300-$500
• Transportation costs are variable

Enrollment Fees
• Student lab fee, per term $300

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
• Required:
  • Students must possess a high school diploma or GED equivalency.
  • The following prerequisite courses must be completed with a "C" grade or higher, with a cumulative GPA of 3.0 or higher prior to applying to the Veterinary Technician program.
    • BI 101 General Biology: Cells & Genes or BI 211 Principles of Biology I
    • GS 105 Physical Science: Chemistry or CH 104 Introduction to Chemistry I MTH 095 Intermediate Algebra or MTH 111 College Algebra
      or higher
  • SP 218 Interpersonal Communication
  • WR 121 Academic Composition
• 40 hours of observation in a veterinary clinic

Other Entrance Requirements
• Required:
  • For a detailed description of admissions requirements, refer to the current year Veterinary Technician Program Admissions Handbook on the Veterinary Technician website. Students must complete a Veterinary Technician program application, which includes completion of the Assessment Technologies Institute Test of Essential Academic Skills (ATI-TEAS) and submit any required documentation as part of their application packet. Admission packets are available at cocc.edu/programs/vet-tech. Applications are accepted biennially during Spring term for admission to the Veterinary Technician program for the following Fall term.
  • Once admitted into the Veterinary Technician program, students will need to complete the following before the start of Fall term:
    • 10 panel urine drug screen
    • Criminal history check
    • Documentation of immunizations
    • Tdap (required)
    • Rabies (recommended)

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
• Students must earn a cumulative 3.0 of higher GPA in prerequisite courses.
• All courses in the program must be completed with a grade of C or higher.
• Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.

Additional Requirements
- Students must enroll full time in all courses listed for each term.
- In order to progress to the next term, students must pass all previous coursework with a grade of 75% or better.
- All Veterinary Technician coursework must be successfully completed prior to entering the clinical practicum courses.

PROGRAM COURSE REQUIREMENTS
Prerequisite Courses

BI 101	General Biology: Cells & Genes	4
or BI 211	Principles of Biology I	
GS 105	Physical Science: Chemistry	4-5
or CH 104	Introduction to Chemistry I	
SP 218	Interpersonal Communication	3
MTH 095	Intermediate Algebra (or MTH 111 or higher)	4
WR 121	Academic Composition	4

40 hours of observation in a veterinary clinic

Core Courses

VT 101	Intro to Veterinary Technician	3
VT 102	Veterinary Terminology	3
VT 103	Animal Hospital and Office Procedures	2
VT 108	Small Animal Nursing	4
VT 110	Parasitology and Pathology	4
VT 111	Hematology and Urinalysis	5
VT 112	Advanced Small Animal Nursing	4
VT 113	Exotic and Lab Animal Medicine	3
VT 114	Pharmaceutical Math	3
VT 116	Pharmacology	4
VT 117	Veterinary Anatomy & Physiology I	6
VT 118	Veterinary Anatomy & Physiology II	5
VT 200	Radiation Safety	2
VT 201	Anesthesiology and Surgery Techniques	4
VT 202	Surgical Nursing and Dentistry	4
VT 203	Large Animal Nursing	4
VT 204	Diagnostic Imaging	3
VT 206	Small Animal Diseases	4
VT 208	Animal Nutrition	2
VT 209	Large Animal Diseases	3
VT 212	Veterinary Microbiology	4
VT 280	Clinical Practicum I	6
VT 281	Clinical Practicum II	4

360 hours on-site at veterinary practices

Total Credits 105-106

ADVISING NOTES
Students are admitted to the Veterinary Technician program through a selective admission process. Admission to the Veterinary Technician program is competitive and enrollment is limited. Program courses must be taken in sequence.

Students are strongly recommended to attend a Veterinary Technician program information session to learn about COCC's Veterinary Technician program and admission requirements prior to application submission. Information session dates and times can be found on the veterinary technician website. Currently, a cohort begins every other Fall term.

This program is intended for students seeking employment as veterinary technicians. These courses are not intended as preparation for a doctor of veterinary medicine degree (see Pre-Vet program). Some courses may transfer to other veterinary technician programs. Please contact your transfer institution for more information.

WILDLAND FIRE/FUELS MANAGEMENT
Wildland Fire/Fuels Management
Associate of Applied Science

PROGRAM DESCRIPTION
The Associate of Applied Science degree in Wildland Fire/Fuels Management is designed to prepare a student for a job in Fire/Fuels management. Students will learn importance of how fire/fuels management fits in the managing of ecosystems and natural resources as one of the more important aspects of fire management, including the reintroduction of fire as an ecosystem process.

ACCREDITATION
National Wildfire Coordinating Group (NWCG), monitored by the Pacific Northwest Coordinating Group (PNWCG)

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Hard hat, gloves, 12" leather boots with Vibram soles, fire clothes, ear protection, eye protection: $250-$500. (Some fire clothes may be provided by the College, check with the program director. Boots will NOT be provided.)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Strongly Recommended:
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II with a grade "C" or better
  - Minimum placement scores resulting in MTH 060 Algebra I/MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra with a grade "C" or better
- Recommended:
  - High school diploma or GED

Other Entrance Requirements
- Required:
  - Current employment with a wildland fire suppression organization

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

FOR 100	Forestry Program Orientation	1
FOR 110	Wildland Fire Science I	2
FOR 111	Forestry Perspectives	4
or SFS 101	Introduction to Emergency Services	
FOR 208	Soils: Sustainable Ecosystems	4
FOR 209	Fire Ecology and Effects	3
FOR 210	Wildland Fire Science II	2
FOR 211	Supervision and Leadership	3
FOR 230A	Map, Compass and GPS	3
FOR 231	GPS Mapping	1
FOR 235	Resource Measurements	4
FOR 236	Aerial Photo	3
FOR 240A	Forest Ecology	3
FOR 241A	Field Dendrology	3
FOR 241B	Dendrology	3
FOR 260	Conservation of Natural Resources	3
FOR 271	Applied Forest Ecology	3
FOR 272	Forest Entomology/Pathology	3

FOR 273	Silviculture and Harvesting Systems	5
GEOG 265	Geographic Information Systems	4
GEOG 273	Spatial Data Collection	5
WF 101	Firefighter Type II Training	3
WF 111	Tactical Decision Simulations	2
WF 290	S-290 Intermediate Wildfire Behavior	3
WF 298	S-390 Fire Behavior Calculation	3
Choose six credits from the Wildland Fire Electives:		6
Any course with a WF prefix		
BA 101	Intro to Business	
FOR 130	Chainsaw Use and Maintenance	
SFS 101	Introduction to Emergency Services	
SFS 102	Firefighter Safety & Survival	

Other Requirements

CIS 120	Computer Concepts (or Computer Competency Test)	0-4
Discipline Studies Course		3-4
HHPA Activity Course		1
HHP 295	Health and Fitness	3
or HHP 242	Stress Management	
or HHP 266	Nutrition for Health	
MTH 085	Technical Mathematics I	4-8
& MTH 086	Technical Mathematics II	
or MTH 111	College Algebra	
Choose one course from the following:		3-4
SP 111	Fundamentals Public Speaking	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	
WR 121	Academic Composition	4

A minimum of 60 days fire-related work experience approved by the Wildland Fire Science director

Total Credits 97-107

ADVISING NOTES

This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

A minimum of 60 days fire-related work experience approved by the Wildland Fire Science director is required for graduation.

All Suppression short courses (S-courses), students will be given National Wildfire Coordinating Group (NWCG) certification.

- Minimum qualifications for entry into the occupation is Firefighter Type II (FFT2) which is offered fall/winter term for the less-than-one-year Firefighter Type II certificate.
- Students will need to be physically fit for employment in the occupation of Wildland Firefighter. For an FFT2 position, students will be required to pass the arduous "pack test" (three miles in 45 minutes carrying 45 pounds).

Because the short courses are sponsored by the East Slope Training region, the short courses (S-courses) are available to students in the following order:
1. Sponsored government and state employees, including structural fire agencies, from within the East Slope Training area;
2. Sponsored government and state employees, including structural fire agencies, from outside the East Slope Training area; and
3. Full-time COCC students/part-time COCC students/private contractors (in that order) who meet the qualifications of the course. Students must provide a copy of training records to the program director.

Wildland Fire Suppression
Certificate of Completion

PROGRAM DESCRIPTION

The one-year certificate is designed to provide basic skills for students interested in working in the wildland fire profession. Courses are open to all students and the certificate takes three terms/quarters to complete for

students attending full time. The Wildland Fire program also offers more extensive training with an Associate of Applied Science (AAS) degree in Wildland Fire/ Fuels Management.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Hard hat, gloves, 12" leather boots with Vibram soles, fire clothes, ear protection, eye protection: $250-$500. (Some fire clothes may be provided by the College, check with the program director. Boots will NOT be provided.)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Strongly Recommended:
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric/Critical Thinking II/WR 095 Basic Writing II with a grade "C" or higher
  - Minimum placement scores resulting in MTH 060 Algebra I/MTH 085 Technical Mathematics I placement or completion of MTH 020 Pre-Algebra with a grade "C" or higher
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

FOR 100	Forestry Program Orientation	1
FOR 110	Wildland Fire Science I	2
FOR 111	Forestry Perspectives	4
or SFS 101	Introduction to Emergency Services	
FOR 211	Supervision and Leadership	3
FOR 230A	Map, Compass and GPS	3
HHPA Activity Course		1
HHP 295	Health and Fitness	3
or HHP 242	Stress Management	
or HHP 266	Nutrition for Health	
WF 101	Firefighter Type II Training	3
WF 103	Safety for Survival	3
or SFS 102	Firefighter Safety & Survival	
WF 111	Tactical Decision Simulations	2
WF 215	S-215 Fire Operations in the Urban Interface	3
WF 290	S-290 Intermediate Wildfire Behavior	3
Choose from the courses below for a total of 4 credits:		4
FOR 130	Chainsaw Use and Maintenance	
Any WF prefix course not required for degree		

Other Requirements

MTH 085	Technical Mathematics I (or higher)	4
WR 121	Academic Composition	4

Total Credits 43

ADVISING NOTES

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.
For all Suppression short courses (S-courses), students will be given National Wildfire Coordinating Group (NWCG) certification.
Minimum qualifications for entry into the occupation is Firefighter Type II (FFT2) which is offered fall/winter term for the less-than-one-year Firefighter Type II certificate.

Students will need to be physically fit for employment in the occupation of wildland firefighter. For an FFT2 position, students will be required to pass the arduous "pack test" (three miles in 45 minutes carrying 45 pounds).

Because the short courses are sponsored by the East Slope Training region, the short courses (S-courses) are available to students in the following order:
1. Sponsored government and state employees, including structural fire agencies, from within the East Slope Training area
2. Sponsored government and state employees, including structural fire agencies, from outside the East Slope Training area; and
3. Full-time COCC students/part-time COCC students/private contractors (in that order) who meet the qualifications of the course. Students must provide a copy of training records to the program director.

Wildland Firefighter Type II
Short term Certificate of Completion

PROGRAM DESCRIPTION
The short-term certificate is designed to provide basic skills for students interested in working in the wildland fire profession. Courses are open to all students and the certificate takes one to two terms/quarters to complete.

Students will meet the standards set forth by the National Wildfire Coordinating Group under the Wildland Qualifications System for the courses that taught using NWCG curriculum and provides certification. The Wildland Fire program also offers more extensive training with a Certificate of Completion in Wildland Fire Suppression as well as an Associate of Applied Science (AAS) degree in Wildland Fire/Fuels Management.

PROGRAM COSTS
(beyond standard tuition/fees and textbooks)
Material Costs
- Hard hat, gloves, 12" leather boots with Vibram soles, fire clothes, ear protection, eye protection: $250-$500. (Some fire clothes may be provided by the College, check with the program director. Boots will NOT be provided.)

PROGRAM ENTRANCE REQUIREMENTS
Academic Entrance Requirements
- Required:
  - Minimum placement scores resulting in WR 121 Academic Composition placement or completion of WR 065 Rhetoric and Critical Thinking II/WR 095 Basic Writing II with a grade "C" or better
  - Minimum placement scores resulting in MTH 060 Algebra I/MTH 085 Technical Mathematics Iplacement or completion of MTH 020 Pre-Algebra with a grade "C" or better
- Recommended:
  - High school diploma or GED

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
Core Courses

FOR 100	Forestry Program Orientation	1
FOR 110	Wildland Fire Science I	2
FOR 111 or SFS 101	Forestry Perspectives Introduction to Emergency Services	4
FOR 230A	Map, Compass and GPS	3
WF 101	Firefighter Type II Training	3
WF 103 or SFS 102	Safety for Survival Firefighter Safety & Survival	3
WF Elective or FOR 130		2-4
	Total Credits 18-20	

ADVISING NOTES
For all Suppression short courses (S-courses), students will be given National Wildfire Coordinating Group (NWCG) certification. Minimum qualifications for entry into the occupation is Firefighter Type II (FFT2) which is offered fall term for the less-than-one-year Firefighter Type II certificate.

Students will need to be physically fit for employment in the occupation of wildland firefighter. For an FFT2 position, students are required to pass the arduous "pack test" (three miles in 45 minutes carrying 45 pounds).

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

WORLD LANGUAGES
World Languages
Associate of Arts Oregon Transfer

FOCUS AREA DESCRIPTION
In today's globally interconnected world and increasingly competitive job market, students with proficiency in more than one language, supported by cultural knowledge and empathetic experience of diverse U.S. and world cultures, have a decided advantage in whatever career they may pursue. Bachelor's degree requirements at most Oregon and other universities include demonstrating proficiency at the second-year level in a world language.

The World Languages and Cultures department offers first- and second-year French, Spanish, German, Italian, Chinese and other courses needed to satisfy lower-division requirements for bachelor's degrees and to prepare transfer students for success in achieving their academic and professional goals. Students seeking a bachelor's degree in French, Spanish, German, Italian, Chinese, or a related degree, or a teaching endorsement featuring world language, literature and culture studies are often best served by pursuing the Associate of Arts Oregon Transfer degree (AAOT).

PROGRAM ENTRANCE REQUIREMENTS
None

PROGRAM PERFORMANCE STANDARDS
Academic Requirements
- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

PROGRAM COURSE REQUIREMENTS
General Education/Foundational
Health

3 credits with HHP or HHPA prefix [1]		3

Mathematics

MTH 105	Math in Society (or higher)	4

Oral Communication

Choose one course from the following: [2]		3-4
SP 111	Fundamentals Public Speaking	
SP 114	Argumentation & Discourse	
SP 115	Intro Intercultural Commun	
SP 218	Interpersonal Communication	
SP 219	Small Group Communication	

Writing

WR 121	Academic Composition	4
WR 122 or WR 227	Argument, Research and Multimodal Composition Technical Writing	4

General Education/Discipline Studies
One course must be designated as Cultural Literacy.

Arts and Letters 9-12
Choose at least three courses from at least two prefixes [3]
Recommend: Second year world language courses [3]

Social Science 12-16
Choose at least four courses from at least two prefixes [4]

Science/Math/Computer Science 12-20
Choose at least four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science

Electives 39
Choose enough electives to reach the minimum of 90 credits required for the AAOT

Total Credits 90-106

[1] HHPA activity courses (1 credit each) are not to be duplicated.
[2] Related course to consider: SP 115 Intro Intercultural Communication
[3] Second-year world language courses fit into this category. Any second-year world language course not used to satisfy this requirement may be counted as an elective. First-year language courses are counted as electives.
[4] Related course to consider: ANTH 240 Language and Culture

ADVISING NOTES
Oregon public universities that offer bachelor's degrees, minors, certificates or endorsements in world languages and related fields:
• Eastern Oregon University
• Oregon State University-Corvallis
• Portland State University
• Southern Oregon University
• University of Oregon
• Western Oregon University

COURSE DESCRIPTIONS

COURSE DESCRIPTIONS

Central Oregon Community College has a diverse selection of transfer and Career and Technical Education (CTE) courses. Prerequisites are specified in many of the course descriptions. It is the student's responsibility to meet the prerequisite conditions before enrolling in the course.

Courses are grouped alphabetically by the subject prefix and then by number. Not every course is offered every term; consult the COCC credit class schedule online (cocc.edu) for details of courses offered by term, format, location and time.

COURSE NUMBERING

Courses with subject names (e.g., MTH 111) and numbered **100–299** are designed to meet COCC certificate or degree requirements.

Courses with subject names (e.g., MTH 065) and numbered **below 100** do not normally transfer to four-year institutions.

Adult continuing education courses offered through Community Learning are non-credit, non-transferrable classes. A schedule of these courses, available through Community Learning, is published prior to each term. This schedule gives city and site locations for Community Learning classes throughout the College district.

HOW TO READ A COURSE DESCRIPTION

COURSE LISTING

EXPLANATION

BA 220 – BUSINESS ANALYSIS AND BUDGETING

This course is designed to develop mathematical analytical skills in performing the daily tasks of a manager or salesperson. The course has a threefold focus: strengthening understanding and use of business terminology in regards to financial information; development of spreadsheet skills in evaluating the costing, pricing and financing strategies of products and services; and development of skills in evaluating and making budgeting, financial and investment decisions. This is a hands-on, skills-oriented course. Prerequisites: BA 104, CIS 131, BA 112. Recommended preparation: CIS 125E.
Credits: 4   Lecture: 3 Other: 2

The **course number** and the **title of the course** are listed in all capital letters.

The **course description** briefly summarizes the course content.

Prerequisites, (or instructor's approval) if any, are listed by course number after the course description. It is important to note prerequisites prior to registering. A prerequisite is a course that must be completed with a "C" grade or better. A **prerequisite with concurrency** is a course which must be completed prior to or while attending the selected course. A **corequisite** is a course which must be completed while attending the selected course.

The content in the stated course is **recommended** beforehand for student success in the selected course, but is not required for registration.

The number of **credits** earned by taking the course and the number of hours per week in **lecture** and **labs** or **other**.

ALLIED HEALTH

AH 111 - MEDICAL TERMINOLOGY I
Covers terminology pertaining to medical term construction, body structure, integumentary, hematopoietic/lymph, cardiovascular, oncology, respiratory and musculoskeletal systems. Includes standard abbreviations, anatomic, diagnostic, symptomatic and operative terms related to these body systems. Students (online and face-to-face) must pass a face-to-face written final exam at 70% or higher to pass this class. The overall grade parameter to pass this class is "C" (75%) or higher.
Credits: 3   Lecture: 3

AH 112 - MEDICAL TERMINOLOGY II
The second of a two-quarter sequence that provides continuity from AH 111 in medical terminology used in the health sciences that pertain to the human body. This course studies neurologic terms and disorders; the digestive system; urogenital system; endocrine system; gynecologic and obstetric terminology; fetal and neonatal disorders and anomalies; terminology relating to psychiatry, anesthesia, pharmacology, and emergency medicine; and the sense organs of sight and hearing. Students (online and face-to-face) must pass a face-to-face, written final exam at 70% or higher to pass this class. The overall grade parameter to pass this class is "C" (75%) or higher. Prerequisites: AH 111.
Credits: 3   Lecture: 3

AH 113 - INTRODUCTION TO THE STUDY OF DISEASE
Reviews abnormal pathological changes that occur within individual organs and body systems as the result of a disease process. Disease processes are studied in detail with regard to the cause, pathological features, physical signs and symptoms, diagnostic procedures, current preferred treatment, prognosis and pertinent public health issues. Recommended preparation: or to be taken with BI 122 or BI 233.
Credits: 5   Lecture: 5

AH 115 - CULTURAL RESPONSIVENESS IN ALLIED HEALTH
Highlights the impact of cultural differences on both the patient and the caregiver. Examines the major categories of diversity, language, heritage, biases, and stereotypes and how these might impact patient care. Examines how knowledge of diversity issues can be essential to the caregiver in communication and treatment. Prerequisites: WR 121.
Credits: 3   Lecture: 3

AH 199 - SPECIAL TOPICS: ALLIED HEALTH
This course is in development. Reserved for courses that cover topics of general interest in health occupations.
Credits: 1 to 3

AH 205 - MEDICAL ETHICS
Explores the relation of traditional ethical precepts to current biomedical ethical controversies. Open to all students without prerequisites, but recommended primarily for students enrolled in, or planning to enroll in, programs in nursing or other health care professions. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

AH 299 - SELECTED TOPICS: ALLIED HEALTH
This course is in development.
Credits: 1 to 4

ANTHROPOLOGY

ANTH 102 - ARCHAEOLOGY
Provides an introduction to archaeological method and theory along with a survey of human world prehistory through the rise of great civilizations. In this course we will address questions relevant to the practice of archaeology: What is archaeology? Why do archaeologists dig holes? How do archaeologists know where to dig? What is material culture? How do archaeologists analyze and understand what they find? Topics include archaeological concepts, survey, excavation, analysis and

interpretation of data, dating techniques, research methods and theories of cultural change.
Credits: 4   Lecture: 4

ANTH 103 - CULTURAL ANTHROPOLOGY
Provides an introduction to the diversity of human beliefs and behaviors around the world. Explores cross-cultural similarities and differences in systems of values, family, religion, economics, politics, and social structure, including issues of race and ethnicity. The goals of this course are to foster an appreciation of cultural diversity, to use this appreciation to better understand the student's culture(s) and to learn to be active and aware participants of local and global communities.
Credits: 4   Lecture: 4

ANTH 141 - FILM & SOCIETY: RACE, GENDER AND CLASS
Examines the representation of race, social class and gender in film. Special attention is given to how particular representations reflect the broader historical context surrounding when the films were produced and culturally-based audience sentiments. Anthropological and sociological analyses of the films will be provided to give a multi-disciplinary account of how films reflect, create and support various ideological positions regarding race, class and gender. This course is also offered as SOC 141; students cannot use credit from both courses.
Credits: 2   Lecture: 1 Lab: 3

ANTH 142 - FILM & SOCIETY: GLOBAL CULTURES
Examines global issues in both foreign and domestic films from sociological and anthropological perspectives. Selected films cover topics that are relevant to understanding global processes such as global economy and Islam in the contemporary world, as well as films that address the more regionally localized processes of community and family. The purpose of the course is to use film to expose students to diverse perspectives and to encourage the critical awareness of the global interconnections that influence and constrain our modern lives. Films will include documentaries, as well as feature films.
Credits: 2   Lecture: 1 Lab: 3

ANTH 143 - FILM & SOCIETY: CONTEMPORARY ISSUES
Examines contemporary issues in film from sociological and anthropological perspectives. Selected films cover such topics as youth culture, nationalism, local culture and poverty, mental health or other social problems. The content of the films, as well as issues of film production, historical context and audience reception will be the major focus of analysis.
Credits: 2   Lecture: 1 Lab: 3

ANTH 188 - SPECIAL STUDIES: ANTHROPOLOGY
Explores topics of current interest in the discipline.
Credits: 1 to 4

ANTH 199 - SELECTED TOPICS: ANTHROPOLOGY
This course is in development.
Credits: 1 to 4

ANTH 202 - ARCHAEOLOGY OF OREGON
Investigates the diverse nature of Oregon archaeology. Prehistoric patterns of human occupation in five distinct regions will be analyzed: the Great Basin, Columbia Plateau, Lower Columbia and Coast, Willamette Valley and the Southwestern Mountains. Furthermore, the course will investigate how the diversity of eco-scapes within Oregon shaped the manner in which humans culturally, technologically and spiritually adapted to their environments. Recommended preparation: WR 121 and ANTH 102.
Credits: 4   Lecture: 4

ANTH 234 - BIOLOGICAL ANTHROPOLOGY
An introduction to biological anthropology. The goal of this course is to achieve the basic scientific literacy necessary to understand and think critically about contemporary human variation, bio-cultural interactions, and five million years of human evolution. It examines the biological evidence for human evolution and population variation. Lecture topics include the mechanisms of evolution, cell biology and human genetics,

primate behavior, the human fossil record, and modern human variation and adaptations.
Credits: 4   Lecture: 3 Lab: 3

ANTH 235 - EVOLUTION OF HUMAN SEXUALITY
Examines the complex interplay between culture and biology in human sexual behavior with particular attention to anatomy and physiology as traits that have evolved from our primate and mammalian ancestors. Focus will be on theoretical issues in evolution and the implications of these theoretical models on human behavior. Topics include human mating systems across cultures, sexual selection, reproduction, physiological and hormonal processes, as well as the non-reproductive aspects of human sexuality and the physiological and hormonal processes of sexuality. Recommended preparation: ANTH 234.
Credits: 4   Lecture: 4

ANTH 237 - FORENSIC ANTHROPOLOGY
This course teaches the basic analysis of human remains for the medico-legal profession, and will cover the history of the discipline, the human skeleton, determining postmortem interval, trauma evaluation and individual identification. It will also cover the investigation of crime scenes, the role of the forensic anthropologist, and case studies from a number of various situations. Recommended preparation: ANTH 234.
Credits: 4   Lecture: 4

ANTH 240 - LANGUAGE AND CULTURE
An introduction to the relationship between communication and culture. Designed to help students become familiar with and understand the mechanics of language from brain structure to how we make sounds; cross-cultural and historical variations between and within communicative systems; and language as a form of social interaction, specifically exploring the complex and diverse relationships between language, socio-cultural, politics and identity. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ANTH 250 - FOOD AND CULTURE
Provides an introduction to the diversity of food ways and the cultural significance of food and eating around the world. Topics explored will include food rules and rituals, consumption and health, food movements, food scarcity and poverty, global movement of foods, as well as the gendered dimensions of food and eating, with particular focus on body and body image. By the end of the course, students will have gained a broad-ranging familiarity with the cultural, political and economic aspects of past and present human food systems and be able to recognize and analyze the social linkages and hierarchies embedded in food systems. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ANTH 254 - MAGIC, WITCHCRAFT, RELIGION
Introduces students to the subject of religion in the broad anthropological context, contributes to a deeper awareness of diverse expressions of religious faith in a multicultural world, and promotes openness to and tolerance of world views different from the student's own. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ANTH 283 - INTRODUCTION TO MEDICAL ANTHROPOLOGY
Introduces the main theories, concepts, and methods of exploring health, illness, disease and health care systems from a medical anthropological perspective. Uses a cultural interpretive approach to explore health beliefs, healing practices, and healer's and patient's roles within the context of world health care systems. Includes an examination of the biomedical model of health care as a cultural construct created through Western belief systems. P/NP grading. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ANTH 295 - GENDER AND SEXUALITY IN AN ANTHROPOLOGICAL PERSPECTIVE
Examines the constructions of femininities, masculinities and sexualities from a cross-cultural perspective. The cross-cultural focus will provide students with the comparative framework necessary to understand the diversity of gender roles within the context of specific cultural, political and economic processes. While exploring how both Western and non-Western cultures from diverse parts of the world imagine, negotiate, and even contest gender identities and relations, this course will also address key theoretical issues and anthropological approaches to understanding gender. Recommended preparation: WR 121 and ANTH 103.
Credits: 4   Lecture: 4

ANTH 298 - INDEPENDENT STUDY: ANTHROPOLOGY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

ANTH 299 - SELECTED TOPICS: ANTHROPOLOGY
This course is in development.
Credits: 1 to 4

APPRENTICESHIP

APR 101 - ELEC/MFG PLANT 1 - BASIC ELECTRIC THEORY
Students will be introduced to content in trade math, fundamental concepts of electricity, resistance, Ohm's law, series circuits, parallel circuits, grounding, grounding electrode systems, and the National Electrical Code. This course will be taught in a lecture/lab format with hands-on use of meters, power supplies, relays and switches.
Credits: 4   Other: 8.4

APR 102 - ELEC/MFG PLANT 2 - BASIC WIRING
This course includes principles of inductance, capacitance, transformer fundamentals, generator fundamentals, electric motors, enclosure grounding, and the National Electrical Code as it applies to these topics. This course will be taught in a lecture/lab format, with labs demonstrating the electrical functions of the various elements.
Credits: 4   Other: 8.4

APR 103 - ELEC/MFG PLANT 3 - INDUSTRIAL WIRING
Students will be introduced to commercial building plans and specs, reading drawings, branch and feeder circuits, appliance circuits, lighting circuits, panel boards, protection circuits, cooling systems, and the National Electrical Code as it applies to these topics. This course will be taught in a lecture/lab format, with a field trip to either a hospital, a newspaper publishing facility or a mill.
Credits: 4   Other: 8.4

APR 104 - ELEC/MFG PLANT 4 - COMMERCIAL WIRING
Course content includes industrial plans and site work, substations, panel boards and feeders, wire tables, determining conductor size, motors, controllers, ventilating, system protection, site lighting hazards, programmable logic controllers, and the National Electric Code as it applies to these topics. This course will be taught in a lecture/lab format, with labs to include hands-on PLC programming and ladder logic development.
Credits: 4   Other: 8.4

APR 111M - METERING BASICS
This course is an introduction to electrical trade theory for Meterman Apprentices and will review math concepts including percentages, scientific notation, metric prefixes, ratios, proportions, and equations. Apprentices will also be introduced to electrical topics such as current, voltage, resistance, Ohm's Law, power, DC series and parallel circuits. Lastly students will learn about single phase metering, Blondel's Theorem, metering vocabulary, single phase transformers and working safely within the electric field.
Credits: 4   Other: 8.4

APR 118M - TRANSFORMER CONNECTIONS
This course is designed to instruct Meterperson Apprentices on the fundamentals of transformer bank connections: delta-delta, wye-wye, wye-delta and single-phase regulators. Apprentices will also learn about

conditions that can cause back feed, while continuing to learn about single phase metering.
Credits: 4 Other: 8

APR 121 - BOILER OPERATOR 1 - STATIONARY ENGINE PRINCIPLES
The course will cover stationary engineering principles, boiler types and accessories, and trade math.
Credits: 4 Other: 8.4

APR 121M - METERING FUNDAMENTALS I
This course is designed to instruct second year Meterperson Apprentices on the fundamentals of AC theory. This includes: DC review, trigonometry review, RC, RL, TLC circuits, series and parallel resonance. Apprentices also learn about self-contained three phase metering and refining what they have already learned about single phase metering.
Credits: 4 Other: 8

APR 122 - BOILER OPERATOR 2 - BOILER ACCESSORIES
The course content will cover boiler accessories, fuel burning equipment, combustion and draft controls.
Credits: 4 Other: 8.4

APR 122M - METERING FUNDAMENTALS II
This course is designed to instruct second year Meterperson Apprentices on the graphic representation of system parameters (i.e. currents & voltages) and various transformer line-ups that create those parameters. Apprentices learn how to apply mathematical and vectoral approaches for deriving the values of Real, Apparent and Reactive Power in a electrical service. Additionally they learn about instrument rated three phase metering and refining what they have already learned about self-contained three phase metering.
Credits: 4 Other: 8

APR 141 - SHEET METAL CORE CURRICULUM
This course is an introduction to construction and maintenance skills used in various crafts. Basic concepts in safety, math, tools, blueprints and rigging are examined this first term. In addition, employment opportunities will be explored through various apprenticeship trades.
Credits: 4 Other: 8

APR 142 - SHEET METAL I
This course presents related training material consistent with the minimum skill requirements of the sheet metal trade. The content includes elements of trade specific tools and fundamentals of duct layout and safety as it relates to the sheet metal trade.
Credits: 4 Other: 8

APR 143 - BASIC LAYOUT
Introduction to trade, terminology, trade math, tools, shop safety, shop equipment, basic layout of duct work and fittings.
Credits: 4 Other: 8

APR 144 - SHEET METAL MATH
Covers fractions and decimals, geometric shapes, equation solutions, ratios and proportions, perimeters, areas and volumes of geometric shapes; powers and use of the scientific calculator. Emphasis is on applications to applied sheet metal fabricators. There will be lab time in the class to work on assignments.
Credits: 4 Other: 8

APR 145 - BLUEPRINT READING
Introduction to blueprint reading, drafting blueprints, scaling existing buildings and drafting mechanical systems.
Credits: 4 Other: 8

APR 146 - ARCHITECTURAL SHEET METAL
The study of architectural sheet metal in the context of today's industry. The course of study includes the following: discovery of various types of materials; study profiles of roofing panels, water conductors, various types of roof flashings; related trades that are integral with this trade; the philosophy of layout in the field; and the application of actual

installations, safety equipment and practices applicable to the trade.
Credits: 4 Other: 8

APR 201 - ELEC/MFG PLANT 5 - MOTOR CONTROLS
Course of study includes reversing circuits applied to motors, power distribution systems, transformers, electronic control devices, relays, photoelectric and proximity controls, programmable controllers, starters, preventive maintenance and the National Electric Code as it applies to these topics. This course is taught in a lecture/lab format, with labs covering wiring and operation of listed equipment to control a small motor.
Credits: 4 Other: 8.4

APR 202 - ELEC/MFG PLANT 6 - MOTOR CONTROLS/CIRCUITS
Course of study includes reversing circuits applied to motors, power distribution systems, transformers, electronic control devices, relays, photoelectric and proximity controls, programmable controllers, starters, preventive maintenance, and the National Electric Code as it applies to these topics. This course will be taught in a lecture/lab format, with the lab portion including the demonstration of and hands on programming of variable speed drives.
Credits: 4 Other: 8.4

APR 203 - ELEC/MFG PLANT 7 - MOTOR APPLICATIONS
Topics include safety, commercial and residential calculations; wiring methods; related theory and the National Electric Code as it applies to these topics. This course will be taught in a lecture/lab format. Lab will include field trip to a commercial building with walk-through of service equipment and heating/cooling equipment.
Credits: 4 Other: 8.4

APR 204 - ELEC/MFG PLANT 8 - NEC CODE
Topics include theory and application of motor controls, solid state fundamentals, special termination, layout, hazardous locations and transformer locations, operation and maintenance of high voltage switchgear and starters, and a thorough review of the National Electric Code. This course will be taught in a lecture/lab format, with students having the opportunity to take practice quizzes and practice code exams.
Credits: 4 Other: 8.4

APR 221 - BOILER OPERATOR 3 - BOILER OPERATION
The course content will include boiler operation, maintenance, water treatment and boiler room safety.
Credits: 4 Other: 8.4

APR 222 - BOILER OPERATOR 4 - STEAM USAGE
The course content includes steam usage and management, basic electricity principles and basic knowledge of steam turbines.
Credits: 4 Other: 8.4

APR 223 - TURBINE OPERATOR 1 - APPLIED MECHANICS
The course content will include mathematics, mensuration, applied mechanics, thermodynamics, steam and internal combustion engines, steam and gas turbines, refrigeration, air compression and lubrication.
Credits: 4 Other: 8.4

APR 224 - TURBINE OPERATOR 2 - INSTRUMENTATION
The course content will include basic electricity, electronics and control instrumentation, fluid mechanics, pumps, power plant piping systems, air compressors and different types of power plants.
Credits: 4 Other: 8.4

APR 225 - TURBINE OPERATOR 3 - THERMODYNAMICS
The course content will include internal combustion engines, lubrication, thermodynamics, heat engines, steam engines and steam and gas turbines.
Credits: 4 Other: 8.4

APR 226 - TURBINE OPERATOR 4 - ELECTRICAL THEORY
The course content will include electrical theory, AC and DC electrical machines, transformers and rectifiers, steam turbine theory, construction of steam turbines, and steam turbine and condenser operation and maintenance.
Credits: 4 Other: 8.4

APR 231M - METERING ADVANCED I

This course is designed to instruct third-year apprentices on the subject of advanced metering, including the following: history of metering (past, present and future), review of meter vectoring, polyphase vectoring, self-contained meters, instrument rated meters, instrument transformers (Current and Voltage) and their application. While learning about Primary metering and refining what they have already learned about instrument rated three phase metering.
Credits: 4   Other: 8

APR 232M - METERING ADVANCED II

This course is designed to instruct third-year Meterperson Apprentices on the subject of advance fundamentals of metering including: billing rates, demand metering, Kilovolt-Ampere-Reactance (KVAR) and Kilovolt Ampere (KVA) metering, special metering, net metering, and pulse metering (pulse weights, pulse initiation, and totalization). Additionally apprentices will learn about different types of meter test equipment, AMI/AMR, Telemetry and Smart grid.
Credits: 4   Other: 8

APR 241 - BUILDING CODES AND INSTALLATION MANUALS

This course is an overview of the mechanical codes as related to the HVAC industry in commercial and residential applications. In addition, installation manuals will be explored as to proper installation and usage of HVAC equipment. During the term there will be three field trips to visit job sites where students will identify code applications and violations.
Credits: 4   Other: 8

APR 242 - DUCT FABRICATION/DESIGN

Introduction to duct design, different styles of duct design, and multilevel duct system design. Heat loss, heat gain calculations and instruction on use of duct calculators.
Credits: 4   Other: 8

APR 243 - GENERAL FABRICATION

This course is the study of the sheet metal trade as it is applied to general-needs metal work. The work studied is that outside of the traditional HVAC and architectural scope as studied in previous terms with a broader base of skills to be learned, such as custom, decorative and artistic finished products.
Credits: 4   Other: 8

APR 244 - PROJECT SUPERVISION

Introduction to construction management skills as they apply to project supervision.
Credits: 4   Other: 8

ART

ART 101 - INTRODUCTION TO THE VISUAL ARTS

Introduces approaches to the understanding and appreciation of the visual arts. Provides a foundation in the basic concepts, vocabulary of the elements and principles of design as well as materials, methods and processes. A wide variety of artworks are explored. May include some hands-on experience with various mediums.
Credits: 4   Lecture: 4

ART 110 - INTRODUCTION TO GRAPHIC DESIGN

Students will use standard graphic design applications such as Adobe Illustrator and Photoshop for drawing and page layout purposes for art, design and the web.
Credits: 3   Other: 6

ART 115 - BASIC DESIGN: 2-D

Introduction to theory and studio practice using the elements of line, value, shape and texture with the principles of organization to articulate visual ideas in black and white.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 116 - BASIC DESIGN: COLOR

Introduction to color theory and studio practice using value, hue and intensity with the elements of line, shape, texture and the principles of organization to articulate visual ideas with two-dimensional color design problems.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 117 - BASIC DESIGN: 3-D

Explores elements and principles of design through hands-on experience to make three-dimensional constructions from inexpensive materials. A foundation course for students interested in ceramics, sculpture and other three-dimensional design fields.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 121 - CERAMICS: INTRODUCTORY HAND BUILDING

Introduces basic hand building skills, simple glaze application and an understanding of fundamental ceramic processes, for students with little or no experience. Includes presentation of historical, cultural and contemporary trends in ceramics. Students should plan on at least one term of this course and one term of Introductory Wheel Throwing before advancing to Intermediate Ceramics and beyond. May be repeated up to 9 credits. Recommended preparation: ART 117 and ART 131.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 122 - CERAMICS: INTRODUCTORY WHEEL THROWING

Introduces basic wheel throwing skills, simple glaze application and an understanding of fundamental ceramic processes, for students with little or no experience. Includes presentation of historical, cultural and contemporary trends in ceramics. Students should plan on at least one term of this course and one term of Introductory Hand Building before advancing to Intermediate Ceramics and beyond. May be repeated up to 9 credits. Recommended preparation: ART 117 and ART 131.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 131 - DRAWING I

Emphasis on observing and developing fundamental drawing and composition skills. Still life material used extensively. Recommended preparation: ART 115.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 132 - DRAWING II

Concepts and skills developed in ART 131 will be applied to introduction to drawing the figure and portraits. Recommended preparation: ART 131.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 133 - DRAWING III

Emphasis on landscape drawing and creative expression working with a broader range of media. Recommended preparation: ART 131.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 157 - METALCRAFT I

Basic skills necessary to work nonferrous metals plus hot and cold fabrication, forging, texturing and cabochon stone-setting are included in the metalwork sequence. Projects can be jewelry, hollowware or small sculpture. Development of imaginative ideas and personal aesthetic direction is expected. Experimentation and invention is encouraged. Should be taken in sequence. Recommended preparation: MTH 060.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 157A1 - METALWORK & JEWELRY - HOT FABRICATION I

Introduction to the basic skills used to fabricate non-ferrous metals including silver, copper and copper alloys to make jewelry or other small metal objects. Projects will be joined using high temperature silver solder and natural gas/compressed air torches as the heat source. Additional instruction includes developing designs, annealing, drilling, sawing, filing, texturing, dapping and finishing techniques.
Credits: 2   Lecture: 1 Lab: 3

ART 157A2 - METALWORK & JEWELRY - HOT FABRICATION II

Builds the skills learned in ART 157A1. Students will develop soldering skill by designing more complex and dimensional projects. Bezel setting a cabochon stone, making hinges and more complex forming techniques

and texturing methods will also be included. Recommended preparation: ART 157A1.
Credits: 2   Lecture: 1 Lab: 3

ART 157B1 - METALWORK & JEWELRY - COLD FABRICATION I
Introduction to the basic skills used to fabricate non-ferrous metals including silver, copper and copper alloys to make jewelry or other small metal objects. Projects will be joined using rivets, tabs, links and other methods of cold connections. Additional instruction includes developing design, annealing, drilling, sawing, filing, texturing, dapping and finishing techniques.
Credits: 2   Lecture: 1 Lab: 3

ART 157B2 - METALWORK & JEWELRY - COLD FABRICATION II
Builds the skills learned in ART 157B1 with more challenging project assignments. Students will develop technical skills by designing projects, which include simple forming techniques, moving parts, incorporating found objects and/or stone settings. Recommended preparation: ART 157B1.
Credits: 2   Lecture: 1 Lab: 3

ART 157C1 - JEWELRY - PRECIOUS METAL CLAY I
An introduction to working with Precious Metal Clay (PMC) to make fine silver jewelry. The course will include designing projects, making a texture stamp, manipulation and joining techniques for both soft and unfired PMC, kiln firing and finishing techniques.
Credits: 1   Other: 2

ART 158B1 - JEWELRY - CASTING & CHAIN MAKING I
An introduction to centrifugal lost wax casting process. Additive and subtractive methods will be used to sculpt small-scale wax models, which will be sprued, invested and cast. Fusing links to weave simple chains and finishing techniques will be included.
Credits: 2   Lecture: 1 Lab: 3

ART 158B2 - JEWELRY - CASTING & CHAIN MAKING II
Builds on the skills learned in ART 158B1. It will include centrifugal, vacuum, cuttlebone casting and sand casting. The use of molds to duplicate textures to transfer onto wax, creating stone settings in wax, controlling the wax burn-out and weaving complex linked chains will be included. Recommended preparation: ART 158B1 and ART 157A1.
Credits: 2   Lecture: 1 Lab: 3

ART 158C1 - JEWELRY - ENAMELING I
Basic introduction to enameling on copper and fine silver. Techniques for texturing, using stencils, sifting and wet-packing enamel, adding foils, kiln firing, cold connecting and finishing techniques will be included.
Credits: 1   Other: 2

ART 158C2 - JEWELRY - ENAMELING II
Builds on the skills learned in ART 158C1. Techniques of champleve, cloisonne, image transfer and fusing the enamel with a torch will be included. Recommended preparation: ART 158C1 and ART 157A1.
Credits: 1   Other: 2

ART 159A1 - METALWORK & JEWELRY - FORMING I
Students will make non-ferrous metal projects which include a third dimension. The projects can be fabricated jewelry, containers, or small-scale sculpture made using folding, scoring, chasing and repousse, or other metalworking techniques used to form sheet metal. Projects may include the use of hot and/or cold connections and non-metal materials. Recommended preparation: ART 157A1.
Credits: 2   Lecture: 1 Lab: 3

ART 159A2 - METALWORK & JEWELRY - FORMING II
Builds on the skills learned in ART 159A1. The projects can be fabricated from sheet metal using angle raising, shell forming, hydraulic-press forming and electro-forming. Projects may include the use of hot and/or cold connections and non-metal materials. Recommended preparation: ART 157A1 and ART 159A1.
Credits: 2   Lecture: 1 Lab: 3

ART 159B2 - METALWORK & JEWELRY - ETCHING & HYDRAULIC PRESS II
Builds on the skills learned in ART 159B1. Etching resists will include markers, oil paint and asphaltum varnish as resists for copper. Non-conforming carved acrylic and liquid steel conforming dies will be made to form the etched metal using the hydraulic press. Recommended preparation: ART 159B1 and either ART 157A1 or ART 157B1.
Credits: 2   Lecture: 1 Lab: 3

ART 159C1 - JEWELRY - PRECIOUS METAL CLAY & ENAMELING I
Focuses on improving designs for fine silver precious metal clay. The fired projects will be enhanced with enamel to add color and then fired again to fuse the enamel. Recommended preparation: ART 157C1.
Credits: 2   Lecture: 1 Lab: 3

ART 159C2 - JEWELRY - PRECIOUS METAL CLAY & ENAMELING II
Focuses on designing projects to create recesses in the precious metal clay. After firing the PMC, enamel is placed in the depressions. The project is fired again to fuse the enamel. Cold connections and adding gold will also be covered. Recommended preparation: ART 159C1.
Credits: 2   Lecture: 1 Lab: 3

ART 161 - PHOTOGRAPHY I
Introduction to traditional black and white film photography including camera operation, composition, film processing, printing and presentation. Emphasis is on creative problem solving and understanding the basic photographic concepts used to create good visual communication. Weekly photo assignments will require shooting outside of class, as will text readings. In-class critiques of work are a major part of this course. Recommended preparation: ART 115.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 162 - PHOTOGRAPHY II
Introduction to black and white fine printing in the traditional wet darkroom. Course includes a basic overview of the Zone System, with the goal of "pre-visualizing" a scene as a finished photograph being an expected outcome. Students work with fiber-base printing paper, print bleaching, toning, archival print finishing and other advanced techniques to create an expressive print statement. Creative problem solving and development of personal vision are a course emphasis. Weekly shooting and printing assignments, class critiques and a final project are part of the course. Recommended preparation: ART 161.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 163 - PHOTOGRAPHY III
An exploration of alternative darkroom processes including hand coloring, multiple image printing, selective/multiple toning, "solarization" (Sabattier effect), negative prints and more. A course goal is to use a "post-visualization" approach, allowing students to evolve visual communication beyond what was initially conceived in the field. Creative problem solving and development of personal vision are emphasized. Weekly printing assignments, class critiques and a final project are part of the course. Recommended preparation: ART 161.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 181 - PAINTING I
Introduction to materials and techniques using alkyd oil, acrylic and/or water-soluble oil paints, building canvas supports, stretching canvas and preparing painting grounds. Studio experience using still life, self-portrait, landscape and the figure. Recommended preparation: ART 115, ART 131 or instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 182 - PAINTING II
Introduction to color theory and personal expression. Studio experience using still life, portrait, figure and landscape. Application of compositional principles using the grid, sequential imagery and continuous field. Recommended preparation: ART 131 and ART 181 or instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 183 - PAINTING III
Exploration of personal iconography. Studio experience using still life, landscape, figure in context, abstract spatial and abstract geometric. Recommended preparation: ART 131 and ART 182 or instructor approval.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 184 - WATERCOLOR I
Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 185 - WATERCOLOR II
Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence. Recommended preparation: ART 131 and ART 184 or instructor approval.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 186 - WATERCOLOR III
Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence. Recommended preparation: ART 131 and ART 185 or instructor approval.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 188 - SPECIAL STUDIES: ART
Explores topics of current interest in the discipline.
Credits: 1 to 4

ART 190 - FIGURATIVE CLAY SCULPTURE
Introduction to modeling the human form in clay from clothed and unclothed models using traditional additive and subtractive processes. Historical treatments of the figure and contemporary approaches will be referenced. Recommended preparation: ART 131 and ART 154.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 191 - SCULPTURE
Studio introduction to articulation of visual ideas in three dimensions using additive, subtractive and construction processes. Recommended preparation: ART 117.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 197 - ART PORTFOLIO CREATION
Art Portfolio Creation prepares students for the business and professional art world. Students will create both digital and hard-copy portfolios while learning about public relations, marketing, promoting, business guidelines, time management, contracts, presentations, goal setting, long-term inspiration and commitment to their craft, as well as exhibition hanging, timelines and reception set-ups. Students will review art school requirements and learn how to fill out applications for art schools, residencies, grants and art scholarships. This course also includes practical experience in art exhibitions in the Pence Gallery at Pinckney Center.
Credits: 2   **Lecture:** 2

ART 199 - SELECTED TOPICS: ART
This course is in development.
Credits: 1 to 3

ART 231 - DRAWING IV
Application of drawing skills with increased emphasis on individual direction and creative expression. Should be taken in sequence. Recommended preparation: ART 131, ART 132, ART 133.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 232 - DRAWING V
Application of drawing skills with increased emphasis on individual direction and creative expression. Should be taken in sequence. Recommended preparation: ART 231.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 233 - DRAWING VI
Application of drawing skills with increased emphasis on individual direction and creative expression. Should be taken in sequence. Recommended preparation: ART 232.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 234 - FIGURE DRAWING I
Studio introduction to drawing the clothed and unclothed figure using a variety of techniques and media. Recommended preparation: ART 131 or instructor approval.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 235 - FIGURE DRAWING II
Studio introduction to drawing the clothed and unclothed figure using a variety of techniques and media. Recommended preparation: ART 234 or instructor approval.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 236 - FIGURE DRAWING III
Studio introduction to drawing the clothed and unclothed figure using a variety of techniques and media. Recommended preparation: ART 235 or instructor approval.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 252 - CERAMICS: INTERMEDIATE WHEEL THROWING
Enhances ceramic wheel throwing skills, with an emphasis on complex functional forms, as well as the understanding of glaze formulation, testing and kiln firing. Includes presentation of historical, cultural and contemporary trends in ceramics. May be repeated up to 9 credits. Recommended preparation: ART 121 and ART 122.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 253 - CERAMICS: INTERMEDIATE CERAMICS
Enhances ceramic hand building and wheel throwing skills. Continued focus on complex thrown and hand built forms with attention to design elements, as well as the understanding of glaze formulation, testing and kiln firing. Includes presentation of historical, cultural and contemporary trends in ceramics. Independent development of a unique body of work, for presentation/exhibition, is expected. May be repeated up to 9 credits. Recommended preparation: ART 121 and ART 122.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 257 - METALCRAFT IV
Skills to work nonferrous metals such as hydraulic press, enameling, granulation, reticulation, electro-forming, fold forming, chasing and repousse, angle-raising, and fabricated hollowware are included. Projects can be jewelry, hollowware or small sculpture. Development of imaginative ideas and personal aesthetic direction is expected. Experimentation and invention are encouraged. Recommended preparation: ART 159 and ART 117.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 258 - METALCRAFT V
Skills to work nonferrous metals such as hydraulic press, enameling, granulation, reticulation, electro-forming, fold forming, chasing and repousse, angle-raising, and fabricated hollowware are included. Projects can be jewelry, hollowware or small sculpture. Development of imaginative ideas and personal aesthetic direction is expected. Experimentation and invention are encouraged. Recommended preparation: ART 257 and ART 117.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 259 - METALCRAFT VI
Skills to work nonferrous metals such as hydraulic press, enameling, granulation, reticulation, electro-forming, fold forming, chasing and repousse, angle-raising, and fabricated hollowware are included. Projects can be jewelry, hollowware and small sculpture. Development of imaginative ideas and personal aesthetic direction is expected. Experimentation and invention is encouraged. Should be taken in sequence. Recommended preparation: ART 117 and ART 158.
Credits: 3   **Lecture:** 1.5 **Lab:** 4.5

ART 261 - DARKROOM PHOTOGRAPHY

This course is an application of darkroom photography. Students must have prior knowledge of traditional black and white film photography including: camera operation, film processing and darkroom printing. Emphasis is on creative problem solving and understanding the photographic concepts used to create good visual communication. Requirements include outside-of-class shooting, and independent in-lab processing and printing. In-class photo critiques of work and a hanging of work are a major part of this course. Recommended preparation: ART 161.
Credits: 3   Lecture: 2 Lab: 3

ART 265 - DIGITAL PHOTOGRAPHY

Introduces students to the basics of composition and camera settings and provides an understanding of digital photo-editing for the purpose of creating successful landscape, portrait, montage and other photographic forms. Students must own a digital camera.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 266 - RAKU-SPECIAL TOPICS

Short course focusing on the raku firing process. Recommended preparation: ART 154.
Credits: 2   Lecture: 1 Lab: 3

ART 267 - DIGITAL PHOTOGRAPHY II

This course is an intermediate continuation of digital photography including: the zone system technique for image exposure; advanced photo-editing techniques; lighting concepts; and presentation. Emphasis is on creative problem solving and mastering the basic photographic concepts used to create good visual communication. Requirements include outside-of-class shooting, as well as readings. In-class photo labs and critiques of work are a major part of this course. Recommended preparation: ART 265.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 270 - PRINTMAKING

Students will practice printmaking, including relief, intaglio process on an individual project basis. Processes and materials are presented for students to complete four to five hand-pulled prints. All projects serve as an introduction to various printmaking methods and reproduction printing techniques. Recommended preparation: ART 131.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 281 - PAINTING IV

Introduction to materials and techniques using alkyd oil, oil and/or water-soluble oil paints and mediums. Studio emphasis on exploration, self-expression and nontraditional supports. Recommended preparation: ART 131 and ART 183 or instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 282 - PAINTING V

Emphasis on individual exploration of color, visual concepts, critical doubling, the diptych and scale. Recommended preparation: ART 131 and ART 281 or instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 283 - PAINTING VI

Emphasis on independent projects, the triptych, exploration of contemporary problems in painting, statement of a thesis, painting the proposition through a series of interrelated works and the professional documentation and exhibition of the paintings. Recommended preparation: ART 131 and ART 282 or instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 284 - WATERCOLOR IV

Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence. Recommended preparation: ART 131 and ART 186.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 285 - WATERCOLOR V

Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence. Recommended preparation: ART 131 and ART 284 or instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 286 - WATERCOLOR VI

Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence. Recommended preparation: ART 131 and ART 285 or instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 291 - MOLD MAKING FOR CERAMICS AND SCULPTURE

Intermediate studio course with emphasis on developing skills and technical knowledge in mold making processes. Topics covered include plaster molds for ceramic slip casting, block molds, two part and complex molds. Lecture and research topics encompass Mold Making and Casting in Art and Industry, Historical Uses of Mold Making and Contemporary Materials/Processes. Recommended preparation: ART 191 and/or ART 121.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 292 - SITE SPECIFIC SCULPTURE

Acquaints students with the possibilities of using non-traditional means such as site, time, and interactivity to communicate ideas. Through a process of research and collaboration, students create interactive sculptural artworks on site. Culminates with a public exhibition of individual and group projects. Recommended preparation: ART 117 and/or ART 191.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 293 - OUTDOOR AND PUBLIC SCULPTURE

Explores the meaning and varieties of art created in and for public spaces, especially concentrating on work that contains environmental and social themes. Each student will generate several proposals, informed by research and readings, then create a work of public art as the primary goal. Recommended preparation: ART 117 and/or ART 191.
Credits: 3   Lecture: 1.5 Lab: 4.5

ART 298 - INDEPENDENT STUDY: ART

Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

ART 299 - SELECTED TOPICS: ART

This course is in development.
Credits: 1 to 3

ART HISTORY

ARH 188 - SPECIAL STUDIES: ART HISTORY

Explores topics of current interest in the discipline.
Credits: 1 to 4

ARH 199 - SELECTED TOPICS: ART HISTORY

This course is in development.
Credits: 1 to 4

ARH 201 - ART HISTORY: WESTERN: PREHISTORY TO EARLY BYZANTINE

Surveys the major periods of visual arts in the West. Introduces students to the concepts of art and surveys the development of art in historical context from Prehistory through the early Byzantine Empire. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them. Recommended preparation: WR 065 or higher.
Credits: 4   Lecture: 4

ARH 202 - ART HISTORY: WESTERN: EARLY MEDIEVAL TO LATE RENAISSANCE
Surveys the major periods of visual arts in the West. Introduces students to the concepts of art and surveys the development of art in historical context from the Early Middle Ages through the Late Renaissance. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them. Recommended preparation: WR 065.
Credits: 4   Lecture: 4

ARH 203 - ART HISTORY: WESTERN: EARLY BAROQUE TO LATE 20TH CENTURY
Surveys the major periods of visual arts in the West. Introduces students to the concepts of art and surveys the development of art in historical context from the Baroque Age through the 20th Century. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them. Recommended preparation: WR 065.
Credits: 4   Lecture: 4

ARH 206 - MODERN ART HISTORY
A specialized chronological survey of Modernism in the visual arts from the mid-19th Century to the present day. Explores the many eclectic developments in Modern art from its beginnings through the Postmodern contemporary era. Emphasizes major artists, movements, and critical concepts in modern art and theory, and relates those concepts to the art of the past as well as issues facing artists and society today.
Credits: 4   Lecture: 4

ARH 207 - NATIVE AMERICAN ART HISTORY
Survey of the arts indigenous to Mesoamerican and North American Indian cultures emphasizing architecture, pottery, painting and the fiber arts.
Credits: 4   Lecture: 4

ARH 208 - ART HISTORY: NON-WESTERN
A specialized survey of the art of Non-Western cultures around the world, from the Prehistoric past through the present day. This course will examine the artistic and cultural traditions of Islam , India, East Asia, the Pacific Islands, Sub-Saharan Africa and the Americas. The course will focus on understanding select works of art and architecture within their original cultural, religious, and historical contexts, and will contrast various Non-Western artistic philosophies and values with those of the Western world. Recommended preparation: WR 065.
Credits: 4   Lecture: 4

ARH 298 - INDEPENDENT STUDY: ART HISTORY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

AUTOMOTIVE

AUT 101 - BASIC ELECTRICITY FOR AUTOMOTIVE
Provides understanding of fundamental principles of electricity. Covers basic electrical quantities, Ohm's law, power, series, and parallel circuits, magnetism, electromagnetism and an introduction to DC-current troubleshooting. Introduces student to the use of a digital multimeter and oscilloscope. Student will also be introduced to electrical schematics. A self-paced course. Prerequisite with concurrency: AUT 106.
Credits: 2   Lab: 6

AUT 102 - AUTOMOTIVE ELECTRIC I
Covers Automotive Electrical Skills. Introduces the testing, diassembly, and rebuilding of various electrical equipment. Troubleshooting and using various test equipment common to the Automotive trade will be stressed. Introduces the use of automotive scan tools for basic diagnostics. Introduces the use of intrusive and non-intrusive testing methods.

Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115. Recommended preparation: MTH 020 or higher or minimum placement into MTH 060.
Credits: 5   Lecture: 2   Lab: 9

AUT 103 - AUTOMOTIVE ELECTRIC II
Studies disassembly, testing and rebuilding of various electrical equipment. Stresses troubleshooting and using various test equipment common to the automotive trade. Prerequisites: AUT 102.
Credits: 2   Lecture: 1   Lab: 3

AUT 104 - AUTOMOTIVE ELECTRIC III
A hands-on study and familiarization of repair procedures for air bag, security entry and cruise control systems. Learn diagnostic and repair procedures using body control modules. Learn diagnostics and repair procedures for hybrid and new electrical systems. Prerequisites: AUT 103.
Credits: 2   Lecture: 1   Lab: 3

AUT 105 - DIESEL PERFORMANCE I
Introduces principles of diesel systems and basic diagnosis. Includes engine analysis, cooling and exhaust systems, fuel management systems and diesel engines. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115.
Credits: 2   Lecture: 1   Lab: 3

AUT 106 - AUTOMOTIVE PROGRAM ORIENTATION
Introduction to the Automotive program. Provides an introduction of the fundamental principles of automotive shop safety and tool care. Guidance given on the self-paced course format. This course is required prior to taking any automotive course. This is a three-day, intensive course that is only taught at the beginning of each term. Permissible to be taken in a term along with other automotive courses. Recommended preparation: or to be taken with AUT 101, AUT 107, AUT 110, AUT 115 and MTH 020 or higher or minimum placement into MTH 060.
Credits: 1   Lecture: 1

AUT 107 - MECHANICAL SYSTEMS I
Provides an understanding of the fundamental principles of automotive shop safety and tool care. Develops mechanical knowledge and skills utilized throughout a career in the automotive field. Includes techniques of routine vehicle maintenance. Includes customer vehicle identification and handling, new vehicle pre-delivery inspection and preparation, safety inspection, lubrication tasks, and light line tasks. A self-paced course. Prerequisites with concurrency: AUT 106.
Credits: 3   Lab: 9

AUT 110 - SMALL GAS ENGINES
Designed to study and apply the theory, operation, diagnoses and repair of small gas engines and their use in the world today. A self-paced course. Prerequisites with concurrency: AUT 106.
Credits: 3   Lab: 9

AUT 111 - COMPUTERIZED ENGINE CONTROLS
Studies advanced electrical systems found on late-model vehicles. Provides solid understanding of computerized automotive engine control systems and how they operate and the ability to diagnose, troubleshoot and repair computerized engine control systems. Prerequisites: AUT 205.
Credits: 5   Lecture: 2   Lab: 9

AUT 112 - BASIC ENGINE PERFORMANCE I
This course is designed to study and apply the theory, operation, diagnoses and repair of the points-type ignition and carburetion systems as they were used in vehicles of the past. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115.
Credits: 1   Lab: 2

AUT 113 - BASIC ENGINE PERFORMANCE II
Designed to continue the study and apply the theory presented in AUT 112 Basic Engine Performance I. Continues with the operation, diagnoses, and repair of the carburetion system as it was used in vehicles of the past. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115.
Credits: 1   Other: 2

AUT 114 - WELDING FOR THE AUTOMOTIVE TRADE

Provides a basic understanding of the fundamental principles of automotive fabrication, including safety topics. Topics introduce students to focused areas that are required when replacing vehicle components that include a light level of fabrication. (A scheduled self-paced course). Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110, and AUT 115.
Credits: 3   Lab: 9

AUT 115 - COLLEGE SUCCESS FOR AUTOMOTIVE TECHNOLOGY

Prepares students for successful completion of the Automotive Technology degree at COCC and explores careers as an automotive technician and professional. Offers a condensed version of the College Success course geared toward the two Automotive Technology degrees and/or the multiple Automotive Certificates. Introduces the various automotive information systems, hand tool usage, Scan Tool introduction, and resume preparation. Prerequisites with concurrency: AUT 106. Recommended preparation: or to be taken with MTH 020 or higher or minimum placement into MTH 060.
Credits: 2   Lecture: 2

AUT 199 - SELECTED TOPICS: AUTOMOTIVE

This course is in development.
Credits: 1 to 4

AUT 201 - AUTOMOTIVE ENGINES

Provides information on the construction, operation and design of the internal combustion engine. Teaches the concepts and procedures of engine work to cover the proper procedure in rebuilding a four-cycle internal combustion engine. Includes a combination of guided lecture and laboratory applications, stressing safety, accuracy of measure, proper usage of tools, and application of repair manuals through actual overhaul of engines. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115. Recommended preparation: MTH 020 or higher or minimum placement into MTH 060.
Credits: 4   Lecture: 2 Lab: 6

AUT 202 - MANUAL DRIVE TRAINS I

A self-paced course that studies standard transmissions and transaxles. Students will learn on college-owned components. The students will learn operating principles, diagnosis, construction, approved repair procedures, and overhaul of current transmission types on manual transmissions and transaxles. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115. Recommended preparation: MTH 020 or higher or minimum placement into MTH 060.
Credits: 3   Lab: 9

AUT 203 - MANUAL DRIVE TRAINS II

Second part of a manual transmission sequence. A study of standard transmission and the relationship to clutches, driveshafts, rear axle assembly, transaxle, shift controls and four-wheel drive components. Students will learn on college-owned components. The student will learn operating principles, diagnosis and approved repair procedures on manual transmissions and related power train components. Includes emphasis on diagnosis, service, and procedure to conform to current service manuals. Prerequisites: AUT 202.
Credits: 3   Lecture: 1.2 Lab: 6

AUT 204 - STEERING AND SUSPENSION

Designed to study and apply the theory, operation, diagnoses and repair of the modern suspension and steering systems. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115. Recommended preparation: AUT 208.
Credits: 3   Lecture: 1.2 Lab: 6

AUT 205 - ENGINE PERFORMANCE I

Studies the diagnosis of drivability problems. Covers engine analysis, cooling and exhaust systems, ignition and fuel management systems. Prerequisites: AUT 103.
Credits: 2   Lecture: 1 Lab: 3

AUT 206 - ENGINE PERFORMANCE II

Studies diagnosis of drivability problems. Includes further study of engine analysis, ignition and fuel management systems, and super performance diagnosis. Provides the technician with a look into the causes of automotive emissions in relation to vehicles that are four years old and newer. Looks at various methods of emissions inspection/maintenance testing, the diagnosis of failed vehicles, and enhanced on-board computer systems. Also covers the testing of alternative-fuel vehicles. Prerequisites: AUT 111.
Credits: 2   Lecture: 1 Lab: 3

AUT 208 - AUTOMOTIVE BRAKES

Studies the theory, operation, diagnosis and repair of the modern braking systems of both domestic and import vehicles. Includes an introduction to anti-lock brake systems. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and AUT 115. Recommended preparation: MTH 020 or higher or minimum placement into MTH 060.
Credits: 3   Lecture: 1.2 Lab: 6

AUT 211 - ASE TEST PREP I

This self-paced, program-specific course allows the student to study in preparation for the ASE A1-A5 areas. Recommended preparation: completion of two terms of Automotive Technology curriculum and WR 060.
Credits: 1   Lab: 3

AUT 212 - ASE TEST PREP II

This self-paced, program-specific course allows the student to study in preparation for the ASE A6-A8 areas. Recommended preparation: completion of two terms of Automotive Technology curriculum and WR 060.
Credits: 1   Lab: 3

AUT 216 - CO-OP WORK EXPERIENCE AUTOMOTIVE

Provides an environment in which students can begin to recognize their strengths and limitations in their chosen career. The student is placed in an actual job environment where pressure, production and personalities are experienced. Cooperative Work Experience is a program requirement for students in the Automotive Technology program. Two CWE sections are required for the student who will achieve the Master Automotive Technician Certificate. Prerequisites: completion of two terms of Automotive Technology curriculum.
Credits: 1 to 4

AUT 216A - CWE AUTOMOTIVE A

The student is provided with the environment in which he/she can begin to recognize his/her strengths and limitations in their chosen career. The student is placed in an actual job environment where the experiences of pressure, production, and personalities are experienced. Cooperative Work Experience, is a program requirement for students in the Automotive Technology Program. Two CWE sections are required for the student who will achieve the Master Automotive Technician Certificate. 4 credits per section (144 hours). Prerequisites: instructor approval. Recommended preparation: at least 24 credits of automotive courses.
Credits: 4

AUT 216B - CWE AUTOMOTIVE B

The student is provided with the environment in which he/she can begin to recognize his I her strengths and limitations in their chosen career. The student is placed in an actual job environment where the experiences of pressure, production, and personalities are experienced. Cooperative Work Experience, is a program requirement for students in the Automotive Technology Program. Two CWE sections are required for the student who will achieve the Master Automotive Technician Certificate. 4 credits per section (144 hours). Prerequisites: instructor approval. Recommended preparation: at least 24 credits of automotive courses.
Credits: 4

AUT 251 - AUTOMATIC TRANSMISSIONS I

Provides an understanding of the basic principles and theory of planetary gear sets, torque converters and hydraulic controls as applied to automatic transmissions. Includes construction, operation and overhaul

of current transmission types with emphasis on diagnosis, service and procedures to conform to current service manuals. A self-paced course. Prerequisites: AUT 203.
Credits: 3   Lab: 9

AUT 253 - AUTOMOTIVE AIR CONDITIONING
A hands-on study of automotive air conditioning and heating systems, concurrent with EPA Recovery Requirements for R-12, R-134a systems, diagnosis and service. A study of advanced electrical systems found on late-model vehicles. Prerequisites: AUT 102. Recommended preparation: MTH 020 or higher or minimum placement into MTH 060.
Credits: 3   Lecture: 1.2 Lab: 6

AUT 256 - AUTOMATIC TRANSMISSIONS II
This is the second part of an automatic transmission sequence. This course will continue principles and theory of planetary gear sets, torque converters, and hydraulic controls as applied to automatic transmissions. Includes emphasis on diagnosis, service, and procedures to conform to current service manuals. The student will also be introduced to Constant Velocity Transmissions/Hybrid Electric Vehicles/Electric Vehicle type transmissions. Prerequisites: AUT 251.
Credits: 2   Lecture: 1 Lab: 3

AUT 260 - DIESEL PERFORMANCE II
This is the second part of a diesel performance sequence. This course will provide the operational principles and theory of: Hydraulically actuated Electronically controlled Unit Injection **(HEUI) systems, the Electronic Unit Injection *(EUI) systems, and the Common Rail (CR) systems, as they are applied to Diesel Engine Performance. The course will include, in depth, Controller Area Networking (CAN),multiplexing, Controller Area Networking (CAN C) language (J1939 protocol), Software Updates, (J2534 re-flash), Vehicle Communication Interface (VCI), Selective Catalytic Reduction (SCR), Exhaust Gas Recirculation (EGR) systems, Variable Geometry Turbo-chargers (VGT}, Constant Geometry Turbo-chargers (CGT) systems, Diesel Particulate Filter (DPF) variations, Diesel Oxidation Catalyst (DOC) systems, and diagnostic strategies, that will lead to accurate conclusions. The student will be exposed to multiple vehicle product lines during this course and,will be introduced to the proper techniques and procedures to repair them. Prerequisites: AUT 206.
Credits: 4   Lecture: 2 Lab: 6

AUT 270 - AUTOMOTIVE CONTROLLER SYSTEMS I
Technological advancements in modern vehicles have changed how we perform diagnosis. This course examines various methods of those enhancements of automotive drive systems, with major emphasis on electronic programing, and how to accurately repair them, using computers and scan tools. This course will require the student technician to build on current diagnostic routines into advanced applications. Prerequisites: AUT 206.
Credits: 4   Lecture: 2 Lab: 6

AUT 271 - AUTOMOTIVE CONTROLLER SYSTEMS II
Vehicle performance is enhanced by a variety of methods. This course examines various methods of performance enhancements of automotive drive systems with major emphasis on electronic programing. Manufacturer scan tools will be included with vehicle testing. Prerequisites: AUT 206. Recommended preparation: AUT 270.
Credits: 4   Lecture: 2 Lab: 6

AUT 280 - HYBRID ELECTRIC VEHICLES I
A study of HEV (hybrid electric vehicles) and EV (electric vehicles). Safety procedures will be strongly emphasized. Vehicle systems that will be covered: Hybrid safety and service procedures, introduction to hybrid batteries and service, introduction to hybrid electric motors, generators, and controls, regenerative braking systems, introduction to hybrid vehicle transmissions and transaxles, hybrid vehicle heating and air conditioning, first responder safety and procedures, introduction to manufacturer scan tools, hybrid vehicle diagnostic trouble codes. Prerequisites: AUT 206.
Credits: 4   Lecture: 2 Lab: 6

AUT 281 - HYBRID ELECTRIC VEHICLES II
A study of HEV (hybrid electric vehicles) and EV (electric vehicles) part 2. Safety procedures will be strongly emphasized. Vehicle systems that will be covered include: Hybrid safety and service procedures, advanced hybrid batteries testing and service, advanced testing of hybrid electric motors, generators, and controls along with extensive manufacturer scan tools use and vehicle testing. Prerequisites: AUT 206. Recommended preparation: AUT 280.
Credits: 4   Lecture: 2 Lab: 6

AVIATION

AV 101 - INTRODUCTION TO AVIATION
This course introduces the student to the Federal Aviation Regulations/ Aeronautical Information Manual (FAR/AIM). Designed to build an understanding of the pilot credentials required for a career in aviation and help students explore various career options. A variety of employment opportunities are investigated, including commercial, business, corporate, military and general aviation-related business. Emphasis will be given to careers in operations and flight technology. Airplane and helicopter pilot careers will be emphasized.
Credits: 3   Lecture: 3

AV 104 - INTRODUCTION TO AIRCRAFT SYSTEMS
Introduces the student to the training aircraft that are used in general aviation, and will look in detail at those aircraft used in this program. Aircraft in current use for training by industry will be studied and emphasis placed on basic aircraft systems operations, including emergencies. Applicable Federal Aviation Regulations, including the use of Minimum Equipment Lists, will be studied.
Credits: 4   Lecture: 4

AV 108 - METEOROLOGY I
A survey course in atmospheric science that covers weather basics and atmospheric circulations. Included is a systematic development of the following: the atmosphere, energy and temperature, wind, atmospheric moisture, horizontal and vertical pressure patterns, clouds, atmospheric circulation, stability, air masses, fronts, fog, icing, thunderstorms, jet streams and turbulence. Students will study surface weather observations, routine weather reports and forecasts, surface maps and constant pressure maps.
Credits: 4   Lecture: 4

AV 110 - PRIVATE PILOT - AIRPLANE
Provides initial ground instruction in aeronautical skills and knowledge for the FAA Private Pilot certificate. Involves an introduction to fundamentals of flight, aerodynamics, flight operations, airspace, weather and weather products, flight planning, decision-making, human factors, human factors in aviation, and crew resource management. Comprehensive course that prepares student for the FAA Private Pilot airman knowledge written exam. Recommended preparation: MTH 020 or higher.
Credits: 5   Lecture: 5

AV 112 - TECHNICALLY ADVANCED AIRCRAFT
The course covers the differences in design, handling characteristics, capability and operation of complex avionics packages in today's modern aircraft. Course will concentrate on the Garmin 430, Garmin 500, Garmin 750 and Garmin 100 glass cockpit systems.
Credits: 1   Lecture: 1

AV 112A - TECHNICALLY ADVANCED AIRCRAFT LAB
The lab course provides one-on-one hands-on training in a simulator using the (FAA)-Industry Training Standards (FITS) program that emphasizes the importance of "real world" training exercises in the form of scenario training. Students will learn to program and utilize advance automated flight decks. P/NP grading.
Credits: 1   Lab: 3.2

AV 115 - PRIVATE PILOT-HELICOPTER
Covers fundamentals of flight, flight operations, aviation weather, performance, navigation, aircraft systems, aeronautical publications, FAA regulations, flight planning, radio procedures, meteorology and human factors. Comprehensive course that prepares student for the FAA Private Pilot airman knowledge exam. Recommended preparation: MTH 020 or higher.
Credits: 5   Lecture: 5

AV 117 - HELICOPTER FUNDAMENTALS
This course covers fundamentals of helicopter flight, flight operations, helicopter performance, navigation, helicopter systems, aeronautical publications, helicopter flight maneuvers, flight planning, radio procedures, meteorology, and human factors. Recommended preparation: MTH 020.
Credits: 3   Lecture: 3

AV 150 - AERODYNAMICS
An in-depth study of aerodynamics, beginning with a brief history of the development of flight and flight theory. The physics of lift, drag, weight and thrust are related to airfoil and aircraft design and operational characteristics. Aircraft stability and control are related to aircraft performance and safety. Students will demonstrate their knowledge of aerodynamics through projects in which they predict aircraft performance. Recommended preparation: MTH 085, MTH 111, or higher.
Credits: 4   Lecture: 4

AV 188 - SPECIAL STUDIES: AVIATION
Explores topics of current interest in the discipline.
Credits: 1 to 5

AV 199 - SELECTED TOPICS: AVIATION
This course is in development.
Credits: 1 to 8

AV 200 - AVIATION LAW
This course offers an introductory analysis of legal concepts related to the aviation industry, including aircraft operations, airports, fixed based operators (FBOs), contracts, insurance and liability, regulatory statutes, and case law. The historical development of aviation law in the United States is included.
Credits: 3   Lecture: 3

AV 201 - AIRPORT MANAGEMENT
This course is a study of the development of airports and the functions and responsibilities of airport management. This course provides an historical background and studies the roles of various governmental agencies in the management and regulation of airports.
Credits: 3   Lecture: 3

AV 204 - ADVANCED AIRCRAFT SYSTEMS
Encompasses a detailed study of aircraft systems and structures and enables the student to progress into heavier, more complex single and multi-engine aircraft. Aircraft in current use by industry will be studied with an emphasis placed on operations, including emergencies. Applicable FAR and Minimum Equipment Lists, will be studied. Recommended preparation: AV 104.
Credits: 4   Lecture: 4

AV 208 - METEOROLOGY II
Focuses on application of meteorology theory and the availability, understanding and use of weather products. Emphasis is placed on maximizing aircraft performance and minimizing exposure to weather hazards. Includes examining the weather forecasting models, detailed use and interpretation of graphic weather products, access to telephone and internet weather briefing sites, and utilization of weather products. Recommended preparation: AV 108 or instructor approval.
Credits: 4   Lecture: 4

AV 210 - INSTRUMENT - AIRPLANE
The instrument rating ground school prepares students for the FAA Instrument airman knowledge test and an FAA Instrument Rating. Includes an in-depth study of basic attitude instrument flying, IFR navigation systems and procedures, aircraft flight instruments, aviation weather, applicable FARs and the instrument charts required for IFR flight. Prerequisites: AV 110 (or Private Pilot Certificate).
Credits: 5   Lecture: 5

AV 215 - INSTRUMENT HELICOPTER
The instrument rating ground school for helicopter prepares students for the FAA Instrument knowledge test and an FAA Instrument Rating. Includes an in-depth study of aircraft flight instruments, basic attitude instrument flying, IFR navigation systems and procedures, aviation weather, applicable FARs, and the instrument charts required for IFR flight. Prerequisites: AV 115 (or Private Pilot Certificate).
Credits: 5   Lecture: 5

AV 220 - COMMERCIAL PILOT - AIRPLANE
Ground instruction of aeronautical skills and knowledge applicable to the FAA Commercial Pilot Certification portion of the Professional Pilot training syllabus. Covers night flight, aviation physiology, advanced aerodynamics, aircraft performance, weight and balance, complex aircraft operations, advanced airplane systems, commercial operations and FAA Regulations for commercial pilots and noncommercial flight operations, with emphasis on human factors, crew resource management, and decision-making. Prerequisites: AV 110 (or Private Pilot Certificate).
Credits: 4   Lecture: 4

AV 222A - AIRPLANE FLIGHT LAB
AV 222A, AV222B, AV222C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors.The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 222B - AIRPLANE FLIGHT LAB
AV 222A, AV222B, AV222C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors.The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 222C - AIRPLANE FLIGHT LAB
AV 222A, AV222B, AV222C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 222D - AIRPLANE FLIGHT LAB
AV 222D, AV 222E, cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 222A, AV 222B, AV 222C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 222E - AIRPLANE FLIGHT LAB

AV 222D, AV 222E, cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 222A, AV 222B, AV 222C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 222F - AIRPLANE FLIGHT LAB

AV 222F, AV 222G, AV 222M covers night flight, aviation physiology, advanced aerodynamics, aircraft performance, weight and balance, complex aircraft operations, advanced airplane systems, commercial operations and FAA Regulations for commercial pilots and noncommercial flight operations, with emphasis on human factors, crew resource management and decision-making. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 222A, AV 222B, AV 222C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 222G - AIRPLANE FLIGHT LAB

AV 222F, AV 222G, AV 222M covers night flight, aviation physiology, advanced aerodynamics, aircraft performance, weight and balance, complex aircraft operations, advanced airplane systems, commercial operations and FAA Regulations for commercial pilots and noncommercial flight operations, with emphasis on human factors, crew resource management and decision-making. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 222A, AV 222B, AV 222C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 222H - AIRPLANE FLIGHT LAB

AV 222K, AV 222H emphasize engine failure, multiengine aerodynamics, minimum controllable airspeed, propeller feathering, V-speeds, flight planning, decision-making, human factors and crew resource management. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 210 (or Instrument Certificate), AV 220 (or Commercial Pilot Certificate), AV 222A, AV 222B, AV 222C, AV 222D, AV 222E, AV 222F, AV 222G, AV 222M, AV 222I, AV 222J, AV 250 (or Certified Flight Instructor/Instrument Instructor Pilot Certificates) and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 222I - AIRPLANE FLIGHT LAB

AV 222I, AV 222J will teach techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation regulations applicable to flight instructors. Practice ground and flight instructing will be required. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 210 (or Instrument Certificate), AV 220 (or Commercial Pilot Certificate), AV 222A, AV 222B, AV 222C, AV 222D, AV 222E, AV 222F, AV 222G, AV 222M and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 222J - AIRPLANE FLIGHT LAB

AV 222I, AV 222J will teach techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation

regulations applicable to flight instructors. Practice ground and flight instructing will be required. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 210 (or Instrument Certificate), AV 220 (or Commercial Pilot Certificate), AV 222A, AV 222B, AV 222C, AV 222D, AV 222E, AV 222F, AV 222G, AV 222M, and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 222K - AIRPLANE FLIGHT LAB

AV 222K, AV 222H emphasize engine failure, multiengine aerodynamics, minimum controllable airspeed, propeller feathering, V-speeds, flight planning, decision-making, human factors and crew resource management. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 210 (or Instrument Certificate), AV 220 (or Commercial Pilot Certificate), AV 222A, AV 222B, AV 222C, AV 222D, AV 222E, AV 222F, AV 222G, AV 222M, AV 222I, AV 222J, AV 250 (or Certified Flight Instructor/Instrument Instructor Pilot Certificates) and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 222M - AIRPLANE FLIGHT LAB

AV 222F, AV 222G, AV 222M covers night flight, aviation physiology, advanced aerodynamics, aircraft performance, weight and balance, complex aircraft operations, advanced airplane systems, commercial operations and FAA Regulations for commercial pilots and noncommercial flight operations, with emphasis on human factors, crew resource management and decision-making. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 110 (or Private Pilot Certificate), AV 222A, AV 222B, AV 222C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 225 - COMMERCIAL PILOT - HELICOPTER

Reviews the principles of flight, aircraft systems, pertinent federal aviation regulations and airman publications and service in order to prepare the student for the FAA Commercial Helicopter Pilot airman knowledge exam. Prerequisites: AV 115 (or Private Pilot Certificate).
Credits: 4   **Lecture:** 4

AV 227A - HELICOPTER FLT LAB SERIES I

AV 227A, AV227B, AV227C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 227B - HELICOPTER FLT LAB SERIES I

AV 227A, AV227B, AV227C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   **Lab:** 3.2

AV 227C - HELICOPTER FLT LAB SERIES I

AV 227A, AV227B, AV227C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and

certification requirements. Prerequisites with concurrency: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227D - HELICOPTER FLT LAB SERIES I
AV 227D, AV 227E, AV 227N cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Additionally, students will earn the basic night vision goggle endorsement coincident to their instrument training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 227A, AV 227B, AV 227C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227E - HELICOPTER FLT LAB SERIES I
AV 227D, AV 227E, AV 227N cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Additionally, students will earn the basic night vision goggle endorsement coincident to their instrument training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 227A, AV 227B, AV 227C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227F - HELICOPTER FLT LAB SERIES I
AV227F, AV227G, AV227H include review and refinement of the principles of flight, flight maneuvers, aircraft systems, pertinent federal aviation regulations, airman publications and services, advanced aerodynamics, aircraft performance, and complex aircraft operations. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 227A, AV 227B, AV 227C, AV 227D, AV 227E, AV 227N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227G - HELICOPTER FLT LAB SERIES I
AV227F, AV227G, AV227H include review and refinement of the principles of flight, flight maneuvers, aircraft systems, pertinent federal aviation regulations, airman publications and services, advanced aerodynamics, aircraft performance, and complex aircraft operations. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 227A, AV 227B, AV 227C, AV 227D, AV 227E, AV 227N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227H - HELICOPTER FLT LAB SERIES I
AV227F, AV227G, AV227H include review and refinement of the principles of flight, flight maneuvers, aircraft systems, pertinent federal aviation regulations, airman publications and services, advanced aerodynamics, aircraft performance, and complex aircraft operations. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 227A, AV 227B, AV 227C, AV 227D, AV 227E, AV 227N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227I - HELICOPTER FLT LAB SERIES I
AV 227I, AV 227J will teach techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation regulations applicable to flight instructors. Practice ground and flight instructing will be required. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Students will meet the eligibility requirement of 15 hours pilot-in-command (in the aircraft appropriate to the rating) during the instrument (R44) and commercial (R22) phases of training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 225 (or Commercial Pilot Certificate), AV 227A, AV 227B, AV 227C, AV 227D, AV 227E, AV 227F, AV 227G, AV 227H, AV 227N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227J - HELICOPTER FLT LAB SERIES I
AV 227I, AV 227J will teach techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation regulations applicable to flight instructors. Practice ground and flight instructing will be required. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Students will meet the eligibility requirement of 15 hours pilot-in-command (in the aircraft appropriate to the rating) during the instrument (R44) and commercial (R22) phases of training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 225 (or Commercial Pilot Certificate), AV 227A, AV 227B, AV 227C, AV 227D, AV 227E, AV 227F, AV 227G, AV 227H, AV 227N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 227N - HELICOPTER FLT LAB SERIES I
AV 227D, AV 227E, AV 227N cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Additionally, students will earn the basic night vision goggle endorsement coincident to their instrument training. Prerequisites with Concurrency: AV 115 (or Private Pilot Certificate), AV 227A, AV 227B, AV 227C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228A - HELICOPTER FLT LAB SERIES II
AV 228A, AV228B, AV228C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228B - HELICOPTER FLT LAB SERIES II
AV 228A, AV228B, AV228C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228C - HELICOPTER FLT LAB SERIES II
AV 228A, AV228B, AV228C introduce the student to the fundamentals of flight, and the practical application of aviation weather, performance, navigation, FAA regulations, flight planning, radio procedures, and human factors. The completion of the associated flight labs will also

insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites: Instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228D - HELICOPTER FLT LAB SERIES II
AV 228D, AV 228E, AV 228N cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Additionally, students will earn the basic night vision goggle endorsement coincident to their instrument training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 228A, AV 228B, AV 228C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228E - HELICOPTER FLT LAB SERIES II
AV 228D, AV 228E, AV 228N cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Additionally, students will earn the basic night vision goggle endorsement coincident to their instrument training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 228A, AV 228B, AV 228C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228F - HELICOPTER FLT LAB SERIES II
AV228F, AV228G, AV228H include review and refinement of the principles of flight, flight maneuvers, aircraft systems, pertinent federal aviation regulations, airman publications and services, advanced aerodynamics, aircraft performance, and complex aircraft operations. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 228A, AV 228B, AV 228C, AV 228D, AV 228E, AV 228N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228G - HELICOPTER FLT LAB SERIES II
AV228F, AV228G, AV228H include review and refinement of the principles of flight, flight maneuvers, aircraft systems, pertinent federal aviation regulations, airman publications and services, advanced aerodynamics, aircraft performance, and complex aircraft operations. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 228A, AV 228B, AV 228C, AV 228D, AV 228E, AV 228N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228H - HELICOPTER FLT LAB SERIES II
AV228F, AV228G, AV228H include review and refinement of the principles of flight, flight maneuvers, aircraft systems, pertinent federal aviation regulations, airman publications and services, advanced aerodynamics, aircraft performance, and complex aircraft operations. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 228A, AV 228B, AV 228C, AV 228D, AV 228E, AV 228N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228I - HELICOPTER FLT LAB SERIES II
AV 228I, AV 228J will teach techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation regulations applicable to flight instructors. Practice ground and flight instructing will be required. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Students will meet the eligibility requirement of 15 hours pilot-in-command (in the aircraft appropriate to the rating) during the instrument (R44) and commercial (R22) phases of training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215 (or Instrument Pilot Certificate), AV 225 (or Commercial Pilot Certificate), AV 228A, AV 228B, AV 228C, AV 228D, AV 228E, AV 228F, AV 228G, AV 228H, AV 228N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228J - HELICOPTER FLT LAB SERIES II
AV 228I, AV 228J will teach techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation regulations applicable to flight instructors. Practice ground and flight instructing will be required. The completion of the associated flight labs will also insure compliance with Federal Aviation Administration flight hour and certification requirements. Students will meet the eligibility requirement of 15 hours pilot-in-command (in the aircraft appropriate to the rating) during the instrument (R44) and commercial (R22) phases of training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 215, 225 (or Instrument Pilot Certificate and Commercial Pilot Certificate), AV 228A, AV 228B, AV 228C, AV 228D, AV 228E, AV 228F, AV 228G, AV 228H, AV 228N and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 228N - HELICOPTER FLT LAB SERIES II
AV 228D, AV 228E, AV 228N cover practical training in aircraft instrument flight, basic attitude instrument flying, Instrument Flight Rules (IFR), navigation systems and procedures, applicable federal aviation regulations and the instrument charts required for IFR flight. Ensures compliance with Federal Aviation Administration flight hour and certification requirements. Students will earn the basic night vision goggle endorsement coincident to their instrument training. Prerequisites with concurrency: AV 115 (or Private Pilot Certificate), AV 228A, AV 228B, AV 228C and instructor approval based on proof of valid Second Class (or higher) Medical Certificate.
Credits: 1   Lab: 3.2

AV 230 - MULTIENGINE PILOT
Ground instruction of aeronautical skills and knowledge applicable to the commercial multi-engine pilot certification. Emphasis is on engine failure, multiengine aerodynamics, minimum controllable airspeed, propeller feathering, V-speeds, flight planning, decision-making, human factors, and crew resource management. Prerequisites: AV 220 (or Commercial Pilot Certificate) and AV 250 (or Certified Flight Instructor/Flight Instructor with Instrument).
Credits: 2   Lecture: 2

AV 235 - HUMAN FACTORS
An introduction to the field of human behavior and characteristics as critical factors in the design and operation of electronic/machine systems. Emphasis is on crew resource management and human factors, including the study of human performance in complex systems with an examination of personality, stress, anxiety, fatigue, communication skills, decision-making, situational awareness, analysis of aviation and accidents, and practical application of human factors and performance to modern aviation.
Credits: 4   Lecture: 4

AV 245 - ADVANCED HELICOPTER OPERATIONS
The course will address advanced helicopter operations in a ground school environment. Students will be introduced to operations of turbine helicopters. The mountain flying phase will provide students with a working knowledge of operations in and around mountainous terrain.

The external load phase covers the basic skills of flying with an external longline attached to the aircraft. The night vision goggle (NVG) phase will introduce the student to a new realm of flying safely at night, and will be completed using an Internet based FAA approved Part 141 training syllabus and classroom instruction. Students will also be introduced to the unique aspect of overwater operations. NVG course licensing fee applies. See aviation program director for current course fee.
Credits: 4   Lecture: 4

AV 246 - AVIATION SAFETY
A detailed introduction into aspects of aviation safety, intended to promote flight safety in the general aviation and training environment. Topics include risk management, pilot psychology, human factors, accident trends, analysis of accident reports and safety survival.
Credits: 3   Lecture: 3

AV 250 - CERTIFIED FLIGHT INSTRUCTOR - AIRPLANE
Provides the flight instructor applicant with fundamental concepts and practice for successful flight instruction at the recreational, private and commercial pilot level. Elements include fundamentals of instruction, developing lesson plans for private pilot and commercial pilot syllabus, designing curriculum, creating objective evaluation and grading criteria, and practical application in presenting technical material in an interactive classroom setting. Two FAA airman knowledge tests are required to obtain the CFI certificate, and a third is recommended. See Aviation Program director for current fees. Prerequisites: AV 210 (or Instrument Rating) and AV 220 (or Commercial Pilot Certificate).
Credits: 5   Lecture: 5

AV 255 - CERTIFIED FLIGHT INSTRUCTOR - HELICOPTER
Teaches techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation regulations applicable to flight instructors. Practice instructing will be required. Student will prepare for the FAA Fundamentals of Instruction (FOI), CFI Helicopter, and Advanced Ground Instructor (AGI) exams. See Aviation Program director for current fee schedule. Prerequisites: AV 215 (or Instrument Pilot Certificate), AV 225 (or Commercial Pilot Certificate and instructor approval based on proof of valid Second Class (or higher) Medical Certificate).
Credits: 5   Lecture: 5

AV 271 - INTRODUCTION TO UNMANNED AERIAL SYSTEMS
This course introduces students to the history of Unmanned Aerial Systems (UAS) and surveys current UAS platforms, sensors, terminology, challenges to integrating unmanned systems into the national airspace system, operational theory, and the Federal Aviation Administration (FAA) certificate of authorization (COA) process. Prerequisites: instructor approval.
Credits: 4   Lecture: 2 Other: 4

AV 272 - UNMANNED AERIAL SYSTEMS (UAS) OPERATIONS
Surveys current UAS platforms, sensors, and terminology. Explores integration and application of UAS resources in United States Airspace. Focuses on building and executing simulated operations in a noncombative environment. Recommended preparation: AV 271.
Credits: 5   Other: 10

AV 273 - UNMANNED AERIAL SYS OPS MAINT
Progression to higher level simulation and mission planning/ execution. Includes a transition from the classroom setting to field operations for actual launches, recoveries, and maintenance of Unmanned Aerial Systems. Prerequisites: AV 272. Recommended preparation: AV 271.
Credits: 5   Other: 10

AV 288 - SPECIAL STUDIES: AVIATION
Explores topics of current interest in the discipline.
Credits: 1 to 5

AV 299 - SELECTED TOPICS: AVIATION
This course is in development.
Credits: 1 to 8

BAKING AND PASTRY ARTS

BAK 100 - WANT TO BE A PASTRY CHEF?
This course serves as an introduction to the field of baking and pastry arts. It is designed for students considering declaring Baking and Pastry Arts as a major; or those taking courses to enhance your placement scores to enter the next Cascade Culinary Institute cohort start. This course will enable students to experience an introduction to baking and pastry arts with a demonstration and hands on class that covers the basics of baking techniques and flavor profiling. Students will "get a taste" of the baking industry, while learning the secrets of being a successful pastry professional.
Credits: 2   Other: 4

BAK 101 - INTRODUCTION TO BAKING & PASTRY
This introductory level course covers the basic theory and skill sets used throughout the field of baking and pastry. Topics covered include the use of hand tools and equipment found in a bakeshop, as well as the exploration of baking and pastry ingredients and their functions. Students will gain a working knowledge of the major methods such as creaming, blending, foaming, meringues, pre-cooked, cut-in, lamination, straight dough, custards, frozen desserts, chocolates and sauces. Students will also taste and evaluate products they create in class to enhance their understanding of the course material.
Credits: 4   Other: 8

BAK 110 - BAKING AND PASTRY FOUNDATIONS I
Learn about the baking industry, nomenclature, equipment, kitchen operations, knife skills, baking techniques, science, ratios, and standardized recipes. Learn about and produce fruit desserts; cookies; meringues; pate a choux and basic custards. Prerequisites with concurrency: CUL 90; CUL 102; and choose either WR 121 or BA 214.
Credits: 4   Other: 8

BAK 140 - BAKING AND PASTRY FOUNDATIONS II
Learn production of breads and yeast doughs, laminate doughs, pies, and tarts. Topics include stages of yeast dough production, product identification, wheat based flours, baker's percentage, gluten development, lean straight doughs, soft-crusted breads, basic laminate doughs. Prerequisites: BAK 110.
Credits: 4   Other: 8

BAK 170 - BAKING AND PASTRY FOUNDATIONS III
Produce quick breads and dessert foundation sauces, make and bake cake layers, and assemble classic cakes. Topics include menu planning and balancing flavors and textures in desserts. Prerequisites: BAK 110.
Credits: 4   Other: 8

BAK 180 - CUSTARDS AND FROZEN DESSERTS
Prepare and present a variety of custards, puddings, Bavarians, mousses, still-frozen, and churn-frozen desserts, ice creams, granitas, sorbets and sherbets. Prerequisites: CUL 110 or BAK 110.
Credits: 4   Other: 8

BAK 188 - SPECIAL STUDIES, BAKING AND PASTRY ARTS
Special Studies in Baking and Pastry Arts
Credits: 1 to 6

BAK 199 - SELECTED TOPICS: BAKING AND PASTRY ARTS
Provides opportunity for students with exceptional background or need to continue beyond normal Baking and Pastry Arts program content. Content and credit(s) earned are established by mutual agreement between instructor and student and detailed in written agreement at the start of the term.
Credits: 1 to 6

BAK 210 - MODERN SUGAR AND CHOCOLATE DECOR
Prepare a variety of chocolate and sugar decorations and develop sculpting techniques. Learn tempering chocolate, use of molds and transfer sheets. Practice various sugar techniques including pulled sugar,

blown sugar, piped sugar, and poured sugar in addition to airbrushing techniques to create a variety of showpieces. Prerequisites: BAK 110 or CUL 110.
Credits: 4   Other: 8

BAK 215 - LAMINATED DOUGH AND VIENNOISERIE
Learn the basic principles of laminated dough and the art of viennoiserie. Prepare European and American enriched yeasted doughs including classic and contemporary varieties of brioche, croissants, Danish, yeasted coffee cakes, doughnuts and sweet rolls. Learn ingredient selection, product identification, retail merchandising, formulation, shaping, proofing, and baking quality laminated products. Prerequisites: BAK 140 or CUL 140.
Credits: 4   Other: 8

BAK 220 - WEDDING CELEBRATION AND SPECIALTY CAKES
Learn the history of making celebration cakes including baking, assembly and decorating. Bake sponge cakes, make buttercream, gum-paste flowers, royal icing piped decorations and rolled fondant.Produce wedding and celebration cakes incorporating all of these elements, from design, baking, assembly, covering and decorating. Prerequisites: BAK 110 or CUL 110.
Credits: 4   Other: 8

BAK 225 - ENTREMETS
Learn principles and techniques of creating entremets. Lecture and lab topics include: the history of entremets, European design, technique and assembly. Utilize a variety of techniques to create layers of flavor and texture while incorporating multiple finishing and decorating styles. Apply traditional and modern applications of glazing, and sugar and chocolate decor. Prerequisites: BAK 140 or CUL 140. Recommended preparation: BAK 180.
Credits: 4   Other: 8

BAK 230 - PLATED DESSERTS AND PRESENTATION
Learn the principles and techniques of plated, banquet, buffet, and table-side desserts. Explore history, decor, purchasing, costing, flavor, presentation, and design sweet and savory desserts. Review high-volume production, portion control, and waste management. Create a final dessert incorporating all topics, including individual design, flavor and decor. Prerequisites: BAK 140 or CUL 140. Recommended preparation: BAK 180.
Credits: 4   Other: 8

BAK 235S - CLASSICAL FRENCH PASTRIES
Produce a variety of classical and modern French cakes or "entremets." Decorate using printed logos, chocolate, and sugar. Utilize updated methods of traditional French recipes using fresh ingredients. Prepare classic French tarts, practicing different types of crusts, doughs and fillings. Prerequisites: CUL 140 or BAK 140.
Credits: 4   Other: 8

BAK 240 - THE CRAFT OF ARTISAN BREADS
Learn the principles and techniques of preparing multigrain breads, sourdoughs, bagels, pretzels, holiday or seasonal, and flat breads. Emphasis placed on regional and international breads, handling grains (such as soakers) for specialty breads, mixing, shaping, finishing, and innovative baking methods. Prerequisites: CUL 110 or BAK 110.
Credits: 4   Other: 8

BAK 245S - ADVANCED SUGAR DECOR AND CHOCOLATE SCULPTING
Produce a variety of chocolate and sugar decorations using various techniques. Learn to apply chocolate colors with a spray gun, use molds, and make cutout decorations and silk screens. Explore various sugar techniques as pastillage, saturated sugar, pulled sugar (ribbons and flowers), blown, spun, piped, bubble, straw, and poured sugar and airbrushing techniques used to create a variety of showpieces. Prerequisites: BAK 210.
Credits: 4   Other: 8

BAK 250 - PETIT FOURS, CANDIES AND CLASSICAL MIGNARDISE
Make individual mini French pastries and petit fours such as éclairs, fruit tartelettes, macarons, and madeleines. Practice French pastry elements such as pastry cream, buttercream, glazes, cream-based, fruit-based, and chocolate-based fillings and doughs. Create petit fours displays; make sugar confectioneries such as pâté de fruit, guimauve, praline, caramels, nougats, lollipops and gummies. Learn how to package and display candies. Prerequisites: CUL 110 or BAK 110.
Credits: 4   Other: 8

BAK 255S - ARTISAN BREADS WITH HEIRLOOM WHOLE GRAINS
Make a variety of specialty breads such as multigrain, rye, flax seed, organic baguette, and organic spelt. Make products with multiple flours, mixed fermentation techniques, and various production processes. Analyze different flours and the health and nutritional benefits of the breads made from them. Prerequisites: BAK 110 or CUL 110.
Credits: 4   Other: 8

BAK 260 - ADVANCED WEDDING, CELEBRATION AND SPECIALTY CAKES
Practice advanced principles of baking, assembly, piping, and decorating of specialty cakes and wedding cakes. Learn design theory; including theme, color, texture, and flavor. Learn basic cake business practices such as selection of ingredients, equipment, tools, retail pricing, consumer trends, delivery, on site construction and client consultation. Produce several single layer and tiered cakes, incorporating advanced techniques; including buttercream, rolled fondant, pastillage, royal icing piped decorations and gum paste flowers. Utilize other techniques such as over-piping, bridgework, stringwork, smocking, painting, embossing, airbrushing, applique and stenciling. Prerequisites: BAK 220.
Credits: 4   Other: 8

BAK 280 - BAKING AND PASTRY ARTS INDUSTRY INTERNSHIP
Supervised work experience designed to expand career knowledge and experiential confidence while increasing knowledge, speed, timing, organization and the ability to execute industry skills on a repetitive basis. Students will receive a diverse work experience designed on a systematic rotation of different stations in the kitchen, dining room and general operations positions. Prerequisites: BAK 140.
Credits: 6   Other: 20

BAK 298 - INDEPENDENT STUDY: BAKING
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

BIOLOGY

BI 101 - GENERAL BIOLOGY: CELLS & GENES
Designed to fulfill general education requirements, this course is intended for non-major students whose program requires biology courses. Centers on concepts of unity of living organisms including evolution, biochemistry, cell biology genetics and development. Need not be taken in sequence. Lab meets first week of classes.
Credits: 4   Lecture: 3 Lab: 3

BI 102 - GENERAL BIOLOGY: EVOLUTION
Designed to fulfill general education requirements, this course is intended for non-major students whose program requires biology courses. Focus is on concepts of biological diversity including the evidence for and mechanisms of evolution, sexual selection, and adaptations to local environments. Need not be taken in sequence. Lab meets the first week of classes. This course includes animal dissection.
Credits: 4   Lecture: 3 Lab: 3

BI 103 - GENERAL BIOLOGY: ECOLOGY
Designed to fulfill general education requirements, this courses is intended for non-major students whose program requires biology courses. Focus is on ecological concepts including interactions between organisms and the abiotic environment, co-evolutionary adaptations, and Central Oregon flora and/or fauna. Scheduled labs may include outdoor field trips. Need not be taken in sequence. Lab meets the first week of classes.
Credits: 4   Lecture: 3 Lab: 3

BI 121 - ANATOMY AND FUNCTION I
Covers body organization, the cell, skin, blood, heart and circulation, immunity, respiration, bones and skeletal muscles. Designed for pharmacy technician, medical assisting and massage therapy programs. Lecture and lab are taken simultaneously; they are not offered as separate classes. Preserved animal tissues are used in some labs.
Credits: 4   Lecture: 3 Lab: 3

BI 122 - ANATOMY AND FUNCTION II
Covers the nervous system, eyes, ears, reproduction, genetics, digestion, urinary system, hormones and diabetes. Designed for pharmacy technician, medical assisting and massage therapy programs. Lecture and lab are taken simultaneously; not offered as separate classes. Preserved animal tissues are used in some labs. Recommended preparation: BI 121.
Credits: 4   Lecture: 3 Lab: 3

BI 188 - SPECIAL STUDIES: BIOLOGY
Explores topics of current interest in the discipline. P/NP grading.
Credits: 1 to 6

BI 202 - GENERAL BOTANY
Studies plant anatomy, human interactions with plants, and especially plant taxonomy within an evolutionary framework. Focuses on flowering plant families common in Central Oregon and identification using taxonomic keys. Recommended preparation: at least one previous biology course (BI 101, 102, 103, 211, 212, 213).
Credits: 4   Lecture: 3 Lab: 3

BI 205 - SCIENTIFIC TERMINOLOGY: LATIN AND GREEK ROOTS
Designed for majors in natural science and social science wishing to enhance their understanding of the basic Latin and Greek prefixes, suffixes, and language roots that are applicable to study and reading in science-related fields. Develops skill in how words are formed, the history, meaning, pronunciation and spelling of scientific terms.
Credits: 3   Lecture: 3

BI 211 - PRINCIPLES OF BIOLOGY I
Introduces basic principles common to all living organisms. Emphasizes chemistry and evolution of life, cellular morphology and genetics. Designed for majors in the life sciences and should be taken in sequence. Animals will be dissected in this class. Recommended preparation: CH 221.
Credits: 5   Lecture: 4 Lab: 3

BI 212 - BIOLOGY OF PLANTS II
Surveys bacteria, protists, fungi and plants; examines evolutionary and ecological interrelationships and emphasizes aspects of plant morphology and physiology. Designed for majors in life sciences as well as those pursuing botany. Field trips may be required. Prerequisites: BI 211.
Credits: 5   Lecture: 4 Lab: 3

BI 213 - BIOLOGY OF ANIMALS III
Examines evolution of animals along with their diversity, ecology, morphology and physiology. Designed for majors in life sciences. Field trips may be required. This course includes animal dissection. Prerequisites: BI 211.
Credits: 5   Lecture: 4 Lab: 3

BI 231 - HUMAN ANATOMY AND PHYSIOLOGY I
Examines the structure and function of the human body utilizing a systems approach. Emphasizes body organization, cells, tissues, as well as microscopic and gross anatomy along with the functional roles of the integumentary, skeletal and muscular systems, and concludes with nerve cells and tissue. Concurrent labs include hands-on dissections of a variety of tissues, organs, rats, fetal pigs and/or cats. First course of a sequence for students in pre-nursing and other pre-professional health programs. This course includes animal dissection and cadaver observation. Prerequisites: WR 065 or WR 095, or minimum placement into WR 121.
Credits: 4   Lecture: 3 Lab: 3

BI 232 - HUMAN ANATOMY AND PHYSIOLOGY II
Continuation of examination of the structure and function of the human body utilizing a systems approach with an emphasis on anatomical and physiological relationships between nervous, endocrine and cardiovascular systems. Concurrent labs include hands-on dissections of a variety of tissues, organs, fetal pigs and/or cats. For students in pre-nursing and other pre-professional health programs. This course includes animal dissection and cadaver observation. Prerequisites: BI 231.
Credits: 4   Lecture: 3 Lab: 3

BI 233 - HUMAN ANATOMY AND PHYSIOLOGY III
Continuation of examination of the structure and function of the human body utilizing a systems approach. BI 233 emphasizes the anatomical and physiological relationships between the lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. Concurrent labs include hands-on dissections of a variety of tissues, organs, fetal pigs and/or cats. For students in pre-nursing and other pre-professional health programs. This course includes animal dissection and cadaver observation. Prerequisites: BI 232.
Credits: 4   Lecture: 3 Lab: 3

BI 234 - MICROBIOLOGY
This course is designed for students to learn the characteristics and disease-causing features of microorganisms, especially the bacteria and viruses that cause serious infectious diseases in humans. It covers defense mechanisms against infections and disease, and the development of immunity against future infections. The mechanisms of action of certain classes of anti-microbial drugs are discussed. The course also covers some of the historically-common human infections and diseases. This course is designed especially for students in nursing, pre-pharmacy and other pre-professional health programs. Prerequisites: WR 065 or higher or minimum placement into WR 095.
Credits: 4   Lecture: 3 Lab: 3

BI 280 - CO-OP WORK EXPERIENCE BIOLOGY
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 4

BI 288 - SPECIAL STUDIES: BIOLOGY
Explores topics of current interest in the discipline.
Credits: 1 to 4

BI 299 - SELECTED TOPICS: BIOLOGY
This course is in development.
Credits: 1 to 5

BUSINESS

BA 101 - INTRODUCTION TO BUSINESS
In this course students will learn about the many exciting and challenging facets of business and its dynamic role in today's environment. Students will gain a working knowledge of components of business including discussion of management, marketing, entrepreneurship and finance. During this course students will be introduced to topics which are covered in greater depth in higher level business courses. Students are encouraged to use this course to explore the breadth of business topics offered in the Business Administration degrees and identify specific areas of interest or specialization.
Credits: 4   Lecture: 4

BA 104 - BUSINESS MATH
Designed to equip students with skills to handle everyday arithmetic problems relative to a business environment and lay the foundation for other business courses including computer classes that use basic business math as examples and assignments. Topics include ratio, proportion, percent, interest, time value of money, markup and discounts, payroll, stocks and bonds, and depreciation. Prerequisites with concurrency: MTH 060 (or higher) or minimum placement into MTH 065.
Credits: 3   **Lecture**: 3

BA 111 - APPLIED ACCOUNTING I
Designed to acquaint students with the basic functions of the bookkeeping and accounting process-journalizing transactions into the journal, posting to the general ledger, analyzing and adjusting the ledger, preparing simple financial statements for a service business and gaining an understanding and working knowledge of the overall payroll function. No previous accounting is required. Prerequisites with concurrency: MTH 060 (or higher) or minimum placement into MTH 065.
Credits: 3   **Lecture**: 3

BA 112 - APPLIED ACCOUNTING II
Continuation of Applied Accounting I. Provides a detailed study of the mechanical and theoretical aspects of the bookkeeping and accounting process as it relates to a merchandising business. Prerequisites: BA 111.
Credits: 3   **Lecture**: 3

BA 113 - APPLIED ACCOUNTING III
Continuation of Applied Accounting II. Provides an in-depth, more detailed background of specific areas of accounting to effectively deal with most accounting situations as they relate to all business forms. Prerequisites: BA 112.
Credits: 3   **Lecture**: 3

BA 120 - INTRODUCTION TO SUPPLY CHAIN MANAGEMENT
This course introduces the student to supply chain management which encompasses all activities associated with the flow and transformation of goods and services from beginning to the end user. Recommended preparation: BA 101.
Credits: 4   **Lecture**: 4

BA 121 - LOGISTICS MANAGEMENT
This course introduces the student to logistics management processes. Attention is given to such issues as transportation management, warehouse and facility location management, inventory management, and customer service strategies. Recommended preparation: BA 101.
Credits: 4   **Lecture**: 4

BA 123 - INTRODUCTION TO TRANSPORTATION LOGISTICS
This course provides a working knowledge of the processes involved in dispatching trucks, trip assembly and transportation terminology. Recommended preparation: BA 101.
Credits: 4   **Lecture**: 4

BA 124 - TRUCKING OPERATIONS MANAGEMENT
This course provides a working knowledge of the basic regulations governing the movement of domestic cargo. Additionally, the student will understand how the various modalities of domestic and International cargo combine to move freight in the global supply chain. Prerequisites: BA 123.
Credits: 4   **Lecture**: 4

BA 177 - PAYROLL ACCOUNTING
Provides the fundamental accounting skills to calculate payroll for any business organization. Topics include calculating payroll based on current laws and regulations, recording payroll transactions in the general journal and general ledger, and completing required federal payroll tax forms and reports. Recommended preparation: or to be taken with BA 112 or BA 212.
Credits: 3   **Lecture**: 3

BA 178 - CUSTOMER SERVICE
This course introduces principles of effective customer service. Students will learn to develop and implement customer service strategies using systems, technologies, and communication skills to serve diverse customer needs. By evaluating elements of customer service culture and delivery, students will understand standards of service excellence, causes of service breakdowns and service recovery techniques.
Credits: 3   **Lecture**: 3

BA 188 - SPECIAL STUDIES: BUSINESS
Engages students with projects from local businesses in the areas of accounting, marketing, management and operations. Prerequisites: instructor approval. Recommended preparation: completion of most Level I and Level II classes from the AAS degree.
Credits: 1 to 4

BA 199 - SELECTED TOPICS: BUSINESS
Offers selected topics of study through workshop and independent study formats. Provides opportunities for students to investigate topics of interest beyond what is covered in current degrees. Prerequisites: instructor approval.
Credits: 1 to 5

BA 206 - MANAGEMENT FUNDAMENTALS I
Introduces students to the theory and vocabulary of management in a business setting. All of the major theoretical foundations for understanding individual and group behavior and leadership are reviewed in a lecture and discussion instructional format. Recommended preparation: BA 101.
Credits: 4   **Lecture**: 4

BA 207 - MANAGEMENT FUNDAMENTALS II
Covers the scope of activities and roles required to be an effective manager. Applying individual and group behavior and leadership theories, and exploring the critical skills of self-management, communication, logical thinking and team building, the major functional areas of management are examined in depth through the exploration of practical applications. Case study analysis and discussion are used extensively as the instructional methods. Recommended preparation: BA 206.
Credits: 4   **Lecture**: 4

BA 211 - FINANCIAL ACCOUNTING I
Introduces financial accounting theory, including the accounting cycle, recording transactions, financial analysis, and reporting corporate financial information in accordance with generally accepted accounting principles. BA 111, 112 and 113 are required for AAS accounting specialization. Recommended preparation: MTH 060.
Credits: 4   **Lecture**: 4

BA 212 - FINANCIAL ACCOUNTING II
Continues the presentation of fundamental accounting issues begun in BA 211, with emphasis on corporate investing and financing activities and preparation of the statement of cash flows. Recommended preparation: BA 211.
Credits: 4   **Lecture**: 4

BA 213 - MANAGERIAL ACCOUNTING
Introduces managerial accounting theory, including cost-volume-profit analysis, product costing, budgeting, capital investing, and cost management in manufacturing and service organizations. Recommended preparation: BA 212.
Credits: 4   **Lecture**: 4

BA 214 - BUSINESS COMMUNICATIONS
Introduces students to prevailing practices of written and oral communication in business organizations, with special attention to audience-adaptation strategies and developing a modern communication style. Includes instruction in formatting techniques, document design, graphics, research strategies and documentation. Recommended preparation: WR 065.
Credits: 3   **Lecture**: 3

BA 217 - ACCOUNTING FUNDAMENTALS
Introduces non-business majors to the accounting process and the informational reports it generates. Topics include the analyzing, recording, summarizing, and reporting of business transactions, with a special focus on using accounting reports to make informed business decisions. This course is for non-business majors and no previous accounting is required. Recommended preparation: MTH 060.
Credits: 4   Lecture: 4

BA 218 - PERSONAL FINANCE
Gives students skills in basic money management. Investigates spending habits and develops personal and family financial budgets. Also focuses on dealing with financial institutions, applying for loans and establishing personal credit. Develops understanding of managing major household expenses. Develops skill in renting, buying and selling residential property. Also focuses on buying and leasing transportation, personal income taxes and different types of insurance. Covers scope and planning of investments and retirement planning. Students develop understanding of different investments including mutual funds, stock market, real estate as an investment and Social Security. Also covers wills and trusts.
Credits: 3   Lecture: 3

BA 220 - BUSINESS ANALYSIS AND BUDGETING
This course is designed to develop mathematical analytical skills in performing the daily tasks of a manager or salesperson. The course has a threefold focus: strengthening understanding and use of business terminology in regards to financial information; development of spreadsheet skills in evaluating the costing, pricing and financing strategies of products and services; and development of skills in evaluating and making budgeting, financial and investment decisions. This is a hands-on, skills-oriented course. Prerequisites: BA 104, BA 112 and CIS 131. Recommended preparation: CIS 125E.
Credits: 4   Lecture: 3 Other: 2

BA 222 - BUSINESS FINANCE
Targets role of financial management in business and provides understanding of the effect of finance on business decisions. The course covers financial forecasting, capital budgeting and risk, financial institutions, securities markets, the investment process and working capital management. Prerequisites: BA 104 and choose BA 113 or BA 212.
Credits: 4   Lecture: 4

BA 223 - MARKETING PRINCIPLES I
Develops skills in understanding and developing strategies in the marketing environment. Covers principles and techniques of market research, consumer behavior, product development, pricing, distribution and promotion. Establishes basis for creating a marketing plan. Recommended preparation: BA 101.
Credits: 4   Lecture: 4

BA 224 - HUMAN RESOURCES MANAGEMENT
Covers principles and techniques of human resources management. Includes the following topics: hiring practices, orientation, training, job enrichment, motivation, and performance and review. Covers wage policies, benefits programs and how to comply with a myriad of legal requirements. Recommended preparation: BA 206.
Credits: 4   Lecture: 4

BA 226 - BUSINESS LAW I
Introduces general concepts, principles and individual conduct of business. The overview of law presented by this course introduces the general concepts of contract law which forms the foundation for the general conduct of business. Covers contract formation, dispute resolution, warranties, legal forms of business and credit and collections. Emphasizes managing risk in the business environment. Recommended preparation: sophomore standing, WR 121 and BA 101.
Credits: 4   Lecture: 4

BA 228 - COMPUTER ACCOUNTING APPLICATIONS
Introduces double-entry, fully-integrated computerized accounting software on the microcomputer. Students will get hands-on experience recording a variety of business transactions and preparing financial statements using the software. Recommended preparation: CIS 131 and either BA 111 or BA 211.
Credits: 3   Lecture: 2 Other: 2

BA 229 - QUICKBOOKS
Introduces students to QuickBooks accounting software. It is designed to give students the basic skills to effectively use QuickBooks and to reinforce the concepts students learned in their first accounting course. Students will get hands-on experience using the software, including recording a variety of accounting transactions and creating financial statements and other financial reports useful in making business decisions. Recommended preparation: CIS 131 and either BA 111 or BA 211.
Credits: 3   Lecture: 2 Lab: 2

BA 232 - BRANDING
Branding is a fundamental element of a competitive marketing strategy. Students will develop skills to conduct the necessary research for a firm to develop a brand identity and brand strategy. This will include the writing of a brand brief, the use of typography and color theory as well as creating compelling content for various touch points that reinforce the brand. Recommended preparation: BA 223
Credits: 4   Lecture: 4

BA 233 - INTERNET MARKETING
Building on the marketing concepts from BA 223, this course develops marketing skills in pricing, promotion and distribution strategies while using the internet. Design and content development for email, website and social media marketing based in an understanding of consumer behavior will also be covered. Additional topics include site optimization along with how to use analytic tools that will determine effectiveness of Internet marketing efforts. Note: this course does not cover HTML programming. Recommended preparation: BA 223.
Credits: 4   Lecture: 4

BA 237 - MARKETING RESEARCH
Effective marketing research is essential to modern business development. The marketing concept is, by definition, customer driven. Without an accurate and complete assessment of customer needs and wants, business risk is increased. Marketing research has become the driving force of business excellence in the 21st century. This course will explore the best methodologies for confirming strategic initiatives before committing tactical assets. Marketing research provides the critical and essential input for crafting a strategy and developing a business model. Recommended preparation: BA 223.
Credits: 4   Lecture: 4

BA 239 - ADVERTISING
This course develops understanding of the principles and techniques necessary to create an advertising campaign for a business with a focus on the promotion component of the marketing mix. Examines the ways in which advertising fits into the scheme of business marketing. Also discusses advertising and its relationships with other promotional activities. Includes a thorough look into the use of different media choices and the planning of advertising campaigns. Also covers some of the basics regarding the design of commercials and printed copy. Includes work on real-life advertising campaigns. Recommended preparation: BA 223.
Credits: 4   Lecture: 4

BA 249 - RETAILING
Develops skills in understanding and developing strategies in the retail environment. Examines the retail industry including store location, layout, display, merchandise selection, inventory and operational controls and promotion. Includes tours of local retail stores. Recommended preparation: BA 223.
Credits: 4   Lecture: 4

BA 250 - ENTREPRENEURSHIP
This course provides a solid foundation in entrepreneurship and small business management. Students will learn about the challenges facing entrepreneurship today, business management strategies, guerrilla

marketing for success, the importance of financial planning and how to effectively present an elevator pitch. Additionally, students will learn about the various legal forms of business ownership, sources of financing a business and E-Commerce. A balance between the practical learning and "real life" situations will be followed throughout the course.
Credits: 4   Lecture: 4

BA 253 - BUSINESS PLAN ELEMENTS
This course focuses on the elements of a business plan- the feasibility analysis, marketing plan, management plan, operations, pro forma financials and how to present the plan.
Credits: 4   Lecture: 4

BA 254 - BUSINESS STRATEGIES
This course is an in depth look at business strategies covering management, financials, operations and selling with a focus on application.
Credits: 4   Lecture: 4

BA 261 - CONSUMER BEHAVIOR
This course explores the determinants of consumer buying behavior and the process consumers use to make buying decisions. Study includes psychological and sociological principles and their impact on purchasing behaviors. Understanding of these behaviors and the purchase process are used to help design marketing strategies. Recommended preparation: BA 223.
Credits: 4   Lecture: 4

BA 271 - PRODUCT DEVELOPMENT PROCESS
This course covers the product development process from cradle to grave.
Credits: 4   Lecture: 4

BA 272 - PRODUCT DEVELOPMENT STRATEGIES
This course is an in depth look at each of the phases of the product development process with a focus on application.
Credits: 4   Lecture: 4

BA 280 - CO-OP WORK EXPERIENCE BUSINESS
Provides work learning credit for student employment in fields pertaining to the business curriculum. Credit is given based upon a total workload of 100 hours per term and completion of learning objectives. Learning experience coordinated with student's supervisor. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 3

BA 285 - BUSINESS HUMAN RELATIONS
Examines the sociological and psychological aspects of the workplace with practical applications. Based on the premise that the practice of sound human relations is essential to success in any context. Group exercises, discussion and lecture are the pedagogies used, in that order of importance. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

BA 286 - MANAGING BUSINESS PROCESSES
Introductory course in understanding and managing business processes. Develops understanding of general concepts and principles of process management. Includes implementation procedures and specific tools used in analyzing processes, uncovering problems and finding solutions to those problems. Recommended preparation: BA 101 and BA 206.
Credits: 4   Lecture: 4

BA 290 - BUSINESS SEMINAR
BA 290 is the capstone course for all specializations in the Associate of Applied Science degree in Business. It is an opportunity for students to demonstrate all they have learned in the areas of accounting, management, finance, marketing and operations. It also allows for the opportunity to demonstrate communication and technology skills. The end result will be a great sample of work for the portfolio that students can use in seeking employment or advancement. This is a hands-on, skills-oriented course. Prerequisites: BA 206, BA 113, BA 220 and BA 223.
Credits: 3   Lecture: 3

CHEMISTRY

CH 104 - INTRODUCTION TO CHEMISTRY I
Introduces basic principles of general chemistry, including atomic theory, chemical formulas and equations, bonding, stoichiometry, acid/base chemistry and solutions. Supporting laboratory work included. Not designed for science majors.Prerequisites: MTH 095 or MTH 105 (or higher) or minimum placement into MTH 105.
Credits: 5   Lecture: 4 Lab: 3

CH 105 - INTRODUCTION TO CHEMISTRY II
Builds on concepts from CH 104 introducing basic principles of general and organic chemistry, including bonding in carbon compounds, equilibrium, stereochemistry and functional group chemistry. Supporting laboratory work included. Not designed for science majors. Prerequisites: CH 104.
Credits: 5   Lecture: 4 Lab: 3

CH 106 - INTRODUCTION TO CHEMISTRY III
Builds on concepts from CH 105 introducing basic principles of general and biochemistry, including consideration of protein, carbohydrate and lipid structure and metabolism, bioenergetics, enzymes and nucleic acid chemistry. Prerequisites: CH 105.
Credits: 5   Lecture: 4 Lab: 3

CH 188 - SPECIAL STUDIES: CHEMISTRY
Explores topics of current interest in the discipline.
Credits: 1 to 4

CH 221 - GENERAL CHEMISTRY I
Explores experimental and theoretical principles of chemistry including matter, measurement, atomic structure, periodicity, stoichiometry, solutions, molecular structure, bonding, oxidation/reduction and thermochemistry. The course is algebra-based and includes supporting laboratory work. This course is appropriate for science and engineering majors. High school chemistry is recommended. Prerequisites: MTH 111, 112, 113, or 251 or higher, or minimum placement into MTH 112.
Credits: 5   Lecture: 4 Lab: 3

CH 222 - GENERAL CHEMISTRY II
This course builds on concepts from CH 221, by exploring experimental and theoretical principles of chemistry including gases, liquids, solids, solutions, kinetics, equilibrium, acids and bases. The course is algebra-based and includes supporting laboratory work. This course is appropriate for science and engineering majors. Prerequisites: CH 221.
Credits: 5   Lecture: 4 Lab: 3

CH 223 - GENERAL CHEMISTRY III
This course builds on concepts from CH 222 by exploring experimental and theoretical principles of chemistry including solubility equilibria, acid-base equilibria, electrochemistry, nuclear chemistry, metals and organic compounds. The course is algebra-based and includes supporting laboratory work. This course is appropriate for science and engineering majors. Prerequisites: CH 222.
Credits: 5   Lecture: 4 Lab: 3

CH 288 - SPECIAL STUDIES: CHEMISTRY
Explores topics of current interest in the discipline.
Credits: 1 to 4

CHINESE

CHN 101 - MANDARIN CHINESE I
Introduces Mandarin Chinese language presented within the context of Chinese culture. First course of a three-course sequence. Introduces students to the sound system of Mandarin Chinese and moves on to basic skills in listening, speaking, reading and copying a limited number of Chinese characters.
Credits: 4   Lecture: 4

CHN 102 - MANDARIN CHINESE II
Introduces Mandarin Chinese language presented within the context of Chinese culture. Second course of a three-course sequence. Develops fundamental language skills (listening, speaking, reading and writing) in communicative context. Prerequisites: CHN 101.
Credits: 4   Lecture: 4

CHN 103 - MANDARIN CHINESE III
Introduces Mandarin Chinese language presented within the context of Chinese culture. Third course of a three-course sequence. Expands on effective communicative skills in both the written and spoken language with particular attention to handling uncomplicated social situations and developing writing and reading to meet a number of practical everyday needs. Prerequisites: CHN 102.
Credits: 4   Lecture: 4

CHN 110 - CHINESE CHARACTERS
An introductory course on Chinese Simplified Characters, with an emphasis on the recognition, writing, and etymology of said characters. This course will help the beginning student of Chinese, or those who have an interest in studying Chinese characters, learn to recognize many of the most common characters, write those characters using correct stroke order and learn the etymology of many of those characters. Students will also gain an understanding of the importance of Chinese characters in Chinese culture, and Chinese character's influence in Asia in general. Note: This is not a calligraphy course. Recommended preparation: CHN 101.
Credits: 4   Lecture: 4

CHN 140 - CONTEMPORARY CHINESE CULTURES
Provides overviews of the dynamic ideologies, political policies, economics, geography, social structures, mass media presentations, and arts and literature, since the formation of the People's Republic of China in 1949 to the present. No background in Chinese languages is required.
Credits: 4   Lecture: 4

CHN 141 - CHINESE CULTURE THROUGH FILM
Introduction to the history, politics, society and economy of China through viewing and analyzing cinema. Examines how traditional Asian visual arts and centuries-old cultural tradition influenced filmmakers. No background in Chinese languages is required.
Credits: 4   Lecture: 4

CHN 201 - SECOND YEAR MANDARIN CHINESE I
The first course of a three-course sequence in intermediate Mandarin Chinese language and culture. This course will focus on effective communication in the Mandarin Chinese language, emphasizing both the written and spoken language, as well as an understanding of the practices and products of Chinese culture. Particular attention will be given to exploring the relationship between Chinese language, literature, philosophy and culture. Prerequisites: CHN 103.
Credits: 4   Lecture: 4

CHN 202 - SECOND YEAR MANDARIN CHINESE II
The second course of a three-course sequence in intermediate Mandarin Chinese language and culture. This course will focus on effective communication in the Mandarin Chinese language, emphasizing both the written and spoken language, as well as an understanding of the practices and products of Chinese culture. Particular attention will be given to exploring the relationship between Chinese language, literature, philosophy and culture. Prerequisites: CHN 201.
Credits: 4   Lecture: 4

CHN 203 - SECOND YEAR MANDARIN CHINESE III
The third course of a three-course sequence in intermediate Mandarin Chinese language and culture. This course will focus on effective communication in the Mandarin Chinese language, emphasizing both the written and spoken language, as well as an understanding of the practices and products of Chinese culture. Particular attention will be given to exploring the relationship between Chinese language, literature, philosophy and culture. Prerequisites: CHN 202.
Credits: 4   Lecture: 4

CHN 298 - INDEPENDENT STUDY: CHINESE
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

COMPUTER & INFORMATION SYSTEMS

CIS 010 - COMPUTER KEYBOARDING
Develops touch keystroking skills for persons who will be using computer terminals for information processing. Emphasis on proper techniques, speed and accuracy development on alphabetic keyboard and numeric keypad. For non-office administration majors. P/NP grading.
Credits: 1   Other: 2

CIS 070 - INTRODUCTION TO COMPUTERS: WINDOWS
Students will gain confidence in the use of personal computers and the Windows operating system. Topics include fundamental computer terminology, introductory use of a graphic user interface including mouse usage, windows, menus, icons and dialog boxes. Also included are file management and an introduction to word processing, web browsing and email. P/NP grading.
Credits: 2   Lecture: 1 Other: 2

CIS 099 - SELECTED TOPICS: COMPUTER AND INFORMATION SYSTEMS
This course is in development.
Credits: 1 to 4

CIS 101 - INFORMATION TECHNOLOGY ORIENTATION
Provides an understanding of the computer-related programs available to students and their pathways to further education and employment. Students will explore the training and productivity habits essential for work in IT-related fields. Students will research, plan and document knowledge and skills used in both academic and professional IT work.
Credits: 3   Lecture: 2 Other: 2

CIS 120 - COMPUTER CONCEPTS
Follows the Internet and Computing Core Certificate (IC3) national standard for digital literacy used at numerous colleges and universities across the country as well as industry. The course objectives are broken down into three modules: Computer Fundamentals, Key Applications, and Living Online. This class provides students with the knowledge and skills needed to use computers successfully at the college level. Recommended preparation: CIS 010 and CIS 070 or equivalent computer skills.
Credits: 4   Lecture: 3 Other: 2

CIS 122 - INTRODUCTION TO PROGRAMMING
Introduction to computer programming for those with little or no programming experience. Provides a strong, fundamental understanding of Visual Basic.Net. Introduces students to elementary programming concepts of algorithm design, control structures, and user interface. Students will use the basic constructs of programming including constants, variables, expressions and control structures for sequential, iterative and decision processing to solve a variety of problems. Recommended preparation: CIS 120 and CIS 131.
Credits: 4   Lecture: 3 Other: 2

CIS 125A - ACCESS
Introduction to the most popular desktop database software, Microsoft Access. This course will help students prepare for the latest Microsoft Office certification for Access (#77-885) which helps students validate the skills industries require. The course teaches users how to create and modify database tables, forms, queries and reports. The focus is on optimizing the databases for efficient data entry and generating comprehensive reports. Database design issues are discussed but not emphasized in this course. Recommended preparation: CIS 131.
Credits: 4   Lecture: 3 Other: 2

CIS 125A1 - AUTOCAD 1
First course in a two-term sequence introducing AutoCAD software as a drafting tool. Instruction will be given in file handling, basic command function, drafting techniques, presentation and plotting. Architectural and mechanical applications will be used in lab exercises to demonstrate AutoCAD commands. Work will be completed with AutoCAD. Recommended preparation: or to be taken with CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 125A2 - AUTOCAD 2
Second course in a two-term sequence covering intermediate AutoCAD commands including dimension styles, templates, CAD standards, attribute blocks, attribute extraction, external references, object linking/embedding, advanced drawing set-up and plotting, and the program parameter file. Work will be completed with AutoCAD. Recommended preparation: CIS 125A1.
Credits: 4   Lecture: 3 Other: 2

CIS 125DV - DIGITAL VIDEO PRODUCTIONS
Uses Adobe Premiere video editing software and the tools and techniques of camera setup, lighting, audio optimization and developing creative content for distribution on the web. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 125E - EXCEL
Covers intermediate and advanced features of Excel 2010 such as lists, pivot tables, working with multiple worksheets, templates, what-if-analysis, data tables, advanced formulas and functions, goal seek, solver, consolidating and importing data. Students will apply these Excel features to create and revise business worksheets. Recommended preparation: CIS 120 and CIS 131.
Credits: 4   Lecture: 3 Other: 2

CIS 125G - PHOTOSHOP
Covers the learning objectives as outlined by Adobe to become an Adobe Certified Associate (ACA) in visual communication using Adobe Photoshop. Outcomes include an overall understanding of Photoshop as well as setting project requirements, identifying design elements, manipulating images and evaluating digital images. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 125I - ADOBE ILLUSTRATOR
This class is consistent with objectives for the Adobe Certified Associate (ACA) in Graphic Design & Illustration and will provide Instruction in drawing, editing and layout techniques using Adobe Illustrator. Students are introduced to the basic illustrator tools, composition rules and complete vector-based projects such as simple illustrations, logotype, posters and postcards. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 125V - VISIO
This course is an introduction to Microsoft Visio, a vector-based illustration tool. Students will learn fundamental skills while creating several types of basic diagrams including workflows, flowcharts, organizational charts, directional maps, network and floor plans. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 125WA - WEB ANIMATION
Explores the tools and technologies used to create vector and bitmap web animations, as well as how to create interactivity in rich web content. Class topics include: keyframe and path-based motion graphics, vector vs. bitmap images, programming interactivity for rollover buttons, special effects and sound. The course will also cover the principles of two dimension animation and its uses on the web. Students will make effective computer animations that can be marketed and delivered through the web. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 131 - SOFTWARE APPLICATIONS
Outcomes focus on learning Word and Excel competencies as defined by the Industry standard Microsoft Office Specialist (MOS) certification. Prerequisites: CIS 120 or COCC Computer Competency. Recommended preparation: MTH 060, MTH 085 or BA 104.
Credits: 4   Lecture: 3 Other: 2

CIS 133JS - INTRODUCTION TO JAVASCRIPT
Expands on existing Web development skills by introducing JavaScript for client-side scripting. Students will learn JavaScript language/syntax, functions, objects, arrays and event handling as they are used for dynamic page content form validation, user interaction and navigation menus. Prerequisites: CIS 122. Recommended preparation: CIS 195.
Credits: 4   Lecture: 3 Other: 2

CIS 133P - INTRODUCTION TO PHP
Covers programming PHP with MySQL. Examines basic techniques of problem-solving, PHP language syntax, using PHP with MySQL, and designing dynamic web pages. Students learn basic program design and construction techniques. Prerequisites: CIS 122. Recommended preparation: CIS 195 and CIS135DB.
Credits: 4   Lecture: 3 Other: 2

CIS 135A1 - AUTODESK REVIT 1
Introduces fundamental aspects of architectural drafting with AutoDESK Revit software. Covers drafting of residential and light commercial buildings, sections and elevations, schedules, design layouts, details and working drawings. Recommended preparation: CIS 125A1.
Credits: 4   Lecture: 3 Other: 2

CIS 135A2 - AUTODESK REVIT 2
Continues with AutoDESK Revit, covering construction drawing sets, commercial planning, residential remodeling, drawing details and drawing production. Term culminates with targeted project covering aspects studied in Revit. Recommended preparation: CIS 135A1.
Credits: 4   Lecture: 3 Other: 2

CIS 135C1 - AUTOCAD CIVIL 3D
Students will learn basic civil drafting theory along with developing drawings that include plats, related civil infrastructure, public utilities, contours and roads. Work will be completed with AutoCAD Civil 3D. Recommended preparation: CIS 125A2.
Credits: 4   Lecture: 3 Other: 2

CIS 135DB - DATABASE THEORY/SQL
An introductory course of database concepts. This course includes discussion of the parts of a database and database management systems. Other topics include database design theory, the concept of normalization, and understanding data models. Introduces SQL. Students will be introduced to several of the most popular database management systems such as Access, Microsoft SQL Server and MySQL. Recommended preparation: CIS 120 (or IC3 certification) and CIS 131.
Credits: 4   Lecture: 3 Other: 2

CIS 135S1 - SOLIDWORKS 1
Introduces engineering graphics used in design and manufacturing. Includes practical applications using solid modeling software to capture design intent through part development and to create assemblies using these parts. Adheres to industrial standards and formats.
Credits: 4   Lecture: 3 Other: 2

CIS 135S2 - SOLIDWORKS 2
Continues the study of engineering graphics used in design and manufacturing. Includes practical applications using solid modeling software for detailed drawings, working drawing sets, sheet metal modeling, content reuse and functional design. Adheres to industrial standards and formats.
Credits: 4   Lecture: 3 Other: 2

CIS 140 - A+ ESSENTIALS I
A+ Essentials is the starting point for a career in IT. The course outcomes cover the fundamentals of computer technology, installation and

configuration of PCs, laptops and related hardware, and basic networking concepts. The course also prepares students to pass the vendor neutral CompTIA A+ Essentials certification exam (220-901). CIS 140 and 145 utilize one textbook. To become A+ certified requires you to pass both certification exams. Recommended preparation: CIS 120. Corequisites: CIS 145.
Credits: 4   Lecture: 3 Other: 2

CIS 145 - A+ ESSENTIALS II
The course prepares students with the skills and knowledge associated with the CompTIAs A+ 220-902 outcomes. The curriculum covers the skills required to install and configure PC operating systems, as well as configuring common features (e.g. network connectivity and email) for mobile operating systems Android and Apple iOS. CIS 140 and CIS 145 utilize one textbook. To become A+ certified requires you to pass both certification exams. Recommended preparation: CIS 120. Corequisites: CIS 140.
Credits: 4   Lecture: 3 Other: 2

CIS 151C - CISCO INTERNETWORKING
2First of a three-course sequence to prepare the student to take the Cisco Certified Network Associate (CCNA) certification exam. The class uses the Cisco Academy online curriculum, CCNA 5.0, Introduction to Networks. Students explore the TCP/IP and Open Systems Interconnect (OSI) models, local area networks (LANs), Ethernet, cabling, topologies, configuring routers and switches, IPv4 and IPv6 addressing, subnetting, network standards and protocols. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term. Prerequisites: CIS 179 or Comptia Network + certification.
Credits: 4   Lecture: 3 Other: 2

CIS 152C - CISCO ROUTER CONFIGURATION
Second of a three-course sequence to prepare the student to take the Cisco Certified Network Associate (CCNA) certification exam. Cisco Routing and Switching implements the Cisco Academy online curriculum, CCNA 5.0, Routing and Switching Essentials, developed by Cisco Systems experts. Explores switch VLANs, trunks and Inter-VLAN routing, 1Pv4 and 1Pv6 static and dynamic routing, OSPFv2 and OSPFv3, DHCP and DNS for 1Pv4 and 1Pv6, NAT, and access-lists for 1Pv4 and 1Pv6. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term. Prerequisites: CIS 151C.
Credits: 4   Lecture: 3 Other: 2

CIS 154C - CISCO VLAN AND WAN TECHNOLOGIES
Third of a three-course sequence to prepare the student to take the Cisco Certified Network Associate (CCNA) certification exam. Cisco Scaling and Connecting Networks implements the Cisco Academy online curricula, CCNA 5.0, Scaling Networks and Connecting Networks. Students explore WAN technologies such as FrameRelay, PPP, and PPPoE, enhanced switching technologies, Etherchannel, multi-area OSPF and EIGRP, and network monitoring with Syslog, SNMP and NetFlow. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term. Prerequisites: CIS 152C.
Credits: 4   Lecture: 3 Other: 2

CIS 178 - INTERNET IN DEPTH
Introduces the concepts and technologies of the Internet. The course explores a wide variety of Internet protocols and examines the history and infrastructure of the internet. Students will learn about web applications, E-commerce, social media and how to create and publish a website with common design tools. Topics include World Wide Web, secure use of the internet, web browser and email basics, searching the web, E-learning resources, mass communication and real-time communication on the internet. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 179 - NETWORKING ESSENTIALS
The course covers network technologies, installation and configuration, media and topologies, management, and security. The outcomes prepare students for job roles, which include network administrator, network technician, network installer, help desk technician and IT cable installer

and the CompTIA N10-005 certification exam. Prerequisites: CIS 140 and CIS 145.
Credits: 4   Lecture: 3 Other: 2

CIS 188 - SPECIAL STUDIES I
Explores topics of current interest in the discipline. P/NP grading.
Credits: 1 to 4

CIS 195 - WEB DEVELOPMENT I
Explores the use of development tools, HTML and CSS to create valid websites for a variety of topics. Students will practice site planning, design, navigation, usability and publishing. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 197 - CMS WEB DEVELOPMENT: WORDPRESS
Examines the basics of database-driven websites created using WordPress content management system (CMS), an extremely flexible and scalable technology used for making websites that need database functionality and regular content updates. Students learn through hands-on projects how to install, configure and manage websites connected to a database. Students will learn how to create rich content for websites that offer both functionality and scalability using WordPress. Other content management systems will be explored. Recommended preparation: CIS 195 Web Development I.
Credits: 4   Lecture: 3 Other: 2

CIS 198 - COMPUTER AND INFORMATION SYSTEMS PROJECTS
Students are placed in local businesses working on small projects that a local business might need. Student is responsible for project, documentation and users' manuals, if necessary. Student is sponsored by a CIS instructor. Recommended preparation: CIS 120 and CIS 131.
Credits: 3   Other: 9

CIS 199 - SELECTED TOPICS: COMPUTER AND INFORMATION SYSTEMS
Reserved for courses that cover topics of general interest, projects in computer science and experimental courses. Prerequisites: instructor approval.
Credits: 1 to 7

CIS 233P - WEB PROGRAMMING
Introduces students to techniques used to create interactive, dynamic content. Students will design interactive user interfaces (using JavaScript and XML) which will interact with custom databases residing on a server (using PHP and MySQL). The course will explore the concepts of event-driven programming to create interactive interfaces using dynamic content. Students will write server-side scripts, design custom databases to both store and provide access to content. The course will conclude with a final project where students will design their own dynamic websites. Prerequisites: CIS 133P. Recommended preparation: CIS 133JS.
Credits: 4   Lecture: 3 Other: 2

CIS 235 - IT IN BUSINESS
Uses advanced software features in Word, Excel, PowerPoint and Access to solve and analyze business problems using integration of the applications in a business environment. Recommended preparation: CIS 120 and CIS 131.
Credits: 4   Lecture: 3 Other: 2

CIS 244 - INFORMATION SYSTEMS ANALYSIS
Provides broad overview of the skills necessary for a systems analyst, consultant or project manager to work as an independent contractor or as part of an IT department. Topics include information systems concepts and tools, goal setting, project management, working in teams, documentation and communication. Recommended preparation: CIS 120 and CIS 131.
Credits: 4   Lecture: 3 Other: 2

CIS 276 - ADVANCED SQL
Focuses on design, development and implementation of SQL programming for all types of relational database applications including client/server and internet databases. The course introduces students to

the procedural language used to extend SQL in a programmatic manner. Students will learn to write complicated interactive and embedded SQL statements. Emphasis will be on using Microsoft SQL server. Recommended preparation: CIS 122 and CIS 135DB.
Credits: 4   Lecture: 3 Other: 2

CIS 279CL - CLOUD ESSENTIALS
Covers cloud services from a business perspective. Topics include the business value of cloud computing, cloud types, steps to a successful adoption of the cloud, impact and changes on IT service management, as well as risks and consequences.
Credits: 4   Lecture: 3 Other: 2

CIS 279L - LINUX+
This course introduces the Unix operating system using Linux. It follows the CompTIA Linux + exam outcomes and competencies and is therefore 'vendor neutral'. It is designed as an introductory course to the Linux operating system but previous experience with other PC operating systems is expected. The class teaches the basics of the Unix operating system from a command-line perspective including installation, management, configuration, security, documentation and hardware. Recommended preparation: CIS 120.
Credits: 4   Lecture: 3 Other: 2

CIS 279OP - CCNA CYBER OPS
Prepares students for the work and requirements of creating and managing a security operations center. Prepares students for the Cisco 210-250 exam - Understanding Cisco Cybersecurity Fundamentals and includes responsibilities in establishing teams to monitor and respond to information security incidents.
Credits: 4   Lecture: 3 Other: 2

CIS 279SC - WINDOWS SERVER CONFIGURATION
Prepares the student to plan and begin implementing the Microsoft server operating system in an enterprise environment. It includes the outcomes and hands-on experience required to build the knowledge and skills needed to pass the associated Microsoft IT professional certification. Prerequisites: CIS 179 or Comptia Network+ certification.
Credits: 4   Lecture: 3 Other: 2

CIS 279SE - SECURITY+
The course outcomes cover: network security; compliance and operational security; threats and vulnerabilities; application, data and host security; access control and identity management and cryptography. The material prepares students to pass the CompTIA Security+ certification. Security+ is an international, vendor-neutral certification. Prerequisites: CIS 179. Recommended preparation: CIS 279L.
Credits: 4   Lecture: 3 Other: 2

CIS 279SM - WINDOWS SERVER MANAGEMENT
Prepares the student to manage, maintain, and troubleshoot the Microsoft server ooperating system in an enterprise environment. It includes the outcomes and hands-on experience required to build the knowledge and skills needed to pass the associated Microsoft IT professional certification. Prerequisites: CIS 279SC.
Credits: 4   Lecture: 3 Other: 2

CIS 279SS - WINDOWS SERVER SERVICES
Prepares the student to plan, implement, maintain and troubleshoot Microsoft server operating system advanced services in an enterprise environment. It includes the outcomes and hands-on experience required to build the knowledge and skills needed to pass the associated Microsoft IT professional certification. Prerequisites: CIS 279SM.
Credits: 4   Lecture: 3 Other: 2

CIS 279WC - WINDOWS CLIENT
This course prepares the student to plan, implement and manage the Microsoft Windows operating system in an enterprise environment. It includes the outcomes and hands-on experience required to build the knowledge and skills needed to pass the associated Microsoft IT professional certification. Recommended preparation: CIS 179.
Credits: 4   Lecture: 3 Other: 2

CIS 280 - CO-OP WORK EXPERIENCE CIS
A learning strategy designed to enhance students' knowledge, personal development, professional development and professional preparation by integrating academic study with practical experience. Students complete on-the-job training in a computer environment (requires a minimum of 33 clock hours of work for each credit hour earned). P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 3

CIS 284 - CISCO CCNA SECURITY
Introduces security related issues and provides essential skills network administrators need in order to provide security for a computer network. Covers protective security technologies including TCP packet analysis, network device hardening, advanced firewall techniques, cryptography, intrusion prevention systems, LAN security, virtual private networks, network attacks and mitigation techniques, andsecurity policy planning. Prerequisites: CIS 154C or CCNA certification.
Credits: 4   Lecture: 3 Other: 2

CIS 284EH - ETHICAL HACKING
Preparation in network penetration testing methodologies in order to help businesses discover and mitigate security weaknesses, using the Linux and Windows operating systems . Learn security related topics such as: firewalls, intrusion detection systems, vulnerability scanners, packet sniffing, port scanning, cryptography, log analysis, web application attacks, exploitation tools, scripting languages, the Metasploit framework, VPNs, SSL, port redirection, security policies, compliance regulations and professional code of conduct. Prerequisites: CIS 279L. Recommended preparation: CIS 151C, CIS 152C.
Credits: 4   Lecture: 3 Other: 2

CIS 288 - SPECIAL STUDIES II
Explores topics of current interest in the discipline. P/NP grading.
Credits: 1 to 4

CIS 295 - WEB DEVELOPMENT II
Expands on existing HTML/CSS skills and explores the process of making websites, particularly e-commerce sites for clients. Students will practice site planning, development, content management and client relations as they create, document and present a website project and portfolio. Topics include website design, search engine optimization, webpage usability, and responsive mobile web design. Recommended preparation: CIS 195.
Credits: 4   Lecture: 3 Other: 2

CIS 297 - CIS PROFESSIONAL CAPSTONE
This course addresses knowledge, skills and outcomes useful to IT professionals in a variety of disciplines. Students will explore and acquire job exploration skills, including interview skills, search skills, and resume-building skills to optimize job market opportunities. An integrated approach is used to combine project design components relative to job goals and capstone activities to assist in entering the job market with an array of job and technical analysis and design skills. The CIS capstone course is expected to be taken in a degree-seeking student's last term. Prerequisite with concurrency: CIS 244.
Credits: 4   Lecture: 3 Other: 2

CIS 298 - INDEPENDENT STUDY: CIS
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

CIS 299 - SELECTED TOPICS: CIS
This course is in development.
Credits: 1 to 7

COMPUTER SCIENCE

CS 160 - COMPUTER SCIENCE ORIENTATION
Gives a broad overview of the discipline of computer science. Students learn about the foundations of computer science such as problem solving and algorithms, programming concepts and computer hardware. Students also research careers available in computer science, research pathways to computer careers and reflect on some of the influences computers have had and continue to have on society. Students also write programs in a variety of programming languages. Recommended preparation: CIS 120 or instructor approval.
Credits: 4   Lecture: 3 Other: 2

CS 161 - COMPUTER SCIENCE I
Examines the nature of computer programming; includes discussion of a computer model, methods of problem solving and programming structures; information representation; algorithm construction; object-oriented design using Java. Prerequisites: MTH 112 or MTH 251. Recommended preparation: CS 160.
Credits: 4   Lecture: 3 Other: 2

CS 162 - COMPUTER SCIENCE II
CS 162 emphasizes the development of data structures, algorithm analysis, recursion and sorting. However we will also explore/review several basic programming constructs, Inheritance, Interfaces, Exceptions and Files/Streams. A strict emphasis will be placed on software engineering methods; proper program development and attention to program planning and documentation. Prerequisites: CS 161. Prerequisites with concurrency: MTH231.
Credits: 4   Lecture: 3 Other: 2

CS 260 - DATA STRUCTURES
Covers general-purpose data structures and algorithms, software engineering of these structures, and the application of these engineering concepts to real world problems. Topics covered include managing complexity, complexity analysis, stacks, queues, lists, trees, heaps, hash tables, sets, maps and graphs. Prerequisites: CS 162 and MTH 231.
Credits: 4   Lecture: 3 Other: 2

CRIMINAL JUSTICE

CJ 100 - SURVEY OF THE CRIMINAL JUSTICE SYSTEM
Introductory survey of the functional components of the U.S. criminal justice system. Includes law enforcement, the courts and corrections.
Credits: 3   Lecture: 3

CJ 101 - INTRODUCTION TO CRIMINOLOGY
Interdisciplinary approach to theoretical perspectives on the causes, treatment and prevention of crime.
Credits: 4   Lecture: 4

CJ 110 - LAW ENFORCEMENT
Surveys the roles and responsibilities of local, state and federal law enforcement agencies in American society. Looks at historical development, role concept and conflicts, professionalization, current enforcement practices and career opportunities.
Credits: 3   Lecture: 3

CJ 120 - JUDICIAL PROCESS
Examines the history and development of court systems and processes in the American justice system. Organization, administration and roles of the federal and state courts are examined, as well as distinctions between civil, criminal and appellate courts.
Credits: 3   Lecture: 3

CJ 123 - SPANISH FOR LAW ENFORCEMENT PERSONNEL
Designed for students who are interested or are currently enrolled in the Criminal Justice program as well as current criminal justice employees. Emphasizes important daily phrases that someone in the criminal justice fields may encounter. Students' basic skills in listening, reading, writing and speaking are developed as well as exposure to the culture of Spanish-speaking citizens and their customs that directly affect interaction with criminal justice professionals. Recommended preparation: SPAN 101.
Credits: 2   Lecture: 2

CJ 152 - RAPE AGGRESSION DEFENSE (RAD) FOR WOMEN
Introduces women to the program of realistic self-defense tactics and techniques called the Rape Aggression Defense (RAD) System. Topics include: awareness, prevention, risk reduction and avoidance, and basic hands-on defense training. P/NP grading. Prerequisites: instructor approval.
Credits: 1   Lecture: 1

CJ 153 - ETHICAL ISSUES IN CRIMINAL JUSTICE
This course outlines various ethical systems and applies them to the individual's analysis and evaluation of ethical dilemmas, duties and responsibilities in the field of criminal justice. The students will explore his/her own ethical framework and decision making while learning to integrate the obligations to society and the codes of conduct prescribed by professional criminal justice organizations and agencies. An emphasis will be placed on the ethical and responsible use of discretion, authority and power as endowed by society.
Credits: 3   Lecture: 3

CJ 188 - SPECIAL STUDIES: CRIMINAL JUSTICE
Explores topics of current interest in the discipline. Prerequisites: instructor approval.
Credits: 1 to 4

CJ 199 - SPECIAL TOPICS: CRIMINAL JUSTICE
Presents selected topics of study in criminal justice offered on a temporary or experimental basis.
Credits: 1 to 4

CJ 201 - INTRODUCTION TO JUVENILE JUSTICE
Introduces the historical reason for establishment of juvenile courts in the United States, current juvenile justice process, and functions of various components within the system. Prevention, intervention and rehabilitation aspects are covered in terms of Oregon's juvenile court law, as well as potential alternatives for change.
Credits: 3   Lecture: 3

CJ 204 - CONTROVERSIES IN CRIMINAL JUSTICE
This course defines, describes and evaluates the crises and conflicts which face law enforcement agencies today. Topics include: use of force, police pursuits, recruitment and the death penalty.
Credits: 3   Lecture: 3

CJ 207 - SEMINAR IN CRIMINAL JUSTICE
Examines current controversial issues, questions and procedures within the criminal justice system.
Credits: 3   Lecture: 3

CJ 210 - CRIMINAL INVESTIGATION I
Examines history, fundamentals and scientific resources involved in criminal investigation. Emphasizes practical aspects of the investigator's approach to criminal acts, crime scene, gathering facts and information, seizing evidence, reporting the total investigation and presenting evidence within court.
Credits: 3   Lecture: 3

CJ 211 - CRIMINAL INVESTIGATION II
Reviews fundamental and scientific resources involved in criminal investigations. Examines in depth criminal investigation techniques and skills necessary to conduct investigations into the more serious and complex crimes.
Credits: 3   Lecture: 3

CJ 214 - CRIME, JUSTICE AND DIVERSITY
Takes an in-depth look at current research and theories of racial and ethnic discrimination within the United States' criminal justice system. This course examines the best and most recent research on patterns of

criminal behavior and victimization, police practices, court processing and sentencing, the death penalty, and correctional programs, while making every effort to incorporate discussion of all major race groups found in the U.S. Additionally, this course will outline the current federal regulations regarding cultural competence in professional practice.
Credits: 4   Lecture: 4

CJ 220 - INTRODUCTION TO SUBSTANTIVE LAW
Examines basic concepts of substantive law and criminal procedural law. Explores effects of substantive laws upon the lives of American citizens through topics such as crimes involving property, fraud and deception, or against persons, state and public order.
Credits: 3   Lecture: 3

CJ 222 - SEARCH AND SEIZURE
Study of procedural aspects of criminal law, i.e., how criminal law is enforced and administered by agents of the criminal justice system. Emphasis on examining the law of arrest, searches and seizures, and interrogation of suspects.
Credits: 3   Lecture: 3

CJ 230 - JUVENILE CORRECTIONS
Studies historical and contemporary perspectives on juvenile offenders, juvenile code and juvenile court procedures. Describes treatment programs and differences between adult and juvenile court procedures.
Credits: 3   Lecture: 3

CJ 234 - THE WORLD OF VIOLENT CRIMINALS
The World of Violent Criminals takes a scholarly, comprehensive and empirical examination of serial murder in the United States. This course is intended for students interested in understanding multiple homicide, the nature of serial killing, the offenders and their victims. Students will be exposed to concepts and information that will help prepare them to understand society's most dangerous criminals.
Credits: 3   Lecture: 3

CJ 243 - DRUGS AND CRIME IN SOCIETY
Introduction to problems of substance abuse, including alcohol, in our society. Equips criminal justice, social service and other human service workers with increased awareness of today's drug technology and options for dealing with substance abusers.
Credits: 3   Lecture: 3

CJ 250 - DOMESTIC TERRORISM AND EMERGENCY MANAGEMENT
Defines domestic terrorism, considers the motivations of terrorists, considers policy proposals, emergency management and law enforcement techniques in response to terrorism and terrorist threats while investigating tensions inherent in democracies between civil liberties and national security. Partners with the Department of Homeland Security's Emergency Management Institute to offer students basic FEMA certifications relevant to law enforcement. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

CJ 253 - CORRECTIONS
Focuses on historical background, current practices and contemporary issues within correctional processes, institutions and policies pertaining to offenders. Emphasizes the goals of corrections, including deterrence and rehabilitation and the role of local, state and federal corrections in the criminal justice system, including community corrections.
Credits: 4   Lecture: 4

CJ 280 - CO-OP WORK EXPERIENCE CRIMINAL JUSTICE
Provides an opportunity to work for a local agency in a field of criminal justice applying classroom theory with on-the-job experience. Learning experience will be coordinated with student's supervisor. Students must pass a criminal history check. P/NP grading. Prerequisites: instructor approval. Recommended preparation: sophomore standing and a minimum of 12 credit hours completed in criminal justice courses.
Credits: 1 to 3

CJ 281 - CWE CRIMINAL JUSTICE II
CJ 281 provides a continuing opportunity to work for a local agency in a field of criminal justice with on the job experience (see CJ 280). P/NP grading. Prerequisites: CJ 280 and instructor approval.
Credits: 2

CJ 282 - CWE CRIMINAL JUSTICE III
Provides a continuing opportunity to work for a local agency in a field of criminal justice with on the job experience (see CJ 280). P/NP grading. Prerequisites: CJ 281 and instructor approval.
Credits: 2

CJ 298 - INDEPENDENT STUDY: CRIMINAL JUSTICE
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval.Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

CULINARY ARTS

CUL 090 - APPLIED MATH FOR CULINARY ARTS
Learn culinary mathematics including customary and metric units of measurement, decimals and fractions, unit conversions, yield percent, food and beverage costing and markup methods, kitchen ratios, baker's percent and butcher's yield percent. Prerequisites: MTH 020 or minimum placement into MTH 060.
Credits: 4   Lecture: 4

CUL 100 - WANT TO BE A CHEF?
This course serves as an introduction to the field of culinary arts. Students considering declaring either Culinary Arts or Baking and Pastry Arts as a major, or students taking courses to enhance their placement scores to enter the next Cascade Culinary Institute cohort start, will find that this course will enable them to experience an introduction to cooking with a demonstration-based class that covers the basics of cooking technique and flavor profiling. Students will "get a taste" of the restaurant industry, while learning the secrets of being a successful culinary professional.
Credits: 2   Other: 4

CUL 101 - INTRODUCTION TO CULINARY ARTS
Experience the basic theory and skill sets used throughout the field of culinary arts. Topics covered include the use of hand tools and equipment found in the professional kitchen, as well as the exploration of ingredients and their functions. Students will gain a working knowledge of the fundamentals of kitchen operations, basic knife skills; an overview of stock, sauce and soup preparation; and coverage of the primary dry heat, moist heat and combination heat cooking methods. Students will also taste and evaluate products they create in class to enhance their understanding of the course material.
Credits: 4   Other: 8

CUL 102 - FOOD SAFETY AND SANITATION
Learn causes and prevention of foodborne illnesses, how to handle foodborne illness outbreaks and emergencies, good personal hygiene, time and temperature control, preventing cross-contamination, safe food preparation, receiving and storing food, methods of thawing, cooking, cooling, and reheating food and Hazard Analysis and Critical Control Points (HACCP). Take the National Restaurant Association Educational Foundation (NRAEF) ServSafe™ examination and earn a certificate with a passing grade.
Credits: 2   Lecture: 2

CUL 105 - INTERNATIONAL EXCHANGE PREPARATION
Explore the social and cultural aspects of various countries including their cuisine, language, music, art, celebrations and rituals. This serves primarily as a preparatory course for the Cascade Culinary Institute's Exchange Program. P/NP grading. Prerequisites: Instructor approval.
Credits: 2   Lecture: 2

CUL 110 - CULINARY FOUNDATIONS I
Learn the history of the culinary industry, nomenclature, equipment, kitchen operations, basic knife skills, cooking methods, and ratios and techniques in contrast to recipe usage. Learn about and produce stocks and soups. Prerequisites with concurrency: CUL 090, CUL 102 and either WR 121 or BA 214.
Credits: 4   Other: 8

CUL 140 - CULINARY FOUNDATIONS II
Learn about and prepare classical mother sauces, contemporary sauces, small sauces, vegetables, grains, starches, pasta, and eggs. Use food science principles related to primary cooking techniques, show station organization, workflow and overall time management. Practice proper use of commercial equipment and reinforcement of understanding of ingredients, measurement, formulas and techniques. Prerequisites: CUL 110.
Credits: 4   Other: 8

CUL 170 - CULINARY FOUNDATIONS III
Identify, butcher, fabricate, and cook a variety of meat, poultry and seafood products emphasizing proper technique. Practice small sauce production and the preparation of vegetables, grains, legumes and pastas as accompaniments. Apply modern composition and presentation techniques utilized in the restaurant industry. Prerequisites: CUL 140.
Credits: 4   Other: 8

CUL 180 - MODERN GARDE MANGER
Learn about and prepare cold foods such as canapés, hors d'oeuvres, salads, sandwiches, cold soups, cheeses, forcemeat, condiments, crackers and pickles. Learn about the role of garnishes, food preservation and contemporary buffet presentation. Prerequisite with concurrency: CUL 140.
Credits: 4   Other: 8

CUL 188 - SPECIAL STUDIES CULINARY ARTS
Explores topics of current interest in the discipline.
Credits: 1 to 6

CUL 199 - SELECTED TOPICS: CULINARY ARTS
Provides opportunity for students with exceptional background or need to continue beyond normal Culinary Arts program content. Content and credit(s) earned are established by mutual agreement between instructor and student and detailed in written agreement at the start of the term.
Credits: 1 to 6

CUL 200 - COMPREHENSIVE KITCHEN OPERATIONS FOR THE RESTAURANT INDUSTRY
Learn to prepare modern and seasonal dishes in a restaurant setting putting previously learned skills into practice in the college's dining room. Emphasis on cooking techniques and ingredients used in contemporary and classical cuisines and cover planning and ordering for production, station organization, preparation and plating, timing, palate development and other production realities of a restaurant. Prerequisites: CUL 140 or BAK 140.
Credits: 5   Lecture: 2 Lab: 9

CUL 220 - INTERNATIONAL CUISINE AND GLOBAL FLAVOR PROFILING
Trace common global ingredients used in many regional dishes. Explore other cultures through the understanding of global culinary heritages. Examine food in the context of culture, geography, history and the influences cuisines have had on each other. Learn how the attitudes and tastes of more global and knowledgeable customers creates the expectation of diversity in a professional culinarian's repertoire. Prerequisites: CUL 140.
Credits: 4   Other: 8

CUL 225 - APPLIED HARVESTING AND FOOD PRESERVATION PRINCIPLES
Learn about the importance of sourcing seasonal foods relating to pricing, flavor and quality. Conduct harvesting techniques of plant

based foods, and participate in slaughtering process of animal based foods. Process the harvested items and apply a diversity of preservation techniques including canning, smoking, pickling, freezing, freeze-drying, dehydrating, etc. Execute a final harvest event for regional farmers and ranchers to celebrate the partnership with them and the Cascade Culinary Institute.
Credits: 4   Other: 8

CUL 230 - CULINARY NUTRITION AND APPLIED TECHNIQUES OF HEALTHY COOKING
Prepare flavorful food and study its impact upon the body. Learn about current dietary guidelines, along with the function of nutrients within the body. Execute modern, healthy cooking techniques in the lab portion of this course exposing students to meeting nutritional needs and requests of health conscious diners. Learn about healthful menu and recipe design and reengineer classical recipes, producing healthful and flavorful alternatives. Prerequisites: CUL 140 or BAK 140.
Credits: 4   Other: 8

CUL 235S - FARM-TO-TABLE AND SUSTAINABLE CUISINE PRACTICES
Serves as an overview of sustainable harvesting techniques for plants and animals and the application of preservation techniques. Students will learn about the importance of sourcing seasonal foods as it relates to pricing, flavor and quality. Students will conduct harvesting techniques of plant based foods, and participate in the slaughtering process of animal based foods. Students will process the harvested items and conduct a diversity of preservation techniques to include canning, smoking, pickling, freezing, freeze-drying, dehydrating, etc. Students will execute a final harvest event for regional farmers and ranchers to celebrate the partnership with Cascade Culinary Institute and local sustainable agricultural partners. Prerequisites: CUL 200.
Credits: 4   Other: 8

CUL 240 - BUTCHERY
Learn about the muscle and bone structure of beef, veal, pork, lamb, game, poultry and specialty meats; fabricate sub-primal and foodservice cuts; and apply tying and trussing methods. Introduction to meat inspection processes, quality and yield grading, costing and yield testing, purchasing specifications, and basic information concerning the farm-to-table trail. Discuss preferred cooking methods for all meats, proper knife selection, and butchery equipment. Sanitation and safety standards are emphasized throughout. Prerequisites: CUL 170.
Credits: 4   Other: 8

CUL 242 - CHARCUTERIE
Learn professional skills in variations of hors d'oeuvres and savories, seasonings, condiments, stuffed meats and curing, pickling and smoking of meat, fish and poultry. Develop proficiency in sausage-making, pâtés, terrines, galantines and stuffed meats. Prepare a variety of charcuterie products from fresh sausage to dry cured salamis. Prerequisites: CUL 240.
Credits: 4   Other: 8

CUL 245S - MODERNIST CUISINE AND THE EVOLUTION OF COOKING
Learn about and apply techniques of spherification, thermal immersion, liquid nitrogen for flash freezing, hydrocolloids for thickening and gelling in the kitchen to a variety of foods. Review food pairing methods with the goal of inspiring new food combinations which are theoretically sound on a basis of their flavor. Prerequisites: CUL 170.
Credits: 4   Other: 8

CUL 255S - EVENT PLANNING AND EXECUTION WITH MODERN BANQUET COOKERY
This course examines the varied ways in which banquets and catering events may be executed. Terms relating to equipment, food preparation, service and presentation will be discussed. Students will prepare a menu each day, following the principles and techniques associated with preparing and serving food to large groups, as well as concentrating on principles of modern batch cookery. An emphasis will be placed on maintaining quality and foundational cooking methodology. Students will

also learn how to organize, plan and operate a banquet kitchen. Cooking applications are at an advanced level in preparation for later work in the public restaurants. Prerequisites: CUL 170.
Credits: 4   Other: 8

CUL 265S - ADVANCED SKILL DEVELOPMENT AND CULINARY COMPETITION MASTERY
Competitions play a vital role in culinary arts as they continually raise the standards of culinary excellence. There is no better way for culinarians to hone their craft than by putting their skills and knowledge to the test in a competitive format. Continually raises the standards of culinary excellence and professionalism. Nurtures the creativity of individual chefs. Provides a showcase for individual skills, techniques and styles. Prerequisites: CUL 170.
Credits: 4   Other: 8

CUL 270 - CULINARY ARTS CAPSTONE INTERNSHIP - ELEVATION RESTAURANT DINNER
Students are evaluated on the skills needed operate a fine dining, a la carte restaurant: food safety and sanitation, knife cuts, dry heat cooking methods, moist heat cooking methods, combination cooking methods, vegetable cookery, starch cookery, sauce cookery and final plate presentation as a representation of their learning experience within the Culinary Arts Program curriculum. This final capstone course is a commutation of all the competencies learned within the program including guest interaction and dining room service, and to provide a last opportunity for assessment and instructor evaluation of student skill sets prior to graduation. Prerequisites: CUL 170 or BAK 170 and CUL 200.
Credits: 6   Other: 18

CUL 276A - REGIONAL WORLD CUISINES: AFRICA
This course utilizes ingredients and techniques used in a specific regional cuisine-Africa. It combines lecture, demonstration, application and presentation as a means to explore a culture through the understanding of its food. Students examine food in the context of culture, geography, history and the influence a region's cuisine has worldwide.
Credits: 4   Other: 8

CUL 276C - REGIONAL WORLD CUISINES: CARIBBEAN
This course utilizes ingredients and techniques used in a specific regional cuisine-Caribbean. It combines lecture, demonstration, application, and presentation as a means to explore a culture through the understanding of its food. Students examine food in the context of culture, geography, history and the influence a region's cuisine has worldwide.
Credits: 4   Other: 8

CUL 276F - REGIONAL WORLD CUISINES: FRANCE
This course utilizes ingredients and techniques used in a specific regional cuisine--France. It combines lecture, demonstration, application, and presentation as a means to explore a culture through the understanding of its food. Students examine food in the context of culture, geography, history and the influence a region's cuisine has worldwide.
Credits: 4   Other: 8

CUL 276G - REGIONAL WORLD CUISINES: GERMANY
This course utilizes ingredients and techniques used in a specific regional cuisine-Germany. It combines lecture, demonstration, application, and presentation as a means to explore a culture through the understanding of its food. Students examine food in the context of culture, geography, history and the influence a region's cuisine has worldwide.
Credits: 4   Other: 8

CUL 276I - REGIONAL WORLD CUISINES: ITALY
This course utilizes ingredients and techniques used in a specific regional cuisine-Italy. It combines lecture, demonstration, application, and presentation as a means to explore a culture through the understanding of its food. Students examine food in the context of culture, geography, history and the influence a region's cuisine has worldwide.
Credits: 4   Other: 8

CUL 276J - REGIONAL WORLD CUISINES: ASIA
This course utilizes ingredients and techniques used in a specific regional cuisine-Asia. It combines lecture, demonstration, application, and presentation as a means to explore a culture through the understanding of its food. Students examine food in the context of culture, geography, history and the influence a region's cuisine has worldwide.
Credits: 4   Other: 8

CUL 276S - REGIONAL WORLD CUISINES: SPAIN
This course utilizes ingredients and techniques used in a specific regional cuisine-Spain. It combines lecture, demonstration, application, and presentation as a means to explore a culture through the understanding of its food. Students examine food in the context of culture, geography, history and the influence a region's cuisine has worldwide.
Credits: 4   Other: 8

CUL 280 - CULINARY ARTS INDUSTRY INTERNSHIP
Serves as a supervised work experience within the culinary arts industry designed to expand career knowledge and experiential confidence while increasing knowledge, speed, timing, organization and ability to execute industry skills on a repetitive basis. Students will receive a diverse work experience that is designed on a systematic rotation of different stations in the kitchen, dining room and general operations positions. Students can complete 100% of the experience in competencies that are relevant to the program curriculum, as it is outlined in the course syllabus and internship agreement. The internship is concluded by a final supervisor evaluation. Prerequisites: CUL 140.
Credits: 1 to 6

CUL 298 - INDEPENDENT STUDY: CULINARY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

DENTAL ASSISTING

DA 110 - BASIC DENTAL ASSISTING
General overview of the Dental Assisting profession through lecture, discussions, demonstrations, laboratory activities and on-site clinic visitation. Includes examining dentistry as a profession, charting and data collection, taking and recording vital signs, four-handed dentistry and equipment use and maintenance. Laboratory portion gives students initial skills for the clinical experience in the areas of instrument identification and transfer, oral-evacuation and use of the air-water syringe. Infection control protocols established by OSHA, the Oregon Board of Dentistry and the Centers for Disease Control and Prevention will be implemented. See DA 115 for Dental Assisting program prerequisites. Corequisites: DA 115, DA 125, DA 134, DA 145.
Credits: 4   Lecture: 2 Other: 4

DA 115 - DENTAL SCIENCE
Explores the following areas of study: basic anatomy and physiology, head and neck anatomy, dental embryology, oral histology, anatomy of the face and oral cavity and tooth morphology. Prerequisites: CIS 010, CIS 120 or Computer Competency Test, HHP 252, MTH 095 or higher; Choose one of the following Psychology Courses: PSY 101, PSY 201, PSY 215 or PSY 216; SP 218 and WR 121. Corequisites: DA 110, DA 125, DA 134, DA 145.
Credits: 5   Lecture: 5

DA 120 - ADVANCED DENTAL ASSISTING
Continuation of DA 110 and furthers student's knowledge of the dental assisting profession. Includes lecture, power point presentations, videos, discussions, demonstrations and lab participation. Covers the advanced dental assisting skills of dental dam placement and procedures involved with the dental specialties of endodontics, periodontics and oral surgery. Also covers expanded functions such as coronal polishing, suture removal

and pit and fissure sealants in accordance with the Oregon Board of Dentistry. Prerequisites: DA 110. Corequisites: DA 130, DA 135, DA 151, DA 181, DA 190.
Credits: 4   Lecture: 2 Lab: 4

DA 125 - DENTAL INFECTION CONTROL
Covers the principles of infection control related to the dental office, including an introduction to microbiology, along with cross-contamination and hazard control. The course covers OSHA Standards of Hazard Communication and Blood-borne Pathogens. Aseptic techniques and infection control procedures will be applied in the laboratory setting and assessed through competencies. The management of Safety Data Sheets and labeling of hazardous material will be addressed. See DA 115 for Dental Assisting program prerequisites. Corequisites: DA 110, DA 115, DA 134, DA 145.
Credits: 3   Other: 6

DA 130 - DENTAL MATERIALS I
Examines the properties of amalgam and composite materials. Provides skills in chairside assisting during the placement of Tofflemire matrices, amalgam restorations, and composite restorations on a dexter. Offers lecture and laboratory experiences manipulating materials such as, alginate impression materials to take impressions, and gypsum products to pour casts. Includes the fabrication of custom methylmethacrylate impression trays, light cured trays and vacuum formed bleach trays. Covers pouring models, trimming for diagnostic casts and taking bite registrations. See DA 120 for second term Dental Assisting program prerequisites. Corequisites: DA 120, DA 135, DA 151, DA 181, DA 190.
Credits: 4   Lecture: 2 Other: 4

DA 131 - DENTAL MATERIALS II
Provides a fundamental knowledge of the materials commonly used in dental practice, including the physical, chemical, and manipulative characteristics of cements, bases, cavity liners, cavity varnishes, composites and resins. The laboratory component offers experience in the correct manipulation of these materials. Covers the skills of cleaning and polishing removable prostheses, and the fabrication of several types of provisional restorations. The didactic portion examines restorative options such as crowns, bridges, inlays, onlays, full dentures and partial dentures. Prerequisites: DA 130. Corequisites: DA 150, DA 160, DA 182, DA 191.
Credits: 4   Lecture: 2 Other: 4

DA 134 - DENTAL RADIOLOGY I
Explores the basic principles of radiography, the history of radiation and an introduction to the physics of radiation. Also covers the biological effects of radiation for both the safety and comfort of the patient and the operator. Introduces the radiographic unit and dental x-ray film. See DA 115 for Dental Assisting program prerequisites. Corequisites: DA 110, DA 115, DA 125, DA 145.
Credits: 3   Lecture: 3

DA 135 - DENTAL RADIOLOGY II
Focuses on the integration of knowledge and skills acquired during DA 134 – Dental Radiology I as the student transitions from the didactic study of radiography to the lab and clinical application. Performance of diagnostic exposure techniques using a variety of image receptors to a predetermined level of competency on both lab manikins and clinical patients. Interpretation of radiographic images for exposure and technique errors, anatomic landmarks, restorations, dental materials and diseases. Focuses on clinical patient management, using interpersonal skills and patient education, while adhering to appropriate infection control protocols. Prerequisites: DA 134. Corequisites: DA 120, DA 130, DA 151, DA 181, DA 190.
Credits: 4   Lecture: 2 Other: 4

DA 145 - PREVENTIVE DENTISTRY
Covers the components of preventive dentistry including oral hygiene instruction, plaque control, fluoride therapy, dental sealants and dietary considerations for the dental patient. Clinical skills include the completion of a coronal polish sequence and fluoride tray therapy on both a manikin and a fellow student patient. Identifies the pros and cons

of Fluoride Varnish and Silver Nitrate therapies used in dental practices. Includes a discussion of the operation and procedures associated with Pediatric Dentistry. A capstone Service Learning project, related to the topic of Preventive Dentistry, will be selected, completed and presented to the class. See DA 115 for Dental Assisting program prerequisites. Corequisites: DA 110, DA 115, DA 125, DA 134.
Credits: 3   Other: 6

DA 150 - INTRO TO DENTAL OFFICE MANAGEMENT
Covers key competencies related to office practices and administrative responsibilities of the dental assistant as identified by the American Dental Association. Covers dental record preparation and maintenance, applicable computer applications, legal issues, general office management principles and professionalism in the dental office. Provides related instruction in computation. Teaches cover letter and resume writing, interviewing skills and HIPAA regulations. See DA 131 for third term Dental Assisting program prerequisites. Corequisites: DA 131, DA 160, DA 182, DA 191.
Credits: 3   Lecture: 3

DA 151 - DENTAL COMPUTING
Computers are an integral part of today's dental offices. They have become the method of choice for managing patient dental records, appointment scheduling, charting, processing insurance claims and establishing financial arrangements. Computer systems allow for the generation of reports, patient statements, professional and patient correspondence, treatment plans, and fees for service. This course is designed to give students the training necessary to successfully complete these front-office tasks. See DA 120 for second term Dental Assisting program prerequisites. Corequisites: DA 120, DA 130, DA 135, DA 181, DA 190.
Credits: 2   Lecture: 2

DA 160 - ORAL MEDICINE
Part one is an introduction to the study of Oral Pathology and Dental Pharmacology. Part two focuses on the role of the dental assistant when caring for compromised patients and in dealing with dental/medical emergencies in the dental office. See DA 131 for third term Dental Assisting program prerequisites. Corequisites: DA 131, DA 150, DA 182, DA 191.
Credits: 3   Lecture: 3

DA 181 - DENTAL SEMINAR I
Discusses the various aspect of practicum I. Guest speakers representing dental specialties and alternative dental employment possibilities will be scheduled. Students will share work-related experiences with the instructor and their peers. Addresses employment opportunities, completing job applications, and interviewing skills. See DA 120 for second term Dental Assisting prerequisites. P/NP grading. Corequisites: DA 120, DA 130, DA 135, DA 151, DA 190.
Credits: 1   Lecture: 1

DA 182 - DENTAL SEMINAR II
Seminar discussions on various aspects of spring term practicums in local dental offices. Guest speakers representing dental specialties and alternative dental employment possibilities will be scheduled. Students will share work-related experiences with the instructor and their peers. Covers employment opportunities, resume writing, completing job applications, and interviewing skills. Student will also prepare for the Dental Assisting National Board (DANB) General Chairside Exam. See DA 131 for third term Dental Assisting program prerequisites. P/NP grading. Corequisites: DA 131, DA 150, DA 160, DA 191.
Credits: 1   Lecture: 1

DA 190 - DENTAL ASSISTING PRACTICUM I
A supervised, unpaid learning experience which takes place on-site at the COCC Dental and Radiology Clinics and at various community outreach facilities. Provides students with the opportunity to perform clearly identified competencies within the clinical setting. Each credit is equivalent to 30 hours in the clinical setting. See DA 120 for second term Dental Assisting program prerequisites. P/NP grading. Corequisites: DA 120, DA 130, DA 135, DA 151, DA 181.
Credits: 1 to 5

DA 191 - DENTAL ASSISTING PRACTICUM II
A supervised, unpaid learning experience which takes place on site at a minimum of two prearranged clinical facilities. Provides students with the opportunity to perform clearly identified competencies within the clinical setting. Each credit is equivalent to 30 hours in the clinical setting. P/NP grading. Prerequisites: DA 190. Corequisites: DA 131, DA 150, DA 160, DA 182.
Credits: 1 to 8

DA 199 - SELECTED TOPICS: DENTAL ASSISTING
This course is in development.
Credits: 1 to 4

ECONOMICS

EC 101 - CONTEMPORARY ECONOMIC ISSUES
Introduction to contemporary public policy using basic economic principles. Topics may include poverty, income distribution, environmental policy, anti-trust, government budget, unemployment, international trade and economic development.
Credits: 4   Lecture: 4

EC 188 - SPECIAL STUDIES: ECONOMICS
Explores topics of current interest in the discipline.
Credits: 1 to 4

EC 199 - SELECTED TOPICS: ECONOMICS
This course is in development.
Credits: 4

EC 201 - MICROECONOMICS
Microeconomics is the study of how individuals and firms make choices in the face of scarcity. This course will build economic intuition about the consequences of our consumption and production decisions. We consider how goods and services are allocated and how market forces such as technology, market power and government intervention shape the setting in which these decisions are made. Recommended preparation: or to be taken with WR 121 and MTH 065.
Credits: 4   Lecture: 4

EC 202 - MACROECONOMICS
Macroeconomics is the study of how economic health is measured and the fiscal and monetary policies used by government to maintain it. This class examines money, banking and the story of the Federal Reserve; how the government uses taxes and spending to achieve economic growth and stability; and the role of international monetary policies including trade deficits, surpluses and exchange rates. The course uncovers the theory of business cycles and teaches students how to model economic growth and the effects of inflation. Recommended preparation: or to be taken with MTH 065 and WR 121.
Credits: 4   Lecture: 4

EC 230 - CONTEMPORARY WORLD ECONOMIC ISSUES: INTERNATIONAL ECONOMICS
Provides an introductory survey of economic, political, social, and cultural dimensions of globalization. Covers issues and problems related to international economics and international economic institutions. Includes trade and the balance of payments; trade competition between the U.S. and other nations; reform and restructure of global economies; economic development and problems of developing nations. Prerequisites: EC 201 or EC 202. Recommended preparation: MTH 095 and WR 121.
Credits: 4   Lecture: 4

EC 285 - INTRODUCTION TO POLITICAL ECONOMY
Covers specific topics related to the United States economy from a systems/institutional perspective. Includes key institutions that make up the U.S. economy such as, corporations, government, the market system, labor unions, monetary and financial institutions, and others. Examines three problem areas: environmental degradation and resource depletion; social and political inequality; and economic instability. Introduces

possible solutions based on institutional change and develops viable economic alternatives based on principles of environmental sustainability, equity and economic stability. Prerequisites: EC 201 or EC 202. Recommended preparation: MTH 095 and WR 121.
Credits: 4   Lecture: 4

EC 298 - INDEPENDENT STUDY: ECONOMICS
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

EDUCATION

ED 112 - CHILDREN'S LIT & CURRICULUM
This course provides an overview of children's literature across the early childhood curriculum (preschool-primary grades) from a curricular perspective. Different genres of children's literature will be examined as it relates to curricular areas: literacy, math, science, history, health, movement, music, and the arts. This course is recommended for early childhood and education majors. This course will address the importance of literacy acquisition of young children (preschool through the primary grades) and how children's literature can support co-curricular standards, goals and objectives.
Credits: 3   Lecture: 3

ED 140 - INTRODUCTION TO EARLY CHILDHOOD EDUCATION
Beginning course in early childhood education which focuses on the teacher as a professional (advocacy, ethical practices, work-force issues, associations); provides strategies to manage an effective program operation; how to plan a safe, healthy learning environment; and gives an overview of the philosophy and history of ECE. Three hours of supervised weekly field placement required.
Credits: 4   Lecture: 3 Other: 3

ED 141 - YOUTH MENTORING AND ADVOCACY
Provides the opportunity to develop leadership, supervisory, and mentoring skills by participating in youth advocacy civic engagement through community service projects and volunteer roles (field placement). Topics include creating safe, engaging, and developmentally appropriate activities, team work, communication techniques, group dynamics, project management, organization and evaluation. Appropriate for those interested in supporting youth both in and out school settings, including after-school programs and specialized areas of focus, including: creative arts, recreation, academic support and enrichment. Recommended preparation: Prior experience volunteering or working with youth.
Credits: 3   Lecture: 2 Other: 3

ED 150 - ENVIRONMENTS & CURRICULUM IN EARLY CHILDHOOD EDUCATION
Utilizes knowledge in child development to design, implement and evaluate activities in the major domains of development for children ages birth to 8 years. Three hours of supervised weekly field placement required. Recommended preparation: ED 140.
Credits: 4   Lecture: 3 Other: 3

ED 151 - OBSERVATION & GUIDANCE IN EARLY CHILDHOOD EDUCATION LEARNING
Introduces observation techniques and tools to accurately collect data on children and how to use assessments to make appropriate decisions about the child's needs regarding programming and the early childhood education environment. Three hours of supervised weekly field placement required. Recommended preparation: ED 140.
Credits: 4   Lecture: 3 Other: 3

ED 152 - FAMILY, SCHOOL AND COMMUNITY RELATIONSHIPS IN ECE
Introduces communication skills needed to enhance partnerships between families, schools and communities in early childhood education.

Three hours of supervised weekly field placement required.
Credits: 3　Lecture: 2 Other: 3

ED 172 - LANGUAGE AND LITERACY IN EARLY CHILDHOOD EDUCATION
Covers language and literacy development as it relates to early childhood education. Also covers the history of literacy development, the family's role, how young children learn to read and write, using books with children, concepts of print, comprehension, differing abilities in literacy development and the role of observation and assessment. Three hours of supervised weekly field placement required. Recommended preparation: ED 140.
Credits: 3　Lecture: 2 Other: 3

ED 173 - MOVEMENT, MUSIC AND THE ARTS IN EARLY CHILDHOOD EDUCATION
Introduces physical education, rhythmic activities, visual arts and performing arts in the early childhood years. Covers basic motor skills and artistic processes, from a developmental perspective. Three hours of supervised weekly field placement required. Recommended preparation: ED 140.
Credits: 3　Lecture: 2 Other: 3

ED 174 - MATH, SCIENCE AND TECHNOLOGY IN EARLY CHILDHOOD EDUCATION
Introduces program and curricular activities that enhance a child's development of math, science and technology understanding and skills. Processes explored are constructivist in nature, with a focus on interdisciplinary approaches. Three hours of supervised weekly field placement required. Recommended preparation: ED 140.
Credits: 3　Lecture: 2 Other: 3

ED 176 - SUPPORTING SOCIAL, EMOTIONAL AND MENTAL HEALTH IN EARLY CHILDHOOD
This course provides the student with knowledge about common social, emotional and mental health concerns in early childhood and explores developmentally appropriate classroom guidance strategies for supporting children's social and emotional skills.
Credits: 3　Lecture: 2 Other: 3

ED 188 - SPECIAL STUDIES: PRACTICUM
Explores topics of current interest in the discipline.
Credits: 1 to 4

ED 199 - SELECTED TOPICS: EARLY CHILDHOOD EDUCATION
This course is in development.
Credits: 1 to 4

ED 200 - INTRODUCTION TO EDUCATION
Survey of the field and foundations of education, especially the teaching profession and the role of education in society. Explores philosophical, economic, legal, ethical, historical, psychological and social foundations of teaching and learning, and includes an overview of educational methods and approaches. Specializations within the field and training requirements for prospective teachers will also be addressed. Recommended preparation: WR 121.
Credits: 3　Lecture: 3

ED 210 - PRACTICUM IN TEACHING
Acquaints potential educators with roles and responsibilities of teachers at elementary and secondary levels. The student will observe and work as an instructional assistant in a local classroom to assess interests and potential for making teaching a career. ED 210 includes six hours field placement per week. Recommended preparation: WR 121 and ED 200 or instructor approval.
Credits: 3　Lecture: 1 Other: 6

ED 216 - PURPOSE, STRUCTURE AND FUNCTION OF EDUCATION IN A DEMOCRACY
Analyzes the system of education in a democratic society. This course introduces the historical, social, philosophical, political, legal and economic foundations of education to provide a framework from which to analyze contemporary educational issues. Recommended preparation: WR 121.
Credits: 3　Lecture: 3

ED 219 - MULTICULTURAL ISSUES IN EDUCATION SETTINGS
Examines the context of working with students, school, communities and workplaces. Explores the diversity of learners, learning cultures (urban, suburban, and rural) and the diversity among learners within those different cultures. Considers the influence of culture on one's learning. Recommended preparation: WR 121.
Credits: 3　Lecture: 3

ED 224 - ANTI-BIAS CURRICULUM IN EDUCATION
Early Childhood comprises a critical timeframe in human development for building a foundation for identity and meaningful engagement in an increasingly diverse world. Future educators and early learning advocates will develop awareness of cultural consciousness in early childhood and elementary classrooms. Focuses on identity development, ethnocentrism, racism, stereotype threat, and discrimination. Includes techniques for developing multi-cultural, anti-bias curriculum specific to early childhood and elementary classrooms. Recommended preparation: ED 140.
Credits: 4　Lecture: 3 Other: 3

ED 235 - TEACHING AND LEARNING IN A DIGITAL AGE
This course will explore the integration and application of technology into the early childhood and primary elementary years curricula. Students will investigate, discuss and apply the theories and practices of educational technology specifically within the context of early childhood education. Additionally, students will develop skills and knowledge that will enable them to use responsibly various technologies to create and assess technology-enriched learning environments that reflect developmentally appropriate practices while being engaging and safe.
Credits: 3　Lecture: 3

ED 240 - PURPOSEFUL LEARNING AND ACTIVE EXPLORATION THROUGH PLAY
Explores why open-exploration, discovery, and play are fundamentally important parts of children's development, the role of play in learning, and ways that adults can support and promote play. Considers current research and implications of play, as an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence, in an era of standards-driven curriculum. Prospective early childhood and elementary educators will grow in their understanding of their role in facilitating children's learning. Focuses on the role of purposeful learning and active exploration through play through the elementary grades. Recommended preparation: ED 140.
Credits: 4　Lecture: 3 Other: 3

ED 245 - TRAUMA SENSITIVE CLASSROOMS
Addresses the role of the education environment in supporting lifelong coping mechanisms. Addresses the impact of stress on children's overall development. Explores Adverse Childhood Experiences (ACEs) and the role of mindfulness and resiliency-based programs to address and mitigate the effects of early trauma. Addresses the impact of stressors on children's participation, relationships and overall success in learning environments. Explores strategies and resources for designing and leading Trauma Sensitive Classrooms. Recommended preparation: ED 140, ED 200, or ED 265.
Credits: 3　Lecture: 2 Other: 3

ED 250 - ADVANCED CURRICULUM DEVELOPMENT & TEACHING METHODS IN EARLY CHILDHOOD EDUCATION
Compares and contrasts various teaching methods for children ages 3 to 8 years. Focuses on constructivist teaching methodology and strategies, based on best practices in early childhood education. Three hours of supervised weekly field placement required. Recommended preparation: WR 121, ED 140, ED 150 and ED 151.
Credits: 4　Lecture: 3 Other: 3

ED 253 - LEARNING ACROSS THE LIFESPAN
Explores how learning occurs at all ages from early childhood through adulthood, major and emerging learning theories, individual learning styles including one's own learning styles, self-reflection on implications of how learning occurs and the impact of these issues on the development and delivery of instruction. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

ED 261 - EARLY CHILDHOOD EDUCATION PRACTICUM I
Students participate in weekly online discussions and six hours of practicum work in an ECE setting. Students select, with their COCC practicum supervisor, an appropriate early learning practicum placement. All ECE courses required for an Early Childhood Education AAS degree need to be successfully completed before taking ED 261. P/NP grading.
Credits: 3   Other: 9

ED 262 - EARLY CHILDHOOD EDUCATION PRACTICUM II
Students participate in weekly online discussions and six hours of practicum work in an ECE setting. Students select, with their COCC practicum supervisor, an appropriate early learning practicum placement. P/NP grading. Recommended preparation: ED 261.
Credits: 3   Other: 9

ED 265 - CHILDREN AT RISK
Issues of child abuse are presented from the multidisciplinary perspectives of education, criminal justice and psychology. Topics covered include definition and prevalence of child abuse, lifelong effects, prevention, identification and intervention. The course will focus on biopsychosocial outcomes and education concerns, as well as legal processes and implications from criminal justice.
Credits: 3   Lecture: 3

ED 269 - EXCEPTIONAL CHILDREN IN EARLY CHILDHOOD EDUCATION
Acquaints students with the exceptional child and his/her family. Local resources are explored to understand the referral process for children, birth to 5 years of age. Explores typical and atypical development and common delays and disabilities in all domains of child development. Includes discussion about teaching methods and strategies that are adapted or modified to meet individual child needs. Three hours of supervised weekly field placement required. Recommended preparation: ED 140, ED 151.
Credits: 3   Lecture: 2 Other: 3

ED 290 - ENGLISH LANGUAGE DEVELOPMENT IN THE PRIMARY CLASSROOM
This is an introductory course that will explore how to best meet the needs of English Language Learners in early childhood and elementary classrooms. We will examine how language skills are acquired and how to assess what stage of language acquisition students are in. We will also explore a variety of effective teaching strategies and materials that can be used in the classroom to help students develop both social and academic language proficiency. Three hours of field placement is required.
Credits: 4   Lecture: 3 Other: 3

ED 298 - INDEPENDENT STUDY: EDUCATION
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

ED 299 - SELECTED TOPICS: EDUCATION
This course is in development.
Credits: 1 to 4

EMERGENCY MEDICINE

EMT 151 - EMERGENCY MEDICAL TECHNICIAN PART A
Develops skills in pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Part 1 of 2-part National EMS Standards Curriculum course. Students must complete an eight (8) hour "shift" hospital field experience. Required prior to first class: documentation of cleared criminal background check, current immunizations, current American Heart Association BLS for the Healthcare Provider (CPR) certification. Prerequisites: department approval, WR 065 or higher or placement into WR 121, MTH 020 or higher or placement into MTH 060.
Credits: 5   Lecture: 2 Other: 6

EMT 152 - EMERGENCY MEDICAL TECHNICIAN PART B
Develops skills in pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Part 2 of 2-part National EMS Standards Curriculum course. Students must complete an eight (8) hour "shift" EMS agency ride-a-long. Prerequisites: Department approval and EMT 151 (completed at COCC within one academic year).
Credits: 5   Lecture: 2 Other: 6

EMT 163 - ADVANCED EMT PART I
This is part 1 of a 2-part course. The Advanced Emergency Medical Technician course prepares the AEMT student to provide prehospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services systems, roles and responsibilities of AEMT's, anatomy and physiology, medical emergencies, trauma, special considerations for working in the prehospital setting and providing patient transportation. Prerequisites: students must have a Valid Oregon EMT license, HealthCare provider CPR card, pass a criminal history check and complete clinical site required immunizations to attend this course.
Credits: 5   Other: 10

EMT 164 - ADVANCED EMT PART II
This is part 2 of a 2-part course. The Advanced Emergency Medical Technician course prepares the AEMT student to provide prehospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services systems, roles and responsibilities of AEMT's, anatomy and physiology, medical emergencies, trauma, special considerations for working in the pre hospital setting and providing patient transportation. Prerequisites: EMT163 (within the current or previous academic year at COCC); students must have a valid Oregon EMT license, HealthCare provider CPR card, pass a criminal history check and complete clinical site required immunizations to attend this course.
Credits: 5   Other: 10

EMT 170 - EMERGENCY RESPONSE COMMUNICATION/ DOCUMENTATION
Covers principles of therapeutic communication, verbal, written, and electronic communications in the provision of EMS, documentation of elements of patient assessment, care and transport, communication systems, radio types, reports, codes and correct techniques.
Credits: 2   Lecture: 2

EMT 171 - EMERGENCY RESPONSE PATIENT TRANSPORT
Covers ambulance operations, laws, maintenance, safety, emergency response driving, and route planning. Includes mandatory ten-hour field-driving course. Required prior to first class: valid Oregon driver's license.
Credits: 2   Lecture: 1 Other: 2

EMT 188 - SPECIAL STUDIES: EMERGENCY MEDICAL TECHNICIAN
Explores topics of current interest in the discipline.
Credits: 1 to 5

EMT 195 - CRISIS INTERVENTION

Prepares the student to deal with situations facing both the patient and caregiver. Included are all facets of crisis intervention techniques and recent advances in critical incident stress debriefing intervention.
Credits: 3   Lecture: 3

EMT 199 - SELECTED TOPICS: EMERGENCY MEDICAL TECHNICIAN

This course is in development.
Credits: 1 to 5

EMT 280 - PARAMEDIC CO-OP WORK EXPERIENCE

Provides the educational field internship experience on an Advanced Life Support (ALS) transporting ambulance required to prepare the student to achieve licensure as a Paramedic. The field internship allows the paramedic student to apply previously learned theory and skills while under the direct observation and guidance of a preceptor. Student must have successfully completed all paramedic Lecture/Lab clinical requirements in order to register for this course.Student must pass a terminal competency exam at the completion of all CWE requirements. This course will meet the 4 credits of CWE required for completion of the paramedic program. Prerequisites: students will have needed to pass all didactic and clinical requirements EMT 290, EMT 291, EMT 292, EMT 293, EMT 294, EMT 295, EMT 296, EMT 297 and EMT 298; department approval.
Credits: 4

EMT 280A - PARAMEDIC CO-OP WORK EXPERIENCE

This is a 1 credit elective CWE offering available only to students affiliated with an agency that is a 911 Advanced Life Support (ALS) transporting agency. Provides the educational field internship experience required to prepare the student to achieve licensure as a Paramedic. The filed internship allows the paramedic student to apply previously learned theory and skills while under the direct observation and guidance of a preceptor. Prerequisites: EMT 290, EMT 291, EMT 296 and department approval.
Credits: 1

EMT 280B - PARAMEDIC CO-OP WORK EXPERIENCE

If a student has taken two 1-credit CWEs during the academic year, this 2-credit CWE must be taken in order to reach 4 credits of CWE required by the program. The CWE will provide the educational field internship experience on an Advanced Life Support Ambulance, required to prepare the student to achieve licensure as a Paramedic. The field internship allows the paramedic student to apply learned theory and skills in the internship setting while under the direct observation and guidance of a preceptor. Students must pass a terminal competency exam at the completion of all CWE requirements. Students will need 4 credits of CWE for completion of the Paramedicine degree. This course is meant to be taken during the Summer term, if the student completed two 1-credit EMT 280A courses in the Winter and Spring terms. Prerequisites: EMT 294, EMT 295 and department approval.
Credits: 2

EMT 280C - PARAMEDIC CO-OP WORK EXPERIENCE

If a student has taken a 1-credit CWE during the academic year, this 3-credit CWE must be taken in order to reach 4 credits of CWE required by the program. The CWE will provide the educational field internship experience on an Advanced Life Support Ambulance, required to prepare the student to achieve licensure as a Paramedic. The field internship allows the paramedic student to apply learned theory and skills in the internship setting while under the direct observation and guidance of a preceptor. Students must pass a terminal competency exam at the completion of all CWE requirements. Students will need 4 credits of CWE for completion of the Paramedicine degree. This course is meant to be taken if the student completed one 1-credit EMT 280A courses during either the Winter or Spring terms. Prerequisites: EMT 294, EMT 295 and department approval.
Credits: 3

EMT 288 - SPECIAL STUDIES: EMERGENCY MEDICAL TECHNICIAN

Explores topics of current interest in the discipline.
Credits: 1 to 5

EMT 290 - PARAMEDIC PART I

First term of a three-term Didactic Series, including EMT 292 and EMT 294. Focuses on patient assessment; airway/ventilation; pathophysiology of shock; general pharmacology; and respiratory, cardiovascular, neurological, behavioral and acute abdominal emergencies. Lab setting will begin the process of students' learning of required skills needed of a paramedic, such as IV establishment, medication administration and patient assessments for a variety of patient presentations. Corequisites: EMT 291.
Credits: 8   Lecture: 7.2 Lab: 7.2

EMT 291 - PARAMEDIC PART I CLINICAL

This is a competency-based clinical experience, which emphasizes patient assessment, formulation of presumptive diagnoses and treatment plans. The clinical experiences are performed at local hospitals. This is the first of three courses in the clinical setting for a paramedic student. Student must have been accepted into the second year paramedic program. Corequisites: EMT 290.
Credits: 3   Other: 10.8

EMT 292 - PARAMEDIC PART II

Offers second term of a three-term course, which includes EMT 290 and EMT 294. Focuses on anaphylactic, toxicological, environmental, geriatric, pediatric, neonatal and endocrine emergencies; infectious diseases; capnography; special patient populations; hematology; psychiatric care; crime scene preservation; genitourinary care and trauma care. Applies didactic knowledge to campus-based laboratory skills practice. Prerequisites: EMT 290 and EMT 291. Corequisites: EMT 293.
Credits: 8   Lecture: 7.2 Lab: 7.2

EMT 293 - PARAMEDIC CLINICAL PART II

This is a competency-based clinical experience, which emphasizes patient assessment, formulation of presumptive diagnoses and treatment plans. The clinical experiences are performed at local hospitals. This is the second of three courses in the clinical setting for a paramedic student. Student must have been accepted into the second year paramedic program. Prerequisites: EMT 290 and EMT 291. Corequisites: EMT 292.
Credits: 3   Other: 10.8

EMT 294 - PARAMEDIC PART III

Offers third term of a three-term course, which includes EMT 290 and EMT 292. Continues on anaphylactic, toxicological, environmental, geriatric, pediatric, neonatal and endocrine emergencies; infectious diseases; capnography; special patient populations; hematology; psychiatric care; crime scene preservation; genitourinary care and trauma care. Applies didactic knowledge to campus-based laboratory skills practice. Prerequisites: EMT 292 and EMT 293. Corequisites: EMT 295.
Credits: 8   Lecture: 7.2 Lab: 7.2

EMT 295 - PARAMEDIC CLINICAL PART III

This is a competency-based clinical experience, which emphasizes patient assessment, formulation of presumptive diagnoses and treatment plans. The clinical experiences are performed at local hospitals. This is the third of three courses in the clinical setting for a paramedic student. Student must have been accepted into the second year paramedic program. Prerequisites: EMT 292 and EMT 293. Corequisites: EMT 294.
Credits: 3   Other: 10.8

EMT 296 - ADVANCED CARDIAC LIFE SUPPORT (ACLS)

The Advanced Cardiovascular Life Support (ACLS) Provider course is designed for healthcare providers who either direct or participate in the management of cardiopulmonary arrest or other cardiovascular emergencies. Through didactic instruction and active participation in simulated cases, the students will enhance their skills and clinical decision-making abilities for the diagnosis and treatment of

cardiopulmonary arrest, acute arrhythmia, stroke and acute coronary syndromes. At successful completion, students will receive an AHA ACLS card. Department approval is required.
Credits: 1   Other: 2

EMT 297 - PEDIATRIC ADVANCED LIFE SUPPORT (PALS)

In the Pediatric Advanced Life Support (PALS) course, you will reinforce and enhance your skills in the treatment of pediatric arrest and periarrest through active participation in a series of simulated pediatric emergencies. These simulations are designed to reinforce the important concepts of systematic approach to pediatric assessment, basic life support, PALS treatment algorithms and effective resuscitation team dynamics. After successful completion of course, students will receive an AHA PALS card. The goal of the PALS course is to improve the quality of care provided to seriously ill or injured children, resulting in improved outcomes. Prerequisites: department approval.
Credits: 1   Other: 2

EMT 298 - PREHOSPITAL TRAUMA LIFE SUPPORT (PHTLS)

In the Prehospital Trauma Life Support (PHTLS) course, you will reinforce and enhance your skills in the treatment of trauma-associated patients through active participation in a series of simulated traumatic emergencies. These simulations are designed to reinforce the important concepts of systematic approach to recognition, assessment and treatment of a multitude of multisystem trauma patients. After successful completion, students will receive an NAEMT PHTLS card. Prerequisites: department approval.
Credits: 1   Other: 2

EMT 299 - SELECTED TOPICS: EMERGENCY MEDICAL TECHNICIAN

This course is in development.
Credits: 1 to 5

ENGINEERING

ENGR 188 - SPECIAL STUDIES: ENGINEERING

Provides an opportunity to explore an area of engineering by doing a special project or to gain practical experience by working with a professional engineer.
Credits: 1 to 6

ENGR 199 - SELECTED TOPICS: ENGINEERING

This course is in development.
Credits: 1 to 6

ENGR 201 - ELECTRICAL FUNDAMENTALS

Topics covered in this course include: DC and 1st order transient analysis, Ohm's Law, Kirchhoff's Law (KCL and KVL), nodal analysis, branch analysis, source transformations, Thevenin and Norton equivalent circuits, maximum power transfer, operational amplifiers, inductance, capacitance and transient response of RL and RC. Recommended preparation: PH 202/212 and MTH 251/252.
Credits: 4   Lecture: 3 Lab: 3

ENGR 202 - ELECTRICAL FUNDAMENTALS II

Topics covered in this course include: AC and 2nd order transient analysis, sinusoids and phasors, sinusoidal steady-state analysis, nodal analysis, branch analysis, source transformations, Thevenin's and Norton's equivalent circuits, sinusoidal steady-state power calculation and balanced three-phase circuits. Recommended preparation: ENGR 201 and MTH 251/252.
Credits: 4   Lecture: 3 Lab: 3

ENGR 211 - STATICS

Analyzes forces induced in structures and machines by various types of loading. Recommended preparation: MTH 251 and PH 201/211.
Credits: 4   Lecture: 3 Lab: 3

ENGR 212 - DYNAMICS

Studies kinematics, Newton's law of motion, and work-energy and impulse-momentum relationships as applied to engineering systems. Recommended preparation: ENGR 211 and MTH 252.
Credits: 4   Lecture: 3 Lab: 3

ENGR 213 - STRENGTH OF MATERIAL

Studies properties of structure materials. Analyzes stress and deformation in axially-loaded members, in circular shafts and beams and in statically indeterminate systems containing these components. Recommended preparation: ENGR 211 and MTH 252.
Credits: 4   Lecture: 3 Lab: 3

ENGINEERING--GENERAL

GE 101 - ENGINEERING ORIENTATION

Introduces students to many different engineering fields through guest lectures, field trips, and hands-on engineering projects and problem-solving exercises. Develops understanding of similarities and differences between the engineering fields. Discusses professional engineering testing and licensing requirements.
Credits: 3   Lecture: 2 Lab: 3

GE 102 - ENGINEERING PROBLEM SOLVING AND TECHNOLOGY

Introduces the use of Microsoft Excel for the solution of engineering problems and familiarizes students with the decision making and report preparation process in engineering design. Development of spreadsheets for analyzing engineering problems and preparation of final design reports that outline in detail design evaluation, recommendation and implementation. Recommended preparation: MTH 112.
Credits: 3   Lecture: 2 Lab: 3

ENGLISH & LITERATURE

ENG 104 - INTRODUCTION TO LITERATURE: FICTION

Explores human purpose, literary structures and cultural values within a variety of short stories and/or novels. Features close reading, interpretation and evaluation of selected works of fiction, with attention to authors' contexts and their creative processes, narrative elements and reader responses. Explores topics and literatures from diverse viewpoints, backgrounds and perspectives. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 105 - INTRODUCTION TO LITERATURE: DRAMA

Examines drama as literature, through its traditions, imaginative purposes and organizing visions, such as tragedy, comedy and realism. Close reading and interpretation of selected plays with attention to the cultural contexts of their creation and to the literary dimensions of character, dialogue, plot, setting, language and theme. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 106 - INTRODUCTION TO LITERATURE: POETRY

Explores critical and personal pleasures of poetry as a powerful and compact means to express feelings and ideas and respond to the varieties of human experience. Close reading of a wide range of poetry with attention to poets' roles, literary traditions and poetic strategies expressed through tone, speaker, situation and event, theme, irony, language, images, sounds, rhythms, symbols, open and closed poetic forms. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 107 - WESTERN WORLD LITERATURE: ANCIENT

Explores origins of Western culture through a study of representative Greek, Roman and other literary philosophical and historical texts. Mythology and the hero's quest as incorporated in Homer and Virgil may form the core of the readings. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 108 - WESTERN WORLD LITERATURE: MIDDLE AGES
Survey of representative texts explores Middle Ages, Renaissance, up to the 18th century Enlightenment, including rise of Christianity, chivalry and the vision quest. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 109 - WESTERN WORLD LITERATURE: MODERN
Surveys representative texts, authors, and genres from the late 18th century to the present; explores modern Western world literary movements and their historical-intellectual contexts, from romanticism and realism to post-colonialism and contemporary global trends. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 188 - SPECIAL STUDIES: LITERATURE
Explores topics of current interest in the discipline.
Credits: 1 to 4

ENG 199 - SELECTED TOPICS: LITERATURE
This course is in development.
Credits: 1 to 4

ENG 201 - SHAKESPEARE
The major plays of Shakespeare's early and middle periods. May also include selected study of his sonnets. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 202 - SHAKESPEARE
The major plays of Shakespeare's middle and later periods. May also include selected study of his sonnets. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 204 - SURVEY BRITISH LITERATURE I
Examines representative texts from the heroic age (Medieval) through the Enlightenment (18th century). Literary forms such as the epic, chivalric romance, morality play and folk ballad, lyric and narrative poetry, drama, the speculative essay, prose non-fiction and the novel are studied. Explores relations between texts and their cultural and historic contexts. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 205 - SURVEY BRITISH LITERATURE II
Examines representative texts from the Romantic period through Contemporary literature. The romance of nature, industrial growth, urban experience, the rise of new class identities and alienation of the individual are themes in this period. Literary forms such as lyric and narrative poetry, short stories, the novel and the drama of social realism and literature of the absurd are studied. Explores relations between texts and their cultural and historical contexts. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 212 - AUTOBIOGRAPHY
Examines diverse modes of autobiographical writing as texts that represent the self in society and where writers construct and represent memories. Explores the ways in which writers construct and represent memory and the impact these narratives have on our understanding of the political and cultural context in which they are produced. Explores autobiography from various places and periods. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 221 - INTRODUCTION TO CHILDREN'S LITERATURE
Provides an overview of children's literature for toddlers through teens by examining the different genres of children's literature, including picture books, myths and folklore, poetry, nonfiction, historical fiction, and fantasy, as well as the criteria for evaluation of each genre. This course is recommended for education majors as well as parents (present and future) who are interested in children's literature and issues related to children's literature. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 232C - TOPICS IN AMERICAN LITERATURE: CONTEMPORARY FICTION
In-depth study of several works of contemporary (late 20th/21st century) American fiction. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 232M - TOPICS IN AMERICAN LITERATURE: LITERATURE & MEDICINE
This course examines fiction, poetry, drama and creative nonfiction by and about members of the health professions. The goal is to understand multiple perspectives on illness, health, and healing as presented in the course material. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 250 - INTRODUCTION TO FOLKLORE AND MYTHOLOGY
Study of the systematic ways to explain how and why so many of the world's great religions, past and present, share similar stories, heroes and ways of attempting to understand and explain the unknowable. Analyzes tales from, among other locales, India, China, Africa, and North and South America. Some of the key myths include those of the Aztecs and Mayans, Native North Americans, the Sumerians and the Gnostics. The first few weeks of the course will provide an introduction to folklore. It will then provide insight into the social, psychological and aesthetic nature of mythology and an introduction to the theoretical approaches to understanding mythology. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 253 - SURVEY AMERICAN LITERATURE I
Reading and interpretation of writings from the diverse cultures which inhabited, colonized or developed this country through material from the Civil War period. Includes the Native American oral tradition, the journals of Columbus and other explorers, the diaries of settlers in the British colonies and more traditional forms of literature through the mid-19th century. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 254 - SURVEY AMERICAN LITERATURE II
Covers selected works of American literature written during the late 19th century and the 20th century. Covers the transition from Realism and Naturalism to Modernism, the Jazz Age, the Harlem Renaissance, the Confessional and "Beat" poets and writers and late 20th century short fiction. Need not be taken in sequence. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 256 - FOLKLORE AND US POPULAR CULTURE
Explores the relationship between folklore and popular culture, with special emphasis on the analysis of legends, myths, icons, stereotypes, heroes, rituals and celebrations. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 260 - INTRODUCTION TO WOMEN WRITERS
Focuses on the achievements and perspectives of women writers through critical analysis of their literary works and literary strategies. Uses a chronological, stylistic or thematic approach. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ENG 288 - SPECIAL STUDIES: LITERATURE
Explores topics of current interest in the discipline.
Credits: 1 to 4

ENG 299 - SELECTED TOPICS: LITERATURE
This course is in development.
Credits: 1 to 4

ETHNIC STUDIES

ES 101 - INTRODUCTION TO ETHNIC STUDIES
Introduction to the multidisciplinary field of Ethnic Studies. Explores the ways that ethnicity, race and racism shape the historical and contemporary experiences of people of color in the United States. Introduces students to a broad range of cultural and political contexts, social problems and histories to understand how racial formation and ethnic identity constructions emerged through and maintain systems of social inequality, while also providing insight into the various modes of resistance and struggles for a just society.
Credits: 4   Lecture: 4

ES 199 - SELECTED TOPICS: ETHNIC STUDIES
Selected topics in Ethnic Studies.
Credits: 1 to 4

ES 211 - INTRODUCTION TO NATIVE AMERICAN STUDIES
Provides an introduction to the history, social organization, political experience, and artistic expression of indigenous peoples of the western hemisphere, focusing primarily on American Indians. Explores the various historical and contemporary struggles, concerns and achievements of American Indians using an interdisciplinary approach. Prioritizes the voices of those within Indian communities in describing their own lives and experiences. Recommended preparation: ES 101.
Credits: 4   Lecture: 4

ES 212 - INTRODUCTION TO AFRICAN AMERICAN STUDIES
This course examines the historical, political, social and cultural issues that shape the experiences of African Americans both in the past and present. The course will cover many of the historical and contemporary concerns and issues facing African American communities with particular attention to the voices within these communities. Recommended preparation: ES 101.
Credits: 4   Lecture: 4

ES 213 - INTRODUCTION TO CHICAN@/LATIN@ STUDIES
This course examines historical, political, social and cultural issues in Chicano and Latino communities and surveys scholarship in Chicano and Latino studies. This course also explores the historical construction of race, ethnicity and identity with attention to how U.S. foreign policy in Latin America has influenced perceptions within and outside of the Chican@/Latin@ communities. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

ES 214 - INTRODUCTION TO ASIAN/PACIFIC ISLANDER AMERICAN STUDIES
Explores interdisciplinary research on Americans of Chinese, Filipino, Japanese, Korean, Southeast Asian, South Asian and Pacific Island ancestry. Surveys the diversity of histories, cultures and experiences that contribute to the broad category of Asian American. Focuses particular attention to the multiplicity of voices and experiences of that shape the lives of Asians in the United States. Recommended preparation: ES 101.
Credits: 4   Lecture: 4

ES 298 - INDEPENDENT STUDY: ETHNIC STUDIES
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

ES 299 - SELECTED TOPICS: ETHNIC STUDIES
Selected topics in Ethnic Studies.
Credits: 1 to 4

FILM ARTS

FA 101 - INTRODUCTION TO FILM
Focuses on audio-visual narratives, with an emphasis on how the collaborative process of combining cinematography, editing, sound, mise-en-scene and acting constructs meaning and communicates ideas. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

FA 125 - WORLD CINEMA
Introduction to comparative study of compelling feature films and their directors from around the globe, analyzing subject matter, theme, genre, narrative structure, character, film style and technique as expressions of diverse cultural worldviews and distinctive artistic visions. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

FA 257 - LITERATURE INTO FILM
Implements analysis of the structure of motion pictures to teach about structure of literature, allowing students to see the comparative strengths of each form. Aspects of narrative to be compared include plot and structure, character development, point of view, figurative discourse, symbol and allegory and means of controlling and expressing passage of time. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

FA 288 - SPECIAL STUDIES: FILM ARTS
Explores topics of current interest in the discipline.
Credits: 1 to 4

FA 298 - INDEPENDENT STUDY: FILM ARTS
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. Prerequisites: instructor approval. Recommended preparation: Prior coursework in the discipline.
Credits: 1 to 4

FA 299 - SELECTED TOPICS: FILM ARTS
This course is in development.
Credits: 1 to 4

FISH & WILDLIFE

FW 135 - MUSEUM TECHNIQUES
Hands on technique course focusing on preparing and preserving mammal and bird specimens for use in education and research. Students will complete a minimum of three projects which requires skinning and preserving wildlife specimens suitable for study and display.
Credits: 1   Lab: 3

FW 199 - SELECTED TOPICS: FISH/WILDLIFE
Provides students with hands-on field experience and aids students in acquiring experience which may meet basic qualification standards required by federal agencies. Content and credit earned by mutual agreement between instructor and student in detailed written agreement. Prerequisites: instructor approval.
Credits: 1 to 4

FW 212 - SURVEY OF NORTHWEST BIRDS
This course is an introduction to bird systematics, and surveys ecologically, economically and socially important bird species in the Pacific Northwest with an emphasis on field identification and basic life history. Recommended preparation: BI 102 or BI 213 or FOR 241A.
Credits: 2   Lab: 6

FW 218 - SURVEY OF NORTHWEST MAMMALS
This course is an introduction to mammal systematics, and surveys ecologically, economically and socially important mammal species in the Pacific Northwest with an emphasis on identification and basic life history. Recommended preparation: BI 102 or BI 213 or FOR 241A.
Credits: 2   Other: 4

FW 251 - WILDLIFE CONSERVATION
Introduces fundamentals of wildlife ecology and management and their role in wildlife conservation. Examines history of wildlife management, current issues and case examples in wildlife conservation. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

FOODS & NUTRITION

FN 225 - HUMAN NUTRITION
In-depth introduction to the science of nutrition, stressing characteristics of nutrients and their food sources. Examines digestion, absorption and metabolism of nutrients. Includes individualized diet analysis and current-interest topics including weight management and some disease therapies. Emphasis is placed on use of scientific research criteria for evaluation of current nutrition articles.
Credits: 4   Lecture: 4

FORESTRY

FOR 100 - FORESTRY PROGRAM ORIENTATION
Provides students with an orientation to the Forest Resources Technology program. The course is designed to give students knowledge and tools to succeed in the Forest Resources AAS, the natural resources work force and in an academic career beyond COCC. The course is required of all students seeking the Forest Resources Technology AAS degree, and is highly recommended for students in the Wildland Fire program.
Credits: 1   Lecture: 1

FOR 110 - WILDLAND FIRE SCIENCE I
Focuses on the effects of Wildland Fire Policy, current fire suppression strategies and tactics; weather, topography, fuel models and how each interact to effect fire behavior. Additional topics include the wildland fire environment as it relates to situational awareness and personal safety. An overview of modern wildland firefighting with an emphasis on understanding and applying fireline safety. Course cannot be challenged, but will be waived for those with proof of wildland fire single resource status.
Credits: 2   Lecture: 1 Lab: 3

FOR 111 - FORESTRY PERSPECTIVES
Introduction to the entire discipline of forestry, including the history of forest use and management, North American forest regions, forest ecology, mensuration and management, forest products and the importance of forest resources other than wood fiber. Also provides overview of state, regional and local employment opportunities.
Credits: 4   Lecture: 3 Lab: 3

FOR 126 - FIELD STUDIES PACIFIC NW FORESTS
This course examines the ecology, management and human uses of Pacific Northwest forests. Field experience takes place during a 4-day field trip to the Oregon coast and Northern California and includes visiting forest environments, forest product manufacturing facilities, field lectures and guided tours, as well as individual and small-group exercises.
Credits: 1   Lab: 3

FOR 127 - PLANTS OF THE PACIFIC NORTHWEST
Identification, classification and distribution of shrubs, forbs and grasses found in low-, mid-, and high-elevation Oregon habitat types. Emphasis is placed upon proper field identification through use of terminology and taxonomic keys. Also discusses sensitive plants and noxious weeds.
Credits: 1   Lab: 3

FOR 130 - CHAINSAW USE AND MAINTENANCE
Covers basic tree falling, bucking and limbing techniques. Equipment safety, use, maintenance and repairs of saws is covered. Designed for inexperienced or novice chainsaw operators or can be used as refresher course for experienced saw operators.
Credits: 2   Lecture: 1 Lab: 3

FOR 180 - CO-OP WORK EXPERIENCE FORESTRY
Provides opportunity for on-the-job training in forestry field operations, forest products manufacturing or work related to these areas. Normally undertaken during summer months on a full-time basis but can occur any term.
Credits: 1 to 7

FOR 188 - SPECIAL STUDIES: FORESTRY
Explores topics of current interest in the discipline.
Credits: 1 to 4

FOR 195 - WILDERNESS CONCEPTS
Introduction to concepts of wilderness and wilderness management principles. Introduction to the history of wilderness and the National Wilderness Preservation System.
Credits: 2   Lecture: 2

FOR 199 - SELECTED TOPICS: FORESTRY
Provides opportunity for students with exceptional background or need to continue beyond normal program content. Content and credit earned by mutual agreement between instructor and student and detailed in written agreement. Maximum of three credits may be applied to degree. Prerequisites: instructor approval.
Credits: 1 to 5

FOR 208 - SOILS: SUSTAINABLE ECOSYSTEMS
Focuses on the basics of Soil Science, ranging from physical properties to use and management. Soils with respect to traditional agricultural, wildlands and rangelands, watersheds and modern environmental perspectives will be discussed. New and current events of soils applications and the science of soils in the world around us will be reviewed to better understand the role soil has in our everyday lives. Lab component will include in and out of classroom lab work and field trips.
Credits: 4   Lecture: 3 Lab: 3

FOR 209 - FIRE ECOLOGY AND EFFECTS
Discusses the role of fire in Pacific Northwest ecosystems. Identifies effects on flora, fauna, soils, water; fire and cultural/visual resource management; fire and insect interactions. Covers the effects of fire on different forest and range ecosystems.
Credits: 3   Lecture: 2 Lab: 3

FOR 210 - WILDLAND FIRE SCIENCE II
A study of hazardous fuel management and treatment practices. Incorporates current fuel measurement and analysis techniques, fire behavior prediction models and hazardous wildland fuel mitigation methods.
Credits: 2   Lecture: 1 Lab: 3

FOR 211 - SUPERVISION AND LEADERSHIP
Covers basic human relations and management skills as applied to first-line supervision in forestry, fire science and EMS. Defines work environment. Identifies and discusses subordinate, peer, and supervisory relationships. Case studies, including students' own work experiences will be used.
Credits: 3   Lecture: 3

FOR 215 - FOREST RESOURCE CAPSTONE
Students conduct a sample survey of a large area and present their findings, along with recommendations for management of the area, in a written report. Oral presentation also made to department staff. Limited to second year students or those who have fulfilled majority of Forest Resources Technology degree requirements. Prerequisites: instructor approval.
Credits: 3   Lecture: 1.5 Lab: 4.5

FOR 230A - MAP, COMPASS AND GPS
Teaches the basic skills of field and forest navigation with compass and GPS. Competency obtained in pacing, paper and computer map use, compass and basic GPS use.
Credits: 3   Lecture: 2 Lab: 3

FOR 230B - FOREST SURVEYING
Studies basic surveying techniques and equipment emphasizing traversing, differential leveling, profiling, GPS mapping and basic coordinate geometry. Recommended preparation: FOR 230A or instructor approval.
Credits: 3 Lecture: 2 Lab: 3

FOR 231 - GPS MAPPING
Introduces the basic techniques of mapping grade GPS data collection for GIS. Includes data dictionary creation, field data collection, differential correction and file transfer. Recommended preparation: FOR 230A.
Credits: 1 Lecture: .6 Lab: 1.2

FOR 235 - RESOURCE MEASUREMENTS
Students will learn the fundamentals of measuring and quantifying natural resources, including cruising and scaling timber to determine merchantable volume, quantifying wildlife and fisheries habitat, measuring and estimating forage production for wildlife and livestock, and sampling wildlife populations. Course will also introduce basic statistical concepts and their applications in resource management. First course in the sequence of FOR 235, FOR 236 and FOR 237. Recommended preparation: MTH 085 or higher.
Credits: 4 Lecture: 3 Lab: 3

FOR 236 - AERIAL PHOTO
Covers practical use of aerial photographs including photo interpretation, navigation, scale, area and distance determination, corner search, basic type-mapping and GPS application. Second course in the sequence of FOR 235, FOR 236 and FOR 237. Recommended preparation: MTH 086 or higher; FOR 230B or FOR 231.
Credits: 3 Lecture: 2 Lab: 3

FOR 237 - RESOURCE SAMPLING
Includes instruction in log scaling, tree measurement techniques, sampling statistics, tree volume and tree taper equations, sampling and field procedures for equal probability (sample tree and fixed area) and variable probability (3P and point sampling) sampling systems. Final course in the sequence of FOR 235, FOR 236 and FOR 237. Recommended preparation: MTH 086 or higher, FOR 235 and FOR 236.
Credits: 4 Lecture: 2.5 Lab: 4.5

FOR 240A - FOREST ECOLOGY
Provides students with an overview of basic plant structure and function and introduces students to functioning of forest ecosystems. Class will examine the physical environment and how it affects growth and distribution of organisms and ecological processes. Course concludes with an examination of communities, disturbance and succession.
Credits: 3 Lecture: 2 Lab: 3

FOR 240B - WILDLIFE ECOLOGY
Explores wildlife ecology and biodiversity in context of forest and range management. Focuses on relationship between wildlife and forest and range ecosystems, and examines the role of forest and range management in wildlife habitat management. Recommended preparation: FOR 240A.
Credits: 3 Lecture: 2 Lab: 3

FOR 241A - FIELD DENDROLOGY
Identification, classification, and distribution of common trees and shrubs found in the Western United States and major tree species of North America. The course emphasizes botanical nomenclature and proper identification using plant keys and field characteristics.
Credits: 3 Lecture: 1 Lab: 6

FOR 241B - DENDROLOGY
Covers identification, classification and distribution of plant communities (tree, shrub, forb and grass) found within Oregon and major North American plan communities. This class covers in lecture format the structure and function of the primary organs and tissues that comprise woody plants. This course is the classroom portion of FOR 241A. Course does not need to follow FOR 241A.
Credits: 3 Lecture: 3

FOR 251 - RECREATIONAL RESOURCE MANAGEMENT
Overview of recreational resource management including study of land and water resources used for outdoor recreation. Includes planning and management of natural and cultural resources for long-term resource productivity.
Credits: 3 Lecture: 2 Lab: 3

FOR 255 - RESOURCE INTERPRETATION
Introduces fundamental theories of interpretation and active and passive techniques of interpretation including: activities, presentations, signage, brochures and information kiosks. Course allows optional certification as an interpreter.
Credits: 3 Lecture: 2 Lab: 3

FOR 260 - CONSERVATION OF NATURAL RESOURCES
Examines current utilization and issues surrounding natural resources availability and management, as well as the effect of human population on resource use and the environment. Includes critical analysis of sustainable development and resource use concepts, including principles of conservation and management. Emphasis placed on current issues. Two-day field trip required. Recommended preparation: WR 121.
Credits: 3 Lecture: 2 Lab: 3

FOR 271 - APPLIED FOREST ECOLOGY
Applies principles of forest ecology to develop a basic understanding of forest stand dynamics and silvicultural principles. Emphasis is placed on stand development, regeneration and stand analysis. Students will develop a practical understanding of stand establishment, maintenance and stand data collection. First course in sequence of FOR 271, FOR 272 and FOR 273. Recommended preparation: FOR 240A and FOR 241A.
Credits: 3 Lecture: 2 Lab: 3

FOR 272 - FOREST ENTOMOLOGY/PATHOLOGY
Emphasizes the recognition and effects of diseases, insects and mammals affecting forest ecosystems in the Pacific Northwest. Course will examine the role of insects, diseases and animals in forest functioning, health and management, as well as control measures and integrated pest management. Lab work is largely field-based and emphasizes identification of damaging forest insects and diseases common in Oregon. Second course in the sequence of FOR 271, FOR 272 and FOR 273. Recommended preparation: FOR 240A and FOR 241A.
Credits: 3 Lecture: 2 Lab: 3

FOR 273 - SILVICULTURE AND HARVESTING SYSTEMS
Emphasizes interrelated systems of silviculture and harvesting. Discussions provide an understanding of the various treatments and harvesting systems applied to forest stands to meet various management objectives for forest ecosystems. Topics include forest regeneration processes and intermediate operations (thinning, pruning, etc.) and different methods of timber harvest. Observation and data collection will be performed in lab sections. Written reports interpreting prescriptions and harvest systems will be required. Last course in a sequence of FOR 271, FOR 272 and FOR 273. Recommended preparation: FOR 271, FOR 272, and FOR 235.
Credits: 5 Lecture: 3 Lab: 6

FOR 299 - SELECTED TOPICS: FORESTRY
This course is in development.
Credits: 1 to 5

FRENCH

FR 101 - FIRST YEAR FRENCH I
The first course of a three-course sequence in French. Emphasizes active communication in French. Develops students' basic skills in listening, reading, writing and speaking.
Credits: 4 Lecture: 4

FR 102 - FIRST YEAR FRENCH II
The second course of a three-course sequence in French. Continues the development of reading, writing, listening and speaking skills. Particular

emphasis on short interactions regarding everyday life. Prerequisites: FR 101.
Credits: 4   Lecture: 4

FR 103 - FIRST YEAR FRENCH III
The third course of a three-course sequence in French. Continues the development of reading, writing, listening and speaking skills. Prepares students for entry into second-year level at COCC or any other university. Prerequisites: FR 102.
Credits: 4   Lecture: 4

FR 199 - SELECTED TOPICS: FRENCH
This course is in development.
Credits: 1 to 4

FR 201 - SECOND YEAR FRENCH I
Continues the work of First Year French, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Emphasis on writing and reading skills. Incorporates culture in all aspects of the course; class taught mostly in French. Course should be taken in sequence. Recommended preparation: FR 103 or three years of high school French.
Credits: 4   Lecture: 4

FR 202 - SECOND YEAR FRENCH II
Continues the work of FR201, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Incorporates culture in all aspects of the course; class taught mostly in French. Course should be taken in sequence. Recommended preparation: FR 201 or four years of high school French.
Credits: 4   Lecture: 4

FR 203 - SECOND YEAR FRENCH III
Continues the work of French 202, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Incorporates culture, regionalisms and argot; class taught mostly in French. Course should be taken in sequence. Recommended preparation: FR 202, or one year of IB, AP French in high school, or four years of middle/high school French.
Credits: 4   Lecture: 4

FR 211 - FRENCH CONVERSATION AND CULTURE I
Intended for students who wish to maintain and continue mastering fluency in the acquisition of French. Also an excellent option for the non-degree-seeking student. Recommended preparation: FR 103, or two years of high school French.
Credits: 3   Lecture: 3

FR 212 - FRENCH CONVERSATION AND CULTURE II
Intended for students who wish to maintain and continue mastering fluency in the acquisition of French. Also an excellent option for the non-degree-seeking student. Recommended preparation: FR 211, or FR 201, or three years of high school French.
Credits: 3   Lecture: 3

FR 213 - FRENCH CONVERSATION AND CULTURE III
Intended for students who wish to maintain and continue mastering fluency in the acquisition of French. Also an excellent option for the non-degree-seeking student. Recommended preparation: FR 212, or 202, or four years of middle/high school French.
Credits: 3   Lecture: 3

FR 298 - INDEPENDENT STUDY: FRENCH
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

GENERAL SCIENCE

GS 104 - PHYSICAL SCIENCE: PHYSICS
Energy is used as the theme to develop basic understanding of introductory principles of physics. Energy topics include mechanical, acoustic, heat, electric, radiant and nuclear. Emphasis placed on practical application of various energy forms. Recommended preparation: one year of high school algebra or equivalent or concurrent enrollment in MTH 060.
Credits: 4   Lecture: 3 Lab: 3

GS 105 - PHYSICAL SCIENCE: CHEMISTRY
Provides an introduction to properties and structures of matter, chemical bonding, solutions, equilibrium, electrolytes, and acids and bases. Also includes quantitative discussions of the mole, stoichiometry and solution concentration. Recommended preparation: one year of high school algebra or equivalent or concurrent enrollment in MTH 060.
Credits: 4   Lecture: 3 Lab: 3

GS 106 - PHYSICAL SCIENCE: GEOLOGY
Study of physical characteristics of, and processes within, solid earth. Principal topics include minerals, earthquakes, plate tectonics, igneous, sedimentary and metamorphic processes, glaciation and geologic time. Recommended preparation: one year of high school algebra or equivalent or concurrent enrollment in MTH 060.
Credits: 4   Lecture: 3 Lab: 3

GS 107 - PHYSICAL SCIENCE: ASTRONOMY
Introduction to astronomy including solar system, stellar systems and cosmology. Some individual observing may be required. Recommended preparation: one year of high school algebra or equivalent or concurrent enrollment in MTH 060.
Credits: 4   Lecture: 3 Lab: 3

GS 108 - PHYSICAL SCIENCE: OCEANOGRAPHY
Survey course that includes topics from four main areas of oceanography: geology of ocean basins and coasts; waves and currents; sea water chemistry and marine biology. Recommended preparation: one year of high school algebra or equivalent or concurrent enrollment in MTH 060.
Credits: 4   Lecture: 3 Lab: 3

GS 199 - SPECIAL TOPICS: GENERAL SCIENCE
This course is in development.
Credits: 1 to 6

GEOGRAPHY / GEOG INFO SYSTEMS

GEOG 100 - INTRODUCTION TO GEOGRAPHY
Designed to examine the key themes, concepts and ideas in geography and to develop a geographical perspective of the contemporary world. A basic foundation of the fundamental themes in geographic education will be extended to the study of places and regions. Emphasis will be placed on the development of cartographic and map interpretation skills.
Credits: 4   Lecture: 4

GEOG 106 - ECONOMIC GEOGRAPHY
Introduces the distribution of economic activities across the nation and the world. Explores core issues such as economic development, resource distribution and use, global agriculture, changes in manufacturing and the growth of the service sector. Urban patterns are explained in the context of our interrelated, globalized world. Useful course for business majors or any student wanting to understand criteria for business location. Recommended preparation: minimum placement into WR 065.
Credits: 4   Lecture: 4

GEOG 107 - CULTURAL GEOGRAPHY
Examination of different cultural traits in the world. Special emphasis on perception of space and landscape, language, world religion and folk and popular culture issues. Recommended preparation: minimum placement into WR 065.
Credits: 4   Lecture: 4

GEOG 190 - ENVIRONMENTAL GEOGRAPHY
Introductory view of the environment and how it is shaped by and shapes human activity. Units include famine, water resources, deforestation, energy use, biodiversity and sustainable land-use practices. Recommended preparation: WR 121.
Credits: 4 Lecture: 4

GEOG 198 - FIELD GEOGRAPHY OF CENTRAL OREGON
Field course that examines natural and cultural landscapes of Central Oregon sub-regions such as the Bend Core, Sisters Country, High Desert, and Upper and Lower Deschutes Basins. Recommended preparation: WR 121.
Credits: 3 Lecture: 3

GEOG 199 - SELECTED TOPICS: GEOGRAPHY
Series of mini-courses focusing on selected geographical topics including the following: an invitation to geography and natural regions of the world (deserts, mountains, humid tropics) and thematic topics.
Credits: 1 to 4

GEOG 201 - WORLD REGIONAL GEOGRAPHY I
Introductory Geography course that explores the following regions: Europe, the former Soviet Union, Anglo-America, Australia and Japan. Evaluate how culture, politics, economics, history and the physical environment help create differences across regions. Recommended preparation: WR 121.
Credits: 4 Lecture: 4

GEOG 202 - WORLD REGIONAL GEOGRAPHY II
Introductory Geography course that explores the following regions: Latin America, Middle East/North Africa, Sub-Saharan Africa, East, South and Southeast Asia. Evaluate how culture, politics, economics, history and the physical environment help create differences across regions. Recommended preparation: WR 121.
Credits: 4 Lecture: 4

GEOG 207 - GEOGRAPHY OF OREGON
Survey of the state of Oregon focusing on natural environment, economic developments and human geography. Special emphasis on historical geography and demographic changes. Includes studies of major regions of Oregon. Recommended preparation: WR 065.
Credits: 3 Lecture: 3

GEOG 211 - COMPUTER CARTOGRAPHY
Develops skills needed to produce maps using ArcGIS Desktop software. Outlines cartographic principles and map use. Emphasis on mapping techniques within a GIS. Intended for students enrolled in GIS or UAS programs.
Credits: 4 Lecture: 3 Other: 2

GEOG 212 - TOURISM AND RECREATION
Includes a study of various components of the tourist industry and an analysis of the economic and environmental impacts of tourism and recreation upon communities. Examines tourism and recreation in Central Oregon and in other selected parts of the world. Recommended preparation: WR 065.
Credits: 3 Lecture: 3

GEOG 213 - GEOGRAPHY OF PACIFIC NORTHWEST
General introduction to geographical characteristics of the Pacific Northwest and, through this regional emphasis, to some of the basic principles and concepts of geography as a discipline. Comprises three broad sections dealing in turn with historical geography, physical geography and economic geography. Recommended preparation: WR 065.
Credits: 3 Lecture: 3

GEOG 265 - GEOGRAPHIC INFORMATION SYSTEMS
Introduces students to principles and practice of GIS, while providing experience using ArcGIS Desktop and Spatial Analyst software. Develops both theoretical understanding of GIS and experience in accessing GIS datasets. Students exposed to raster and vector GIS.
Credits: 4 Lecture: 3 Lab: 3

GEOG 266 - ARC GIS
Provides working knowledge of ArcGIS Desktop software. In addition, students undertake designing and developing a GIS database, performing spatial analysis, creating maps and generating a report using the desktop products. Recommended preparation: or to be taken with GEOG 265.
Credits: 5 Lecture: 4 Other: 2

GEOG 267 - GEODATABASE DESIGN
Covers fundamentals of creating, using, editing, and managing spatial and attribute data stored in a geodatabase in ArcGIS. Topics include data migration; data loading; topology rules; use of subtypes, attribute domains and relationship classes. Also covered are creation, editing and analysis of geometric networks. Recommended preparation: GEOG 266.
Credits: 5 Lecture: 4 Other: 2

GEOG 270 - MAP INTERPRETATION AND DESIGN
Looks at the world of maps. How to design, interpret and critique many forms of maps. Recommended preparation: MTH 060 or equivalent.
Credits: 4 Lecture: 4

GEOG 272 - GEOGRAPHY FOR TEACHERS
Designed for public and private school teachers in Geography and for all teachers wishing to include geographic content and concepts in their social studies classes. Emphasizes how to teach Geography at any grade level and incorporates the benchmarks and curriculum goals of the state of Oregon Department of Education as well as National Geography standards. Recommended preparation: WR 121.
Credits: 3 Lecture: 3

GEOG 273 - SPATIAL DATA COLLECTION
Provides the skills to collect location information for the purpose of integration with a Geographic Information System. The focus is on proper utilization of Global Positioning System (GPS) receivers and data collection. Intended for students enrolled in the second year of GIS or UAS programs, or similar academic preparation. See program director for details.
Credits: 5 Lecture: 4 Other: 2

GEOG 275 - GIS CAPSTONE
Culmination GIS project. Students are presented with a set of criteria and perform all steps necessary to complete the project including: project planning, designing and developing a GIS database, data collection and editing, performing spatial analysis, creating maps, generating reports and presenting of project output. See instructor for details. Recommended preparation: GEOG 285.
Credits: 5 Lecture: 4 Other: 2

GEOG 278 - PHYSICAL GEOGRAPHY-LANDFORMS AND WATER
Introduction to the science of landforms and the processes that form them, including both internal and external processes, and how these processes interact and form a system. The course will survey different landform types, such as fluvial, Aeolian, glacial, volcanic, coastal, karst and periglacial landforms and identify where, on a global basis, these landforms are likely to occur.
Credits: 4 Lecture: 3 Lab: 3

GEOG 279 - PHYSICAL GEOGRAPHY-WEATHER AND CLIMATE
This course is an introduction to the sciences of meteorology and climatology. The focus of study for the meteorology section of the course will be on the troposphere, which is the layer of the atmosphere closest to the earth. The last portion of the course will study climatic classification and the relationship of climate with natural vegetation and human activity.
Credits: 4 Lecture: 3 Lab: 3

GEOG 280 - CO-OP WORK EXPERIENCE GIS
Provides opportunity for on-the-job experience in the GIS field. Normally taken summer term, but may occur during any term. See instructor for details. Prerequisites: instructor approval.
Credits: 1 to 3

GEOG 284 - GIS CUSTOMIZATION
Utilizes techniques to customize ArcGIS software through use of a current programming language. Publishing content to the internet and servers is also undertaken. Recommended preparation: CIS 122.
Credits: 5　Lecture: 4 Lab: 2

GEOG 285 - DATA CONVERSION AND DOCUMENTATION
Covers a variety of techniques to collect and convert data between various formats, projections and coordinate systems, etc. Cultivates student's ability to research and experiment with data and enhance problem-solving skills. Stresses use of metadata which allows the data user to determine whether a particular data set is suitable for its proposed use. Recommended preparation: GEOG 266.
Credits: 5　Lecture: 4 Other: 2

GEOG 286 - REMOTE SENSING
Introduces students to the theory and methods of remote sensing through use of satellite imagery. Practical exercises involve use of SPOT, LANDSAT and Quickbird images with ArcGIS/Imagine Analysis software. Digital analysis is discussed and performed including preprocessing, image classification and image evaluation. Intended for students enrolled in the second year of GIS or UAS programs, or similar academic preparation. See program director for details.
Credits: 5　Lecture: 4 Other: 2

GEOG 287 - ANALYSIS OF SPATIAL DATA
Leads students through the analytical capabilities of GIS. Course begins with the more elementary but useful techniques involving locating and describing features, then proceeds to more advanced techniques based on higher-level spatial objects. Lab exercises utilize the Spatial Analyst Extension of ArcGIS to perform analysis of raster datasets. Recommended preparation: GEOG 266.
Credits: 5　Lecture: 4 Other: 2

GEOG 290 - ENVIRONMENTAL PROBLEMS
Examines intentional and inadvertent human modification of the natural environment and local, regional and global problems it may cause. Includes deforestation, urbanization, resource depletion and climate. Recommended preparation: WR 121.
Credits: 3　Lecture: 3

GEOG 295 - WILDERNESS AND SOCIETY
Cultural and historical overview of the changing attitudes toward wilderness as reflected through literature and the history of federal land legislation. Attempts to define the social and economic values of wilderness lands and where they occur geographically. A reading intensive course.
Credits: 4　Lecture: 4

GEOG 298 - INDEPENDENT STUDY: GEOGRAPHY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

GEOG 299 - SELECTED TOPICS: GEOGRAPHY
This course is in development.
Credits: 1 to 4

GEOLOGY

G 148 - VOLCANOES AND EARTHQUAKES
This lab science course examines the global occurrence, origin and geological processes that create volcanoes and earthquakes. In addition, the course explores geologic hazards, risks, monitoring techniques and prediction methods associated with earthquakes and volcanism. The course makes extensive use of historic and prehistoric records of earthquakes and volcanic events and highlights examples from Oregon and the western United States.
Credits: 4　Lecture: 3 Lab: 3

G 162CV - CASCADE VOLCANOES
Consists of field studies of selected areas with emphasis on relationship between rock type, geologic setting and topography. Includes lectures, laboratory and weekend field trips. Topic areas include Cascade Volcanoes.
Credits: 3　Lecture: 1 Lab: 6

G 199 - SELECTED TOPICS: GEOLOGY
This course is in development.
Credits: 1 to 6

G 201 - GEOLOGY I
Examines the nature and origins of igneous metamorphic and sedimentary rocks, volcanism and volcanic hazards, geological resources, interior of the earth and plate tectonics.
Credits: 4　Lecture: 3 Lab: 3

G 202 - GEOLOGY II
Examines the nature of earthquakes, mass wasting, rivers, glaciers, groundwater, deserts, rock deformation, mountain building and plate tectonics. Need not be taken in sequence.
Credits: 4　Lecture: 3 Lab: 3

G 203 - GEOLOGY III
Examines earth history, geologic time, plate tectonics, fossils and the origin of earth. Need not be taken in sequence.
Credits: 4　Lecture: 3 Lab: 3

G 207 - GEOLOGY OF THE PACIFIC NORTHWEST
This is a one-term introductory lab science course in geology. It provides an introduction to the regional geology of the Pacific Northwest with emphasis on Oregon, Washington and parts of neighboring states and provinces. Includes basic geologic principles, earth materials and geologic history of the Pacific Northwest. Required weekend field trip.
Credits: 4　Lecture: 3 Lab: 3

G 299 - SELECTED TOPICS: GEOLOGY
Selected Topics in Geology
Credits: 1 to 6

GERMAN

GER 101 - FIRST YEAR GERMAN I
German 101 is designed for beginners. Basic listening, comprehension, speaking and writing skills will be developed during this course. Focuses on phonetics, genders, descriptions of objects and people, conjugating regular and irregular verbs in the present tense, punctuation, question words, German word order, and vocabulary, which includes the following categories: the alphabet, numbers and greetings. Communication and German thought processes will be emphasized. Successful completion of this sequence, which should be taken in order, will prepare students for second-year level German at COCC or other universities.
Credits: 4　Lecture: 4

GER 102 - FIRST YEAR GERMAN II
Continues the development of reading, writing, listening and speaking skills. Focuses on usage of kennen and wissen, the accusative case and prepositions governed by the accusative, modal verbs, verbs with separable prefixes, forming plurals, the formal and informal imperative, and prepositions. Students are encouraged to review GER 101 concepts and vocabulary prior to class. Recommended preparation: GER 101 or one year of high school German.
Credits: 4　Lecture: 4

GER 103 - FIRST YEAR GERMAN III
Continues the development of reading, writing, listening and speaking skills. Focuses on the dative case including indirect objects and prepositions governed by the dative, prepositions that can be accusative or dative, past tense using sein and haben, coordinating conjunctions, and comparisons. Students are encouraged to review the concepts of GER 101 and GER 102 prior to class. Recommended preparation: GER 102 or two years of high school German.
Credits: 4　Lecture: 4

GER 188 - SPECIAL STUDIES: GERMAN
Explores topics of current interest in the discipline.
Credits: 1 to 4

GER 201 - SECOND YEAR GERMAN I
Continues, after GER 103, with the development of reading, writing, listening and speaking skills. Focuses on subordinating conjunctions, reflexive pronouns and verbs in the accusative and dative, genitive, adjective endings and comparisons. Class begins with a review of GER 101, GER 102 and GER 103. Recommended preparation: GER 103 or three years of high school German.
Credits: 4   **Lecture:** 4

GER 202 - SECOND YEAR GERMAN II
Continues with the development of reading, writing, listening and speaking skills. Focuses on the concepts of adjectives used as nouns, the simple past tense, past perfect tense, expressing wishes and expectations, the future tense, relative clauses, negations using nicht, noch nicht, noch kein(e), and nicht mehr, verbs with fixed prepositions, da- and wo-compounds and the subjunctive. Recommended preparation: GER 201 or four years of high school German.
Credits: 4   **Lecture:** 4

GER 203 - SECOND YEAR GERMAN III
Continues with the development of reading, writing, listening and speaking skills. Focuses on the concepts of subjunctive I and II, expressing opinions, indirect discourse in present and past subjunctive I, the passive voice and the impersonal use of "man," present participles, review of GER 202 grammar and vocabulary. Recommended preparation: GER 202 or four years of high school German.
Credits: 4   **Lecture:** 4

GER 298 - INDEPENDENT STUDY: GERMAN
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

GER 299 - SPECIAL STUDIES: GERMAN
This course is in development.
Credits: 1 to 4

HHP ACTIVITY

HHPA 102 - BEGINNING ROCK CLIMBING
Provides an introduction to rock climbing.
Credits: 1   **Other:** 3

HHPA 103 - TRAINING FOR ROCK CLIMBING
Provides training for rock climbing.
Credits: 1   **Other:** 3

HHPA 104 - INTERMEDIATE ROCK CLIMBING
This class focuses on preparing the student to transition into a lead sport climber. This class builds upon the skills covered in the beginning rock climbing courses, including advanced belay techniques, belay/rappel transitions, and anchor building in a sport climbing environment. Students will develop a plans to improve their climbing techniques, strength and endurance.
Credits: 1   **Other:** 3

HHPA 105 - BACKPACKING
Provides instruction for backpacking.
Credits: 1   **Other:** 3

HHPA 106 - SNOWSHOEING
Provides an introduction to snowshoeing.
Credits: 1   **Other:** 3

HHPA 107 - BACKCOUNTRY SKIING
Provides an introduction to backcountry skiing.
Credits: 1   **Other:** 3

HHPA 109 - WHITEWATER KAYAKING I
Provides introduction to whitewater kayaking.
Credits: 1   **Other:** 3

HHPA 110 - WHITEWATER RAFTING I
Provides introduction to whitewater rafting.
Credits: 1   **Other:** 3

HHPA 112 - BEGINNING MOUNTAIN BIKING
Introduction to mountain biking which will include local trail systems.
Credits: 1   **Other:** 3

HHPA 114 - INTERMEDIATE MOUNTAIN BIKING
Designed to build upon fundamental mountain bike skills. Trail etiquette and basic nutrition will be reviewed. Introduces intermediate bike maintenance and advanced riding techniques. Rides will take place on local trails. Previous mountain biking experience is necessary.
Credits: 1   **Other:** 3

HHPA 115 - WILDERNESS TRAINING: BEGINNING
Introduces a variety of outdoor activities, which may include: rock climbing, whitewater rafting, kayaking, canoeing, snowshoeing, caving, hiking and cross-country skiing. Develops basic skills in outdoor activities and learns about appropriate preparation for participation.
Credits: 1   **Other:** 3

HHPA 120 - TAI CHI/QIGONG
Introduces the basic techniques of Tai Chi Yang style simplified form and three Qigong exercises, as well as theories and concepts for better health and relaxation through meditation in movement. Can accommodate all levels.
Credits: 1   **Other:** 3

HHPA 122 - YOGA-BEGINNING
Introduces the basic techniques of yoga incorporating a wide range of yoga styles. Classes vary according to instructor offerings, which include Ashtanga, Hatha, Vinyasa, Yin, Restorative and Kundalini.
Credits: 1   **Other:** 3

HHPA 125 - YOGA-INTERMEDIATE
Appropriate for any student who has a yoga background and is familiar with basic yoga postures, breathing and intentions. Self-exploration is enhanced through the introduction of variations of alternative movements to basic poses such as arm balances. Following a dynamic warm-up, students will participate in a flow-type session with quick movements to increase heart rate. Deep stretch and shavasana will conclude each class. Students will often work in pairs on advanced postures.
Credits: 1   **Other:** 3

HHPA 126 - YOGA-ALL LEVELS
Modification and additional variation in postures for students wanting a more challenging practice, using a blend of different yoga styles. Appropriate for all levels.
Credits: 1   **Other:** 3

HHPA 127 - YOGA FOR ATHLETES
Designed for anyone (novice to advanced) who aspires to utilize the benefits of yoga to boost their athletic performance in any sport. Although not required, it may be helpful to have had an introductory course prior to this class. A dynamic, flow-style of Vinyasa practice linking breath and movement with modifications emphasizing safety and anatomical clarity. The practice will utilize traditional asanas (poses) to build a foundation for a robust athletic yoga tool. The importance of strength will be equally emphasized with Yin like deep-style stretching. Rest and recovery will be given equal time with an intro to the benefits of restorative practice utilizing props (bolsters).
Credits: 1   **Other:** 3

HHPA 128 - YOGA/PILATES BLEND
Focuses on a blend of two modalities, with the flexibility of yoga and core strength training of Pilates.
Credits: 1   Other: 3

HHPA 130 - TOTAL FITNESS
High-intensity, physically demanding activity class geared toward improving overall physical fitness in a supportive team atmosphere. Various forms of games, skills, exercises and activities will be used to improve weakness areas as well as further enhance areas in which the student already excels physically. All levels welcome but a positive, can-do attitude is a must.
Credits: 1   Other: 3

HHPA 132 - JOGGING
Focuses on improving running economy and cardiovascular fitness through various running-related activities. Students will run at both on- and off-campus sites. Runners of all levels welcome.
Credits: 1   Other: 3

HHPA 133 - SKI CONDITIONING-NORDIC
An outdoor/indoor conditioning class for all levels of Nordic skiers. Goal of the class is to provide ski-specific cardiovascular fitness and muscular strength as well as improving Nordic ski technique. Various ski-specific drills and exercises will be used in a fun group atmosphere.
Credits: 1   Other: 3

HHPA 134 - CIRCUIT TRAINING
Traditional circuit training class for total body conditioning that includes interval training via different apparatuses and core circuit training using various forms of equipment. Emphasizes improvement in both core strength and cardiovascular fitness. Appropriate for all levels of fitness and exercise experience.
Credits: 1   Other: 3

HHPA 135 - CYCLING: STUDIO
Introduces indoor studio cycling skills to all fitness and experience level of cyclists. Emphasizes proper form and designed to provide a fun mode of enhancing cardiovascular fitness in a group setting.
Credits: 1   Other: 3

HHPA 136 - BOOT CAMP FOR WOMEN
Introduction for women to exercises that improve cardiovascular endurance, muscular strength and flexibility in a supportive team atmosphere. Utilizes interval training, core strength, plyometrics, running, games and weights and is appropriate for all levels of fitness and experience.
Credits: 1   Other: 3

HHPA 137 - PROGRESSIVE WALKING
A group class designed to prepare and progressively improve cardiovascular fitness through walking. An emphasis will be placed on monitoring intensity through heart rate. All levels of walkers are welcome.
Credits: 1   Other: 3

HHPA 138 - KI AIKIDO
Introduces the martial art of Ki Aikido, a form of self-defense and non-fighting to all levels of experience in Ki Aikido. It is based upon coordination of mind and body, not only in throwing, but also in the art of falling (ukemi).
Credits: 1   Other: 3

HHPA 140 - BASKETBALL
This activity class teaches all the fundamental skills and rules of basketball to all levels of basketball players. There will be an emphasis on team play.
Credits: 1   Other: 3

HHPA 141 - GOLF
Held at local golf courses and is taught by local professional golf instructors. Instruction of basic golf skills to all levels of golf players. Golf clubs may be available for use in class (contact the department for more information).
Credits: 1   Other: 3

HHPA 142 - BEGINNING RUGBY
Familiarizes students with the rules, skills, strategy, fitness level and basic concepts of modern Rugby Union Football. Equips students to be an informed Rugby participant.
Credits: 1   Other: 3

HHPA 143 - SOFTBALL
Focuses on fundamental skill development and team play for all levels of softball players.
Credits: 1   Other: 3

HHPA 144 - SOCCER
Focuses on fundamental skill development and team play for all levels of soccer players.
Credits: 1   Other: 3

HHPA 146 - TENNIS I
Focuses on skill development for beginning tennis players. Students will learn through various drills and court games.
Credits: 1   Other: 3

HHPA 147 - TENNIS II
Geared toward students with intermediate or advanced tennis skills. Students will work toward improving current tennis skill level and strategy by means of practice as well as feedback from the instructor. Recommended preparation: HHPA 146.
Credits: 1   Other: 3

HHPA 148 - VOLLEYBALL - ALL LEVELS
Focuses on fundamental volleyball skill development and team play for beginning students and continuing students who want to enhance their skill level.
Credits: 1   Other: 3

HHPA 149 - VOLLEYBALL - DOUBLES
Provides rules and strategy of doubles volleyball. Includes communication with teammates on the courts due to the faster pace of the game.
Credits: 1   Other: 3

HHPA 150 - CULTURAL DANCE FITNESS
Designed to introduce individuals to various types of energetic dance styles from Africa to the Caribbean in a fun, dance fitness setting as well as learning the art of choreography. Integrates several dance styles (i.e., West African, Dance Hall, Hip-Hop) to a variety of beats and rhythms from around the world. Designed for all levels.
Credits: 1   Other: 3

HHPA 153 - AEROBIC DANCE-HIP HOP
Explains the growing awareness of hip hop as a mind-body, dance-style aerobic movement. Includes choreographed moves with each class and building upon each other as a sequenced routine.
Credits: 1   Other: 3

HHPA 154 - DANCERCISE
High-energy activity class emphasizing dance movements including jazz, contemporary and salsa styles.
Credits: 1   Other: 3

HHPA 156 - PILATES-BEGINNING
Through Pilates exercises, this class familiarizes students with the awareness of core flexibility and strength, relative muscle groups and joint actions of the core. Students will learn Pilates vocabulary and training techniques, including specific stretching, as well as stretching for general health. Also provides proper sequence form for stretching, the slide, rings, exercise balls and weights for cardio and overall balance.
Credits: 1   Other: 3

HHPA 157 - PILATES - ALL LEVELS
Includes a brief review of Pilates fundamentals (proper spine alignment, elongation, thoracic breath and core control, including the use of appropriate Pilates equipment). Students will learn several sequences of Pilates exercises with appropriate modifications for all fitness levels.
Credits: 1   Other: 3

HHPA 158 - STRETCH AND RELAXATION
Introduces students to progressive stretching activities and emphasizes the value of stretching to the overall relaxation process.
Credits: 1　　**Other:** 3

HHPA 159 - BARRE BODY
Combines ballet & Pilates fundamentals with motivating music to improve fitness through use of ballet or body barres. This low-impact class is ideal for all fitness levels without traditional gym equipment. Muscles are engaged in strategic patterns that intermix small isometric movements with greater range of motion working toward a defined physique.
Credits: 1　　**Other:** 3

HHPA 170 - SNOWBOARDING I
For beginning snowboarders. Students will learn the fundamentals of snowboarding with qualified instructors. Equipment must be provided by the student.
Credits: 1　　**Other:** 3

HHPA 171 - SNOWBOARDING II
For intermediate to advanced snowboarders. Students will be provided instruction to enhance their current skill level in snowboarding. Equipment must be provided by the student.
Credits: 1　　**Other:** 3

HHPA 172 - SNOWBOARDING III - COMPETITIVE FREESTYLE RIDING
Focuses on freestyle techniques for advanced riders. Emphasis of instruction is on freestyle maneuvers, including straight airs, 180s, and straight airs with grabs, as well as etiquette when riding in the half-pipe, slope-style facilities and natural freestyle terrain. Equipment must be provided by the student.
Credits: 1　　**Other:** 3

HHPA 173 - BRAZILIAN JUJITSU
Modified version of traditional Japanese Jujitsu and martial art sport that focuses on gaining a dominant position over an opponent. Students will learn proper techniques, using leverage, sparring and self-defense drills to gain self-confidence.
Credits: 1　　**Other:** 3

HHPA 174 - SWIMMING I-SWIM FITNESS AND TECHNIQUE
Swim Fitness and Technique helps student feel safe and comfortable in the water for at least ten minutes at a time, incorporating and refining swimming strokes.
Credits: 1　　**Other:** 3

HHPA 176 - MASTERS SWIMMING
Designed to strengthen swimming stroke skills to the advanced level. Introduces advanced concepts of fitness swimming. Prepares students for a lifetime of participation in swimming and racing if desired. Students will attend organized masters swim team practices. Previous swimming experience expected.
Credits: 1　　**Other:** 3

HHPA 177 - SWIMMING FUNDAMENTALS
Basic swim instruction for individuals with limited to no swim experience. Learn basic swim skills (floating, breathing techniques, and flutter kicking), swimming theory concepts and strokes (front and back crawl and breaststroke) at your own pace.
Credits: 1　　**Other:** 3

HHPA 178 - SKI ALPINE I
Designed for beginning downhill skiers. Learn the fundamentals of skiing with qualified instructors. Equipment must be provided by the student.
Credits: 1　　**Other:** 3

HHPA 179 - SKI ALPINE II
Designed for intermediate to advanced alpine skiers. Provides instruction to enhance current ski skill level. Equipment, including helmet, must be provided by the student.
Credits: 1　　**Other:** 3

HHPA 182 - TAE KWON DO
A martial art form that if properly performed, improves cardiovascular endurance, muscular strength, and flexibility. Instruction includes techniques of self-defense, proper Tae Kwon Do etiquette and a cultural introduction of Dojang.
Credits: 1　　**Other:** 3

HHPA 183 - WATER AEROBICS
Introduces water aerobics which improves cardiovascular endurance, muscular strength and flexibility in a low-impact environment.
Credits: 1　　**Other:** 3

HHPA 184 - ZUMBA
ZUMBA dance fitness fuses hypnotic rhythms and easy-to-follow moves to create a dynamic fitness program. This course is designed to include cardiovascular strengthening, muscle toning with resistance and movements to enhance flexibility and balance.
Credits: 1　　**Other:** 3

HHPA 185 - WEIGHT TRAINING
Covers the basic principles of weight training and proper use of weight room equipment and safety. The course includes a variety of weight training methods and incorporates core strength and flexibility activities. Students will develop their own weight lifting program throughout the term.
Credits: 1　　**Other:** 3

HHPA 186 - STAND UP PADDLE BOARDING
Introduction into the world of stand-up paddle boarding. Designed for all levels, teaches the fundamentals of stand-up paddle boarding with a qualified instructor. Introduces skills for proper paddling technique, safety considerations and trip planning. Participants should be comfortable in and around the water. Equipment provided.
Credits: 1　　**Other:** 3

HEALTH & HUMAN PERFORMANCE

HHP 100 - INTRODUCTION TO PUBLIC HEALTH
Provides an introduction to the core elements of public health science and practice, including health policy, health systems and health ethics. Open to all COCC students who want to know more about the dynamic, multi-disciplinary field of public health, what it is, how it is organized and how it works. Recommended preparation: Completion of WR 065 or higher or minimum placement into WR 121.
Credits: 4　　**Lecture:** 4

HHP 110 - ORIENTATION TO PUBLIC HEALTH PROFESSIONS
Provides an introduction for students interested in health-related careers to the field of public health and its many career opportunities in behavioral and social sciences, community health (including maternal & child health), epidemiology, environmental health, health management and policy, health promotion, health informatics, minority health and health disparities, public health preparedness, gerontology and global health. Meet public health professionals in class and 'on-the-job,' explore public health interests and academic pathways. Recommended preparation: Completion of WR 065 or minimum placement into WR 121.
Credits: 1　　**Lecture:** 1

HHP 131 - INTRODUCTION TO EXERCISE/SPORT SCIENCE
Introduces students to the profession of exercise science including an overview of basic concepts and careers in exercise physiology, athletic training, personal training, coaching, sports medicine, physical therapy and fitness management. Provides a comprehensive introduction to any student who is considering a career in the area of health, fitness, wellness, exercise physiology and sports medicine. Also, includes guest speakers currently working in the profession, as well as tours of local fitness facilities. Various fitness certifications are compared and contrasted. Recommended preparation: WR 065 or higher.
Credits: 3　　**Lecture:** 3

HHP 188 - SPECIAL STUDIES: HHP
Explores topics of current interest in the discipline.
Credits: 1 to 6

HHP 199 - SELECTED TOPICS: HEALTH AND HUMAN PERFORMANCE ACTIVITIES
Includes both introductory courses and activities.
Credits: 1 to 6

HHP 210 - INTRODUCTION TO THE HEALTH CARE SYSTEM
Provides tools to examine and critically assess the U.S. health care delivery system, its components and the challenges created by its structure. Considers the U.S. health care system from the perspective of multiple players and partners, including consumers/patients, primary health care, hospitals, providers, insurers and government. Compares and contrasts the U.S. health care system to health care systems in other developed and emerging countries. Recommended preparation: HHP 100.
Credits: 3   Lecture: 3

HHP 212 - CPR - AMERICAN HEART ASSOCIATION HEARTSAVER WITH PEDIATRIC
The Heartsaver Automatic External Defibrillator (AED) with Pediatric CPR course teaches the basic techniques of adult CPR and use of an AED. Pediatric CPR skills may be taught if students live or work in a setting where children are present. Students also learn to use barrier devices in CPR and give first aid for choking for responsive adult, child and infant victims. Course teaches how to recognize the signs of four major emergencies: heart attack, stroke, cardiac arrest and foreign-body airway obstruction. Through the American Heart Association. Course meets the Dental Assistant standards.
Credits: 1   Lecture: 1

HHP 212A - AHA BASIC LIFE SUPPORT FOR PROVIDERS CPR
Provides the following skills: basic life support for patients of all ages (including ventilation with a barrier device and a bag-mask device), use of an automatic external defibrillator and relief of choking in responsive and non-responsive patients. Designed for providers who care for patients in a wide variety of settings, both in and out of hospital. In order to receive the AHA BLS Provider Certification card, one must pass a written exam and be able to physically perform all skills required for CPR.
Credits: 1   Lecture: 1

HHP 216 - SOCIOCULTURAL DIMENSIONS OF PHYSICAL ACTIVITY
This course will provide an overview of physical activity in contemporary society. It will look at relationships with the social processes: interrelationships between physical activity and cultural institutions.
Credits: 3   Lecture: 3

HHP 231 - HUMAN SEXUALITY
Explores physiological, sociological and psychological factors relating to human sexual behavior. Topics include male and female sexual anatomy, gender identity and roles, relationships and communication, fertility management and sexual diseases and dysfunctions. Recommended preparation: WR 065 or higher.
Credits: 3   Lecture: 3

HHP 240 - SCIENCE OF NUTRITION
Will introduce nutrition to exercise science, nutrition, dietetics, food science, and health science majors who have taken general chemistry. Concepts of nutrient metabolism and utilization, nutrient deficiencies and toxicities and their relationship to disease prevention and treatment. Meets requirements for COCC AS in EXSS and BS in EXSS at OSU-Cascades. Prerequisites: CH 104 or 105 or 106 or CH 221 or 222 or 223.
Credits: 3   Lecture: 3

HHP 242 - STRESS MANAGEMENT
Helps students develop a comprehensive approach to the management of stress. Examines the historical, emotional, intellectual, spiritual, psychological and physiological foundations of the stress concept. This broad understanding of stress will be the basis for the study of the role that stress plays in health and disease. Students will experiment with a wide variety of stress management and relaxation techniques. Recommended preparation: WR 065 or higher.
Credits: 3   Lecture: 3

HHP 243 - OCCUPATION HEALTH, AHA BLS CPR
This class provides an introduction to major concepts and issues in occupational health and safety, including health promotion, injury and disease prevention, and protection of worker populations from environmental hazards. The course will also include a section on stress management with a focus on the application of managing stress on the job, and will include the American Heart Association (AHA) Basic Life Support (BLS) for Health Care Providers (HCP) CPR course which is what we currently teach in our one-credit HHP 212A class.
Credits: 3   Lecture: 3

HHP 246 - INTRODUCTION TO ADAPTED PHYSICAL ACTIVITY
This course will provide an overview of cognitive, neuromuscular, sensory, and orthopedic impairments; understanding accessible physical activity programs for individuals with disabilities. This is a hybrid course where approximately 50% of the course will take place in a traditional face-to-face classroom and 50% will be delivered via Blackboard, your online learning management system, where you will interact with your classmates and with the instructor.
Credits: 3   Lecture: 3

HHP 248 - HEALTH PSYCHOLOGY
Health is defined as "a state of complete physical, mental and social wellbeing, and not merely the absence of disease" (World Health Organization, 1948). With that definition in mind, this course examines how biological, psychological, social and environmental factors affect physical health and wellbeing. Specific topics include historical and cultural perspectives of health, the psychology and physiology of stress, health behavior modification with emphases on primary prevention and health promotion, socioeconomic and healthcare inequalities, and an exploration of biopsychosocial factors related to chronic diseases like obesity, heart disease and HIV AIDS. This course is one of the four pre-Public Health core courses offered. Recommended preparation: WR 065 or higher.
Credits: 4   Lecture: 4

HHP 252 - FIRST AID & AHA BASIC LIFE SUPPORT PROVIDER CPR
First Aid & CPR instruction. First aid includes: immediate and temporary care for a wide variety of injuries, illnesses, conditions. CPR includes: patients of all ages; ventilation with a face shield, pocket mask and a bag-mask device; use of an automated external defibrillator (AED); relief of choking; both one- and two-person CPR; and compression-only CPR. Practical exam includes individual hands-on testing; successful completion of course results in National Safety Council Standard First Aid - card valid for three years and American Heart Association (AHA) Basic Life Support (BLS) for Provider Adult & Pediatric CPR - card valid for two years. Recommended preparation: WR 065 or higher.
Credits: 3   Lecture: 3

HHP 252A - FITNESS/FIRST AID
Introduces both first aid and wellness topics, such as immediate and temporary care for injury and illness, control of bleeding, care for poisoning, splinting, bandaging and transportation, as well as fitness, nutrition and stress management. Students earn first aid and CPR cards in both adult and infant from the National Safety Council upon completion of course. Recommended preparation: WR 065 and MTH 020 or higher.
Credits: 3   Lecture: 3

HHP 258 - HOLISTIC WELLNESS
Looks beyond health risk factors to broader wellness dimensions (i.e. mental, emotional, spiritual, environmental, cultural & financial). Conventional & alternative paradigms of chronic disease causes plus modalities for healing will be explored through the role of our minds, environment, relationships, spirituality and social support. Recommended preparation: WR 065 or higher.
Credits: 4   Lecture: 4

HHP 259 - CARE AND PREVENTION OF ATHLETIC INJURY
Introduces management of athletic injuries, injury recognition and assessment, proper care and treatment of athletic injuries and rehabilitation of athletic injuries. Emphasizes hands-on experience included for mastery of surface anatomy, injury assessment and proficiency in rudimentary injury care and rehabilitation practices. Recommended preparation: BI 231, HHP 260 and WR 065 or higher.
Credits: 3   Lecture: 3

HHP 260 - ANATOMICAL KINESIOLOGY
This is an introduction to the science of human movement (kinesiology). The class explores the anatomical elements such as muscle action and joint structure and function involved in the gross motor movement. Major emphasis will be on structural anatomy, primary movers of each joint, and muscle utilization for specific sport actions. Recommended preparation: BI 231 and WR 065 or higher.
Credits: 4   Lecture: 4

HHP 261 - EXERCISE PHYSIOLOGY
This course is designed to provide the student with an introductory foundation for understanding the physiology associated with exercise. Emphasis will be placed on how the various tissues and systems of the body adjust to acute work stress and ultimately adapt to chronic exercise training. Course materials will include metabolic, musculoskeletal, cardiovascular and respiratory adaptations to exercise and exercise training. Recommended preparation: MTH 020 or higher and WR 065 or higher.
Credits: 4   Lecture: 4

HHP 262 - EXERCISE TESTING AND PRESCRIPTION
The intent is to provide a practical guide for administering safe exercise testing as well as development of safe and effective exercise prescription for all clients including special populations. Specific content to be addressed includes: initial client consultation, risk factor classification, performance of hands-on exercise testing, prescribing appropriate aerobic, anaerobic, flexibility and resistance exercise plans, periodication, prevention of overtraining, metabolic calculations and legality including HIPAA laws. Recommended preparation: HHP 260 and HHP 261.
Credits: 3   Lecture: 3

HHP 266 - NUTRITION FOR HEALTH
Introduces the basics of nutrition for a physically active, healthy lifestyle. The course emphasizes nutrient function, energy production, weight management, body composition, psychosocial health, global impact of nutrition, prevention of nutrition related diseases, food guide pyramid, ergogenic aids fad diets, dieting and nutritional research. Course also includes a computerized nutritional assessment. Recommended preparation: MTH 020 or higher.
Credits: 3   Lecture: 3

HHP 267 - WELLNESS COACHING FUNDAMENTALS
Explore components of behavior change by providing an overview of the dimensions of wellness, coaching technique and models in health. Foundational concepts of positive psychology, including the history, theory and ethics, as well as mindfulness, appreciative inquiry and self-efficacy will be examined and applied. Recommended preparation: WR 065 or higher.
Credits: 3   Lecture: 3

HHP 268 - SUSTAINABLE FOOD AND NUTRITION
Farmer and author Wendell Berry once wrote that eating is an "agricultural act." It is also an ethical, cultural, political and environmental act. In an attempt to understand the full impact of our food choices, this course will explore American food production from start to finish, past to present and field to fork. Along the way we will answer questions such as: How does a plant grow? What is the difference between conventional vs. organic agriculture? How and why did our current food system evolve? How much does a fast-food cheeseburger really cost? What and why is food biotechnology? Where can I buy a local head of lettuce or leg of lamb? And, ultimately, what should I eat? Recommended preparation: WR 065 or higher.
Credits: 4   Lecture: 4

HHP 270 - SPORT AND EXERCISE PSYCHOLOGY
Introduces broad range of topics relevant to sport and exercise psychology, including sport personality, motivation, psychological skills training, energy management, attention, imagery, competitive anxiety and mental relaxation. Content is relevant for coaches, athletes and others interested in the psychology of sport. Recommended preparation: WR 065 or higher.
Credits: 3   Lecture: 3

HHP 280A - PRACTICUM - EXERCISE SCIENCE
Provides exercise science practicums by the department in conjunction with the community in health & fitness programs including group fitness, personal training, wellness coaching, research, clinical professions such as physical therapy, occupational therapy, athletic training and cardiac rehabilitation. P/NP grading. Prerequisites: instructor approval. Recommended preparation: complete a minimum of three exercise science classes.
Credits: 1 to 2

HHP 280B - PRACTICUM - EXERCISE SCIENCE
Provides exercise science practicums by the department in conjunction with the community in health & fitness programs including group fitness, personal training, wellness coaching, research, clinical professions such as physical therapy, occupational therapy, athletic training and cardiac rehabilitation. P/NP grading. Prerequisites: instructor approval. Recommended preparation: complete a minimum of three exercise science classes.
Credits: 1 to 2

HHP 281 - PRACTICUM-HEALTH PROMOTION/ PUBLIC HEALTH
Provides practicums co-mentored by department faculty in collaboration with community partners. Practicum sites may include, but are not limited to public health departments, community health centers, health promotion and education programs, local government organizations, environmental health organizations and social justice organizations. Thirty hours of practicum experience is equivalent to one credit. P/NP grading. Prerequisites: instructor approval. Recommended preparation: complete a minimum of three Health Promotion/Public Health courses.
Credits: 1   Other: 6

HHP 283 - INTRODUCTION TO ALTERNATIVE MEDICINE
Introduces the historical and sociopolitical context of conventional and "alternative" medical systems in the United States. A number of professional alternative medical practices will be examined as independent systems, and also as components of the larger context of the overall health care system in America.
Credits: 4   Lecture: 4

HHP 291 - LIFEGUARD TRAINING
Designed to teach the knowledge and skills needed to help prevent and respond to aquatic emergencies, including land and water rescue skills, as well as first aid, CPR and AED. Meets American Red Cross lifeguard training standards. Participants should be comfortable in and around the water and be able to demonstrate proficient swimming technique.
Credits: 2   Lecture: 1 Other: 2

HHP 292 - WATER SAFETY INSTRUCTOR
Provides participants with the ability to teach swimming and water safety skills and a logical progression for aquatic skill development. Students receive Ellis & Associate Pool Lifeguard certificate upon successful completion of course.
Credits: 2   Lecture: 1 Lab: 2

HHP 295 - HEALTH AND FITNESS
Introduces a comprehensive overview of wellness concepts including fitness, nutrition, stress, disease prevention and various other lifestyle factors that improve the quality of life. Each student's health and fitness is individually evaluated through a series of tests measuring cardiovascular endurance, strength, body composition, flexibility, blood pressure, nutrition, stress levels and blood lipid and blood glucose. Recommended preparation: or to be taken with WR 065 and MTH 020 or higher.
Credits: 3   Lecture: 3

HHP 298 - INDEPENDENT STUDY: HHP
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

HHP 299 - SELECTED TOPICS: HHP
Health topics requiring advanced level of critical thinking, writing and/or other skills.
Credits: 1 to 3

HEALTH INFORMATION TECHNOLOGY

HIT 103 - HEALTH INFORMATION SYSTEMS AND PROCEDURES
Provides a fundamental knowledge of health care delivery, health information systems, functions of the health record and the skills necessary to integrate theoretical knowledge with application functions. Lab includes application of health information technology procedures via web-based software. Students are required to pass a criminal history check prior to enrolling in HIT 103. Prerequisites: AH 111, CIS 120 and WR 121.
Credits: 5   Lecture: 4 Lab: 3

HIT 104 - HEALTH DATA CONTENT/STRUCTURE
Utilization and application of health record standards and analysis. Special emphasis on physician's orders relating to: laboratory, pathology, radiology and pharmacology. An overview of applicable consent and confidentiality principles. Lab includes application of health information technology procedures via web-based software. Enrollment limited to HIT majors. Prerequisites: instructor approval.
Credits: 5   Lecture: 4 Lab: 3

HIT 131A - DOCUMENT MANAGEMENT AND TECHNOLOGY
Provides specific fundamental experience in the identification and application of inpatient and outpatient records and reports based on current use of electronic health records (EHRs). It is important to have strong skills in spelling, medical terminology, the English language, attention to detail, proofreading, quality editing and grammatical appropriateness. Students must pass a face-to-face written final exam at 70% or higher. The overall grade parameter to pass this class is "C" (75%) or higher. Prerequisites: instructor approval.
Credits: 3   Lecture: 3

HIT 180 - HIPAA MANAGEMENT
Presents a medical-legal foundation with respect to HIPAA (Health Insurance Portability and Accountability Act), federal legislation enacted in 1996. HIPAA encompasses the privacy, security and electronic transaction standards for maintaining and transmitting protected health information. This course is designed to provide a basis for understanding the impact this legislation imposes on the health care industry and on health information management. Offered online and face-to-face. Students (online and face-to-face) must pass a face-to-face written final exam at 70% or higher. The overall grade parameter to pass this class is "C" (75%) or higher.
Credits: 2   Lecture: 2

HIT 182 - INTRODUCTION TO MEDICAL CODING
Explores the history, arrangement and application of ICD-9-CM (legacy system), ICD-10-CM and CPT coding systems. ICD-10-CM/CPT conventions, updates, influencing entities and how these expectations are communicated to health care providers, coding clearinghouses, ethical and quality coding, coder responsibilities, etc. will be determined. Basic coding guidelines by body system and/or payer requirements will be explored and applied including reporting of ICD-10-CM/CPT codes, inpatient and ambulatory reporting/billing. Prerequisites: instructor approval. Recommended preparation: or to be taken with AH 111, AH 112, BI 231, BI 232, BI 233, HIT 184, HIT 103 and HIT 104.
Credits: 4   Lecture: 4

HIT 184 - ADVANCED PATHOPHYSIOLOGY
This course provides an in-depth study of human pathological processes, which affect body organs and interrelated body systems. Upon completion of this course, students will know the etiology, physical signs and symptoms, pathogenesis, diagnosis, treatment modalities and prognosis of disease conditions identified in specific body systems. Students will be able to analyze and interpret laboratory, EKG, pulmonary and radiologic findings. This course will prepare students to understand and apply clinical concepts to medical coding, utilization review, quality management and clinical documentation. Prerequisites: AH 112 and BI 232. Recommended to be taken with: BI 233.
Credits: 5   Lecture: 5

HIT 188 - SPECIAL STUDIES I
Explores topics of current interest in the discipline. P/NP grading.
Credits: 1 to 4

HIT 193 - DIRECTED PRACTICE I
Provides experience in the HIT workplace. Students report to a health care facility and experience planned activities at an approved location. Supervised by a registered health information administrator or registered health information technician. Fulfills 60 of the 120 total clinical hours distributed in the curriculum at various points of program completion. Forty hours on-site and twenty hours of preparatory instruction. P/NP grading. Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 2   Other: 6

HIT 199 - SELECTED TOPICS: HEALTH INFORMATION TECHNOLOGY
This course is in development.
Credits: 1 to 4

HIT 201 - LEGAL ASPECTS OF HEALTH CARE
This course presents the medical-legal aspects of health care. The course is designed to provide a foundation for understanding the rapidly expanding field of laws and regulations affecting the health care industry. Special emphasis is placed in the areas of preservation of medical records, hospital and physician liability, statutes of limitations, consents for treatment and release of information, preparation of medical records in answer to a subpoena duces tecum, behavior of the medical record practitioner in court and principles of confidentiality highlights the technical role of the professional. Special legal implications for medical administration and risk management also are addressed. Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 3   Lecture: 3

HIT 203 - HEALTHCARE DELIVERY AND TECHNOLOGY
Provides analysis of the common terms and procedures related to the development and implementation of information systems; specifically networks and interfaces (in reference to electronic health records), the personal health record (PHR), public health and other administrative application/systems, database architecture and design along with systems analysis and database informatics. Also provided in this class is an overview of the health care delivery system and its relationship to technology in health care. Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 3   Lecture: 3

HIT 205 - INTRODUCTION TO MEDICAL RECORD ANALYSIS
Application of qualitative and quantitative analyses of health records based on accreditation standards, licensing and certifying agencies. The applications of accrediting standards and healthcare industry compliance regulations are also covered. Prerequisites: instructor approval based on completion of first-year HIT program curriculum.
Credits: 3   Lecture: 3

HIT 272 - HEALTH INFORMATION MANAGEMENT
Studies organization and management principles in order to develop effective skills in data management, data governance and human resource administration for the health care workplace. Covers computer concepts with emphasis on DRG grouping and encoding applications

via AHIMA virtual lab web-based software. Includes capstone service learning project and orientation to the HIM professional environment at the Oregon Health Information Management convention. Prerequisites: instructor approval based on completion of first-year HIT curriculum. Corequisites: HIT 287.
Credits: 5   Lecture: 4 Lab: 2

HIT 281 - HEALTH DATA COLLECTION
Studies data computation, presentation, and analysis of health statistics with an emphasis on validity and reliability. Includes definitions, the use of graphs and tables, measures of central tendency and percentiles. Emphasis on calculating hospital statistics. Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 3   Lecture: 2 Lab: 2

HIT 282 - QUALITY IMPROVEMENT IN HEALTH CARE
Application and analysis of quality management, utilization management, risk management and other related studies. Also covered is the analysis of clinical data to identify trends that demonstrate quality, safety and effectiveness of health care. Abstraction of data for facility-wide quality management and performance improvement programs is also utilized. In addition, review of registries (cancer, disease, diabetes, etc.), indexes and databases are covered. Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 4   Lecture: 3 Lab: 2

HIT 283 - CODING CLASSIFICATIONS
Places major emphasis on coding guidelines and application of codes for diseases and conditions in the ICD-10-CM coding classification. Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 6   Lecture: 3 Lab: 6

HIT 284 - CLASSIFICATION AND REIMBURSEMENT SYSTEMS
Provides principles and applications of HCPCS coding classification (CPT and National Codes). Focuses on coding categories, guidelines, and application of code set. Emphasizes reimbursement systems including Prospective Payment Systems (PPS), Ambulatory Payment Classifications (APCs), Resource Based Relative Value System (RBRVS) and Outpatient Prospective Payment Systems (OPPS). Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 5   Lecture: 4 Other: 2

HIT 285 - ADVANCED CODING CLASSIFICATIONS
The use of ICD-10-CM/PCS will offer greater coding detail and granularity and will greatly enhance the precision with which users measure quality, collect statistical data and submit claims for reimbursement. This course is designed to provide advanced level hands on application of ICD-1 0-CM/PCS and in depth instruction in ICD-10-PCS. Prerequisites: HIT 283, HIT 284 and instructor approval.
Credits: 4   Lecture: 4

HIT 287 - LEADERSHIP AND PROJECT MANAGEMENT
This course will provide students with the knowledge and skills to facilitate change, build teams with cultural awareness and understand the fundamentals of risk management as it applies to health information management leadership. A component of this course will include monitoring a service-learning project coordinated with the health care community. Curriculum includes how to plan, organize, develop and implement a project utilizing appropriate project management tools. Prerequisites: instructor approval. Corequisites: HIT 272.
Credits: 2   Lecture: 2

HIT 288 - SPECIAL STUDIES: HEALTH INFORMATION TECHNOLOGY
Explores topics of current interest in the discipline.
Credits: 1 to 4

HIT 293 - DIRECTED PRACTICE II
Provides experience in the HIT workplace. Students report to a health care facility and experience planned activities at an approved location. Supervised by a registered health information administrator or registered

health information technician. Fulfills 60 of the 120 total clinical hours distributed in the curriculum at various points of program completion. Forty hours on-site and twenty hours of preparatory instruction. P/NP grading. Prerequisites: instructor approval based on completion of first and second-year HIT curriculum.
Credits: 2   Other: 6

HIT 294 - RHIT EXAM PREPARATION
Prepares HIT students for the National RHIT Examination. Reviews core curriculum identified by AHIMA as essential domains of learning and provides practice exams. Prerequisites: instructor approval.
Credits: 1   Lecture: 1

HIT 295 - CCA EXAM PREPARATION
Prepares HIT students for the national Certified Coding Associate (CCA) Examination. Reviews core curriculum identified by AHIMA as essential for the CCA certification and provides practice exams. Prerequisites: instructor approval.
Credits: 1   Lecture: 1

HIT 296 - AMBULATORY DATA SYSTEMS
Focuses on electronic information systems in non-acute facilities with emphasis on professional medical billing and revenue cycle. Course will address healthcare insurance, legal and regulatory conditions, coding systems, reimbursement issues, and filing claims utilizing electronic medical data systems. Prerequisites: instructor approval based on completion of first-year HIT curriculum.
Credits: 3   Lecture: 2 Lab: 2

HIT 297 - CURRENT TOPICS
Discusses current trends, topics and procedures affecting the medical record professional and the delivery system in general. P/NP grading.
Credits: 1   Lecture: 1

HIT 298 - INDEPENDENT STUDY: HIT
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

HIT 299 - SELECTED TOPICS: HIT
This course is in development.
Credits: 1 to 4

HISTORY

HST 101 - HISTORY OF WESTERN CIVILIZATION
Provides a framework for understanding the notion of "Western Civilization." Surveys political, social, intellectual and cultural developments in Europe from prehistoric times to the early Medieval period. Covers the ancient civilizations, the establishment of early European civilizations and the world of the Greeks and Romans. HST 101, HST 102 and HST 103 need not be taken in sequence. Recommended preparation: or to be taken with WR 121.
Credits: 4   Lecture: 4

HST 102 - EUROPE: FROM THE MIDDLE AGES TO ENLIGHTENMENT (700-1700 C.E.)
Provides a framework for understanding the notion of "Western Civilization." Surveys the development of European civilizations from the fall of the Roman Empire, continuing through the Medieval period into the early 1700s. Focuses on the cultural, religious, political and intellectual changes brought about by the Renaissance, Reformation, Enlightenment and Scientific Revolution, as well as the tensions in European society, which culminated in the French Revolution. The focus will extend from religion and politics to social class, gender and stereotypes. Need not be taken in sequence.
Credits: 4   Lecture: 4

HST 103 - EUROPE: REVOLUTION AND WAR (1789 - PRESENT)

Provides a framework for understanding the notion of "Western Civilization." Explores European civilizations from the French Revolution in 1789 to the present day. Focuses on the establishment of nations, the impact of the Industrial Revolution, nationalism and racism, colonization and the two World Wars. Concludes by questioning the differences between civilization and barbarism. Focuses on the cultural, religious, political and intellectual changes that happened between the late 18th century and the present, extending from religion and politics to social class, gender and stereotypes based on nationality or ethnicity. Need not be taken in sequence.
Credits: 4   Lecture: 4

HST 104 - ANCIENT SOCIETIES (PRE-HISTORY - 500 C.E.)

Provides a survey of the development of world civilizations and nomadic/pastoral lifestyles. Investigates cultures, politics, belief systems and lifestyles from prehistoric times through 500 C.E. Covers origins of civilizations in the Middle East, the Mediterranean, Africa, China and the Indian subcontinent. Also covers the establishment of early European civilizations, the world of the Greeks and Romans and the Fall of Rome. Uses a comparative perspective in order to understand larger changes provoked by climate change, nomadic incursions and interactions on the Silk Road.
Credits: 4   Lecture: 4

HST 105 - THE EXPANSION OF WORLD RELIGIONS (500 - 1700)

Covers the world from 500 C.E. through early 1700s, focusing on the expansion of world religions, including Christianity, Buddhism, Hinduism and Islam. Focuses on the regions of Asia, Africa and India, and tells the story of Europe's first worldwide expansion. Looks at history from political, cultural, social and intellectual angles using primary sources. Need not be taken in sequence.
Credits: 4   Lecture: 4

HST 106 - MODERN WORLD HISTORY: INDUSTRIALIZATION, NATIONS AND WAR (1800-PRESENT)

Traces the impact of industrialization upon the world. Industrialization propelled colonial expansion by European powers; traces the colonizers and the colonized. The twentieth century endured two world wars, several genocides and several wars of decolonization; focuses on the cultural and intellectual trends that went along with political turmoil, industrialization and modern warfare. Need not be taken in sequence.
Credits: 4   Lecture: 4

HST 188 - SPECIAL STUDIES: HISTORY

Explores topics of current interest in the discipline.
Credits: 1 to 4

HST 199 - SELECTED TOPICS: HISTORY

This course is in development.
Credits: 1 to 4

HST 201 - EARLY AMERICA - HISTORY OF THE UNITED STATES (PRE-HISTORY TO 1820)

Provides an overview of the civilizations of North America and the United States from pre-history to the early 19th century, covering the colonial, revolutionary and early national periods. Topics include Native American societies, the migration of Europeans and Africans and the impact on native populations, regional Protestant cultures, the emergence of racial slavery, the political origins and constitutional consequences of the American Revolution, politics, culture and war in the first few decades of existence for the United States. Need not be taken in sequence.
Credits: 4   Lecture: 4

HST 202 - 19TH AND EARLY 20TH CENTURY UNITED STATES HISTORY (1820-1920)

Provides an overview of United States history from approximately 1820 to 1920, covering the antebellum, civil war, reconstruction, gilded age and progressive periods. Topics include the Jacksonian era, territorial expansion, slavery and the Old South, the causes and consequences of the Civil War, successes and failures of Reconstruction, 19th-century society and culture, economic transformations, U.S. imperialism, progressivism and the United States entrance into World War I. Need not be taken in sequence.
Credits: 4   Lecture: 4

HST 203 - 20TH AND EARLY 21ST CENTURY UNITED STATES HISTORY (1920-PRESENT)

Provides an overview of United States history from approximately 1920 to the present, covering the modern period. Topics include the end of World War I and its consequences, modernity, the Great Depression, World War II, the Cold War, foreign policy determinants & conflicts since WWII, Civil Rights, 1960s-70s social and cultural changes, shifting economic and social role of government, feminism and changing status of women since WWII, immigration, 20th century society and culture, late 20th century politics, terrorism and other recent developments. Need not be taken in sequence.
Credits: 4   Lecture: 4

HST 204 - HISTORY OF THE CIVIL WAR

Examines problems of the Civil War period including politics, military leadership, troop life and activity, civilians, Native Americans, African-Americans, technology and unique geographic challenges in order to better understand the impact of the war on the entire nation of this "brothers' war." Recommended preparation: or to be taken with: WR 121.
Credits: 4   Lecture: 4

HST 207 - HISTORY OF THE AMERICAN WEST

Examines Native American tribal life, the emergence of a multicultural frontier, the problems, failures and success of new settlement patterns in the growing commercial development of the West's unique assets. Recommended preparation: or to be taken with WR 121.
Credits: 4   Lecture: 4

HST 218 - NATIVE AMERICAN HISTORY

Examines Native American (or First Peoples) lifestyles before and after contact with European settlers. With increasing demands by whites and new immigrants for land, Native Americans struggled for survival implementing various tactics to retain control of their homelands and retain their unique cultures. Recommended preparation: or to be taken with WR 121.
Credits: 4   Lecture: 4

HST 225 - US WOMEN'S HISTORY

Survey of the problems and achievements of U.S. women from the 16th to the 20th century, including issues of race, ethnicity and class. Recommended preparation: or to be taken with WR 121.
Credits: 4   Lecture: 4

HST 235 - SEXUALITY IN 20TH CENTURY EUROPE

A survey of sexual cultures, politics and practices in Europe, from the waning of Victorianism to the collapse of Communism and the rise of Islam. This course provides an understanding of how gender and sexuality have changed over the course of the tumultuous twentieth century.
Credits: 4   Lecture: 4

HST 242 - HISTORY OF THE PACIFIC NW

Overview of Native American societies of the Pacific Northwest, patterns of white movement into the area, acquisition of the region by the United States, the long road to statehood and the impact of national politics on this unique region. Recommended preparation: or to be taken with WR 121.
Credits: 4   Lecture: 4

HST 258 - COLONIAL LATIN AMERICAN HISTORY

Surveys the history of economic, political and social development in Mexico, Central America and South America from the 15th century through the Wars of Independence. Recommended that HST 258 and HST 259 be taken in sequence, but not required. Recommended preparation: or to be taken with WR 121.
Credits: 4   Lecture: 4

HST 259 - MODERN LATIN AMERICAN HISTORY

Surveys Latin American history in Mexico, Central and South America from the Wars of Independence through modern times. Recommended that HST 258 and HST 259 be taken in sequence, but not required. Recommended preparation: or to be taken with WR 121.
Credits: 4 Lecture: 4

HST 260 - HISTORY OF ISLAMIC CIVILIZATIONS

This course covers political, social and religious developments in the Islamic world from 600 C.E. to the 1960s. It traces the formation of Islam and the establishment of the Caliphate; the impact of the Mongol Invasions; the Ottoman, Mughal and Safavid Empires; and the impact of European colonization and 20th Century movements of decolonization.
Credits: 4 Lecture: 4

HST 270 - 20TH CENTURY EUROPEAN HISTORY

Covers the intellectual, political and cultural history of 20th-century European history. Investigates events in a European context, analyzing the historical setting and significance of major occurrences in Europe, such as fascism, world wars, the Holocaust, Soviet communism and decolonization. Does not need to be taken in sequence.
Credits: 4 Lecture: 4

HST 280 - CO-OP WORK EXPERIENCE HISTORY

Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 3

HST 290 - EAST ASIAN HISTORY

Traditional China as the foundation of East Asian civilization. Recommended that HST 290, HST 291 and HST 292 be taken in sequence, but not required. Recommended preparation: or to be taken with WR 121.
Credits: 4 Lecture: 4

HST 291 - EAST ASIAN HISTORY

Development of Chinese, Japanese and Korean societies through the late 19th century. Recommended that HST 290, HST 291 and HST 292 be taken in sequence, but not required. Recommended preparation: WR 121.
Credits: 4 Lecture: 4

HST 292 - EAST ASIAN HISTORY

Late Imperial China, Japan and Korea and their evolution/revolution into modern nation-states. Recommended that HST 290, HST 291 and HST 292 be taken in sequence, but not required. Recommended preparation: WR 121.
Credits: 4 Lecture: 4

HST 298 - INDEPENDENT STUDY: HISTORY

Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

HST 299 - SELECTED TOPICS: HISTORY

This course is in development.
Credits: 1 to 4

HOSPITALITY MANAGEMENT

HM 101 - INTRODUCTION TO HOSPITALITY

Provides an overview of the hospitality and tourism industry, its growth and development, industry segments and their distinguishing characteristics, trends and current concerns. Introduction to career opportunities and the employability skills needed to succeed in specific hospitality fields.
Credits: 4 Lecture: 4

HM 130 - HOSPITALITY INDUSTRY SUPERVISION AND PRINCIPLES OF LEADERSHIP

Learn the management/supervision/leadership responsibilities in the typical lodging and/or food service establishment. Stresses leadership, communication, morale, motivation, training, team building, and employee development and retention unique to lodging and food service operations.
Credits: 4 Lecture: 4

HM 150 - PROCUREMENT, INGREDIENT IDENTIFICATION AND FOOD COST CONTROL

Learn the principles of cost control, product yield tests, vendor relations and procurement, and an introduction to ingredient identification and tasting. Exposure to profit and loss statements, and how to track cost as it relates to the flow of food. Place, receive and store food orders, conduct quality assurance on all food items, and execute an electronic end-of-month inventory. Issue course ingredients utilizing supply requisitions. It is also an opportunity for industry vendors to speak with students, conduct ingredient tastings, and provide updates regarding industry practices. Prerequisites: CUL 090.
Credits: 3 Lecture: 1 Lab: 6

HM 160 - WINE AND SPECIALTY BEVERAGE MANAGEMENT AND SERVICE

Learn the theoretical and practical information about the organization of a beverage program within the operation of a hospitality business. Included are the legal and moral responsibilities that come with the sale of alcoholic beverages, purchasing and marketing, distillation, brewing, mixology and non-alcoholic beverage service. Emphasis placed on wine and beverage knowledge, pair principles, cost control measures, inventory, and sanitation laws and practices.
Credits: 3 Lecture: 3

HM 190 - DINING ROOM OPERATIONS

Exposure to the importance of service, sanitation and appearance in a real-life dining room setting. Learn and practice styles of service including à la carte, reception, banquet and buffet. Additionally, learn the primary guidelines for service, guest relations, etiquette phone use and Point Of Sale systems. Learn about different dining room staff positions, proper use of tabletop flatware, china, and glassware and table set-up. Students will receive the following industry certifications in this course: OLCC Alcohol Service Permit, FDRP Dining Room Associate and Wine Steward Associate Certificates and Allergy Safe certificate.
Credits: 5 Lecture: 2 Lab: 9

HM 210 - MENU COMPOSITION AND ANALYSIS

Analyze menu design and effectiveness for a diversity of local restaurant establishments. Learn about standardized recipes and cost cards, understanding income and profit and loss statements, nutritional aspects of menu planning and design and menu configuration. Analyze and critique industry menus and create menus from the perspective of concept, clarity, cost, price and efficiency. Conduct an analysis of the sales mix for the Elevation Restaurant as part of a group assignment, evaluate the sales distribution of food and beverage items and give presentations to the Elevation staff as to how to make perspective design and offering improvements. Prerequisites: CUL 090.
Credits: 3 Lecture: 3

HM 230 - LODGING MANAGEMENT

Explore current operational practices of lodging operations throughout the world. Study management functions related to front office, housekeeping, marketing, reservations, maintaining customer accounts, laws affecting lodging operations and typical service problems. Go on field trips to learn about different kinds of lodging operations throughout the state.
Credits: 4 Lecture: 4

HM 240 - HOSPITALITY LAW

Learn about the hotel/guest relationship, innkeeper's lien, crimes against innkeepers, overview of employment rights, policy formulation, duty to protect guests and their belongings, ejection of guests and non-guests, and an introduction to general business law dealing with torts and

contracts. Issues concerning travel law will be included. Recommended preparation: WR 121 and HM 101.
Credits: 4   Lecture: 4

HM 275 - MIXOLOGY AND BEVERAGE OPERATIONS
Create a wide variety of classic and everyday mixed drinks in a standard bar setting. Learn about bar glassware and equipment identification, pouring techniques, common cocktail mixing methods, history of distilled spirits, origin and characteristics of various distilled spirit brands, distillation process, bartenders job description and responsibilities, cost control, beverage pricing and responsible alcohol service. Prerequisites: instructor approval and Oregon Liquor Control Commission (OLCC) Server Permit.
Credits: 4 Other: 8

HM 280 - HOSPITALITY MANAGEMENT INDUSTRY INTERNSHIP
Serves as a supervised work experience within the restaurant management/hospitality industry designed to expand career knowledge and experiential confidence while increasing knowledge, speed, timing, organization and ability to execute industry skills on a repetitive basis. Students will receive a diverse work experience that is designed on a systematic rotation of different stations that related to management functions within a restaurant or hospitality industry venue. Students can complete 100% of the experience in competencies that are relevant to the program curriculum, as it is outlined in the course syllabus and internship agreement. The internship is concluded by a final supervisor evaluation. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 6

HM 290 - CAREER SUCCESS AND E-FOLIO PRESENTATION
Finalize your Cascade Culinary Institute eFolio including updated, effective résumés, cover letters, reference letters, photos of prepared dishes, class projects and certificates earned during study at CCI. Learn about career opportunities, networking, volunteerism and interview techniques. P/NP grading. Prerequisite: CUL 170 and instructor approval.
Credits: 2   Lecture: 2

HM 298 - INDEPENDENT STUDY: HOSPITALITY MANAGEMENT
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

HUMAN DEVELOPMENT

HD 100CS - COLLEGE SUCCESS
College Success is designed to give new students a broad overview of college and life success strategies. The course introduces students to college resources, students services and personal behaviors that support successful academic transition, growth and planning. Topics include personal responsibility, self-motivation, time management, academic planning, financial planning, decision making, health and learning styles.
Credits: 3   Lecture: 3

HD 100PM - PROCRASTINATION & MOTIVATION
Introduces students to the characteristics of procrastinating behaviors. The class explores reasons for procrastination and how to self-negotiate to eliminate non-productive behaviors. Specific tools to address individual styles of procrastination will be introduced with an emphasis on identifying personal values to motivate one to action and achieve defined goals.
Credits: 1   Lecture: 1

HD 100TT - TEST TAKING
Designed for students challenged by tests or assessment materials. The class introduces students to the process of effective test taking including preparation for all types of tests and classroom assessment tools, study and relaxation techniques and actual test taking. Students will be introduced to pro-active strategies to address test anxiety, utilize test

results for improved performance and access instructors for guidance and performance.
Credits: 1   Lecture: 1

HD 100VC - VALUES CLARIFICATION
Designed to assist students in defining the motivation behind their college investment and develop a compelling academic plan integrated with their personal life plan. Students will identify their key motivators (values), assess current life choices and roles in the framework of the defined values, develop a plan of action that realistically supports success, choose action steps resulting in the achievement of defined outcomes and develop strategies to continually reassess and measure academic/personal success.
Credits: 1   Lecture: 1

HD 101 - STUDY STRATEGIES
Emphasizes study skills, acquisition of college knowledge, resources and personal responsibility while building and using strategies for college and workplace success. Effective learning and study strategies are reviewed and practiced including text reading, note taking, test taking, listening strategies and time management. Learning styles are identified and connected to pro-active behaviors. College resources, campus protocol and ethical student behavior are introduced and integrated with examination of self-talk and application of visualization processes to enhance confidence and self-esteem in the college environment.
Credits: 3   Lecture: 3

HD 102 - LEADERSHIP DEVELOPMENT
Teaches basic principles of leadership development and staff management in order to prepare student/staff leaders to effectively work in their assigned roles within Student Life and together as a team. Includes topics designed to increase knowledge and skills in the areas of diversity awareness, communication, conflict management, teambuilding, group development, personal awareness, time management and values clarification. As a result of this class, students will become familiar with the roles and expectations of the Student Life staff and be able to professionally represent COCC in their leadership roles on campus. Prerequisites: department approval.
Credits: 2   Lecture: 2

HD 103 - STRATEGIES FOR LIFE MANAGEMENT
Helps college students identify and manage internal factors that contribute to positive mental, physical and emotional health during their college journey. Through exploring proven strategies for self-management, students will be able to analyze, create and implement a personalized set of habits and routines that will support their journey through college and beyond.
Credits: 3   Lecture: 3

HD 109 - EFFECTIVE JOB SEARCH STRATEGIES
Introduces students to an effective, comprehensive approach to the job search process. Students will learn how to develop a job search plan, accurately and effectively complete job applications, write resumes and cover letters accordingly, identify marketable skills and prepare for job interviews.
Credits: 2   Lecture: 2

HD 110 - CAREER PLANNING
Provides tools and resources for making informed career decisions. Covers assessing skills, values, interests, personality, barriers, lifestyle, education and approaches to decision making. Covers how to research career information. Includes educational decision-making in determining a field or program of study, and college or training program.
Credits: 3   Lecture: 3

HD 188 - SPECIAL STUDIES: HUMAN DEVELOPMENT
Explores topics of current interest in the discipline. P/NP grading.
Credits: 1 to 4

HD 190 - OLI LEADERSHIP SKILLS I
HD 190 is the first in a 3-quarter series. This first quarter lays the foundation for the series by providing high school students with activities

that encourage them to: establish personal and team goals; develop effective teamwork skills; explore and articulate their cultural identity; explore aspects of leadership including varying styles, qualities and cultural implications. Interaction with college mentors prepares students of varying races and ethnicities to embrace post-secondary education as both desirable and attainable. P/NP grading. Prerequisites: instructor approval.
Credits: 1 Other: 2

HD 191 - OLI LEADERSHIP SKILLS II
HD 191 is the second in a three-quarter series. Building upon the foundation of leadership and teamwork considered in a cultural context, high school students explore issues of personal responsibility; strategies for advocacy and organizing; and opportunities for developing intercultural awareness. Interaction with college mentors expands to focus on the college challenges, requirements, tools for success and the application process. P/NP grading. Prerequisites: instructor approval.
Credits: 1 Other: 2

HD 192 - OLI LEADERSHIP SKILLS III
HD 192 is the third in a 3-quarter series. It provides high school students with opportunities to explore and attain skills in leadership, teamwork, communication and conflict resolution. Interaction with college mentors prepares students of varying races and ethnicities to embrace post-secondary education as a viable option. P/NP grading. Prerequisites: instructor approval.
Credits: 1 Other: 2

HD 199 - SELECTED TOPICS: HUMAN DEVELOPMENT
This course is in development.
Credits: 1 to 4

HD 298 - INDEPENDENT STUDY: HUMAN DEVELOPMENT
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval.Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

HUMAN SERVICES/ADDICTIONS STDS

HS 101 - ORIENTATION TO HUMAN SERVICES
Introduces the human services profession. Helps students evaluate their fit within the human services field. Highlights self-understanding and individual compatibility with human services occupations. Emphasizes prevention, early intervention concepts and programs, significance of social justice and multicultural equity.
Credits: 3 Lecture: 3

HS 161 - ETHICS FOR HUMAN SERVICES
Examines the legal and ethical issues facing human service practitioners. Explores how to set and maintain professional boundaries. Evaluates the roles, functions and legal/ethical responsibilities of human services workers, including the process of ethical decision making and awareness of the moral and legal complexities in the field of human services. Prerequisites: HS 101, MTH 031 or higher and choose one of WR 121, WR 122, or WR 227.
Credits: 4 Lecture: 4

HS 162 - EFFECTIVE HELPING SKILLS I
Focus is on skills of interacting with people both verbally and non-verbally, as well as the ethical and cultural underpinnings to helping and interviewing. Emphasis placed on understanding and application of the principles of interviewing. Significant concentration on practicing skills with peers. Prerequisites: HS 101, MTH 031 or higher and choose one of WR 121, WR 122, or WR 227.
Credits: 4 Lecture: 4

HS 180 - ADDICTIONS, HIV AND OTHER INFECTIOUS DISEASES
Reviews the theory and technique for effectively addressing issues of substance use and addictive behaviors for the at-risk person. Considers

issues of risk of exposure for the substance abusing or other at risk individual. Physiology, epidemiology, risk assessment, legal/ethical issues and societal implications of HIV and other pathogens will be presented.
Credits: 2 Lecture: 2

HS 199 - SELECTED TOPICS: HUMAN DEV.
Credits: 1 to 4

HS 200 - ADDICTIVE BEHAVIOR
Provides a broad overview of the field of addictions through a look at the issues and treatments involved. Includes history, prevention regarding alcohol, drugs, nicotine, eating disorders, depression and relapse prevention. Recommended preparation: or to be taken with WR 121.
Credits: 3 Lecture: 3

HS 201 - FAMILIES AND ADDICTIONS
Examines how substance use disorders impact family systems. Topics will include etiology of substance use disorders within the family, impact upon members of the system and its dynamics, intervention and treatment approaches, and long-term recovery issues. Strategies and behaviors that family members, couples and significant others must adopt in order to assist in sustaining recovery and healthy relationships will be outlined.
Credits: 3 Lecture: 3

HS 205 - YOUTH AND ADDICTIONS
Introduces child/adolescent biopsychosocial development and evaluates the effects of substance abuse on that development. Covers the signs of substance abuse and addiction; describes assessment, treatment and prevention philosophies, protocols and models; describes recovery and covers relapse prevention and the signs of relapse in young people. Recommended preparation: WR 121.
Credits: 3 Lecture: 3

HS 206 - GROUP COUNSELING SKILLS FOR HUMAN SERVICES
Provides strategies from accepted and culturally appropriate models for facilitating 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, group stages; common and difficult therapeutic problems also addressed.
Credits: 4 Lecture: 4

HS 208 - MULTICULTURAL ISSUES IN HUMAN SERVICES
Presents the foundations for developing the skills and sensitivities needed to practice as culturally alert counselors. Explore issues and trends related to culture, ethnicity, race, nationality, age, gender, sexual orientation, mental and physical abilities/disabilities, education, religious and spiritual values, immigrant dynamics and socioeconomic factors which influence counseling relationships, process and treatment outcomes. Encourages students to engage in self-exploration around their own cultural identities and their responses to issues of diversity including bias, oppression, discrimination and the role of privilege. Prerequisites: HS 101, MTH 031 or higher and choose one of WR 121, WR 122, or WR 227.
Credits: 4 Lecture: 4

HS 209 - INTRODUCTION TO PSYCHOLOGICAL TRAUMA: THEORY AND PRACTICE
Introduction to types, history, and impact of trauma on individuals, family, and community. Explores the impact on those working with trauma survivors and inadvertent re-traumatization of victims that occurs by the social service system. It introduces crisis management strategies in the context of a trauma informed practice. It provides a framework for crisis recognition/response and intervention for people experiencing trauma symptoms. Students will analyze as well as practice using a trauma informed framework designed for multiple settings. Utilizes trauma informed and wellness informed approaches. Recommended preparation: WR 121.
Credits: 4 Lecture: 4

HS 210 - CO-OCCURRING DISORDERS
Recognize and differentiate symptoms and treatment of substance related and addictive disorders and mental health issues. Develop

knowledge, skills and theoretical frameworks applicable to co-occurring disorders. Understand best practice models and integrated treatment for co-occurring disorders. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HS 224 - PSYCHOPHARMACOLOGY
This course covers the knowledge required to pass the pharmacology section of the Certified Alcohol and Drug Counselor (CADC) 1 exam. It includes the ways drugs are used, controlled and valued culturally; how the human body functions normally, including knowledge of cells, nerve cells and basic bodily systems (i.e., respiratory, circulatory, endocrine and digestive; how drugs are absorbed, distributed, metabolized and excreted and how drugs affect these systems).
Credits: 4   Lecture: 4

HS 250 - PROCESS ADDICTIONS
Provides a broad overview of process addictions including a look at the issues and treatments involved. Process addictions are defined as addiction to certain mood-altering behaviors, actions or routine of actions such as gambling, eating, shopping, working or sexual activities. Recommended preparation: or to be taken with WR 121.
Credits: 4   Lecture: 4

HS 260 - COUNSELING THEORIES
Introduces major counseling theories that have demonstrated effectiveness with a variety of mental health issues including substance abuse disorders. Includes an overview of 10 specific theories (including affective, behavioral and cognitive approaches), their founders, key concepts, techniques and appropriate applications. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HS 262 - EFFECTIVE HELPING SKILLS II
Introduces students to intentional interviewing/motivational interviewing as a foundation for developing basic counseling skills. Focus will be on developing more intensive counseling skills with significant opportunity for hands-on practice. Videotaping is used extensively. Recommended preparation: HS 162 or instructor approval.
Credits: 4   Lecture: 4

HS 263 - COUNSELING THE CHEMICALLY DEPENDENT CLIENT
Trains students in a systematic approach to screening, assessing and treatment planning. Goal is to determine the most appropriate course of action given the client's needs and characteristics and the available resources. This is a collaborative, ongoing process in which the counselor and the client develop desired treatment outcomes and identify strategies to achieve them.
Credits: 3   Lecture: 3

HS 266 - CASE MANAGEMENT FOR THE CHEMICALLY DEPENDENT CLIENT
Provides foundation skills to successfully manage client cases in a treatment setting. Includes skills in the ASAM Criteria including client assessment, treatment planning, treatment plan review, writing of clinical progress notes, treatment summary and discharge planning and coordination with other agencies. Recommended to be taken with WR 121.
Credits: 4   Lecture: 4

HS 290 - INTRODUCTION TO PRACTICUM IN HUMAN SERVICES
This is an introduction to practicum and should be taken at least one term before the practicum. The goal of this course is to prepare students for a successful practicum. In this course students will develop their resume, job search and job interviewing techniques and research possible practicum sites.
Credits: 1   Lecture: 1

HS 291 - PRACTICUM IN HUMAN SERVICES I
Practicum is closely supervised opportunity to implement professional skills, knowledge and attitudes presented in prior Human Services coursework. Provides experience working on site in a human service agency to integrate field and classroom experience. Students also attend a weekly seminar and meet individually with both the practicum instructor and the site supervisor throughout the quarter. Students are required to have a placement confirmed prior to the term they decide to begin. Addiction Studies students must have completed HS 161, HS 162, HS 206 and HS 290 prior to enrolling in this class. Note: 1,000 hours supervised experience are required before taking the Oregon Certified Alcohol and Drug Counselor I exam.
Credits: 4   Lecture: 1 Other: 9

HS 292 - PRACTICUM IN HUMAN SERVICES II
This second-term practicum is more comprehensive and provides an opportunity to develop more advanced skills. Addiction Studies students must have completed HS 161, HS 162, HS 206 and HS 291 prior to enrolling in this class. With instructor approval only students may co-enroll in HS 291. Note: 1,000 hours supervised experience are required before taking the Oregon Certified Alcohol and Drug Counselor I exam.
Credits: 4   Lecture: 1 Other: 9

HS 293 - PRACTICUM IN HUMAN SERVICE III
This third-term practicum is more comprehensive and provides an opportunity to develop more advanced skills. Addiction Studies students must have completed HS 161, HS 162, HS 206, HS 291 and HS 292 prior to enrolling in this class. With instructor approval only students may co-enroll in HS 292. Note: 1,000 hours supervised experience are required before taking the Oregon Certified Alcohol and Drug Counselor I exam. Course may be repeated for credit.
Credits: 4   Lecture: 1 Other: 9

HS 298 - INDEPENDENT STUDY: HUMAN SERVICES
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

HS 299 - SELECTED TOPICS: HUMAN SRVCS
This course is in development.
Credits: 1 to 6

HUMANITIES

HUM 105 - ITALIAN LIFE AND CULTURE
Offered as a required course in the Florence Quarter study abroad program. The student will gain a broad overview of contemporary Italian society by examining cultural traditions and values. Besides topical lectures by native guest lecturers, the course engages students in experiential learning through field trips to such historic and cultural sites as Etruscan Fiesole, the Uffizi Gallery, the Accademia Museum and the Medici Pitti Palace. (Elective only: does not satisfy general education requirement).
Credits: 2   Lecture: 2

HUM 106 - BRITISH LIFE AND CULTURE
Offered as a required course in the London Quarter study abroad program. The student will gain a broad overview of contemporary British culture and society by examining traditions and institutions that impact the British way of life in the twenty-first century. Besides topical presentations by native guest lecturers, the course engages students in experiential learning through field trips to such historic and cultural sites as the Museum of London, the National Gallery, Shakespeare's Globe Theatre and the Houses of Parliament.
Credits: 3   Lecture: 3

HUM 107 - SPANISH LIFE AND CULTURE
Offered as a required course in the Barcelona Quarter study abroad program. The student will gain a broad overview of contemporary Spanish society by examining cultural traditions and values. Besides topical lectures by native guest lecturers, the course engages students in experiential learning through field trips to such historic and cultural sites

as Gaudi's Barcelona, the Gothic quarter and the Dali museum. (Elective credit only: does not satisfy general education requirements).
Credits: 3   Lecture: 3

HUM 188 - SPECIAL STUDIES: HUMANITIES
Explores topics of current interest in the discipline.
Credits: 1 to 4

HUM 199 - SELECTED TOPICS: HUMANITIES
This course is in development.
Credits: 1 to 4

HUM 210 - CULTURE AND LITERATURE OF ASIA
Introductory study of representative literary texts, films and related language arts, in English or in translation, of Asian regions and countries, such as China, India and Japan, examined in the context of their histories and cultural traditions. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 211 - CULTURE AND LITERATURE OF AFRICA
Introductory study of representative oral arts, literature, film and related creative arts, in English or in translation, of sub-Saharan African peoples, examined in context of their histories and cultural traditions. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 212 - CULTURE AND LITERATURE OF THE AMERICAS
Interdisciplinary study of representative literary and historical texts (and other media) from Hispanic and Afro-Caribbean cultures of traditional, colonial and post-colonial origin. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 213 - CULTURE AND LITERATURE OF MIDDLE EAST
Introductory study of representative Arabic, Persian and Hebrew literary texts in translation, placed in the context of films and other cultural media of the Middle East and Northern Africa. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 230 - IMMIGRANT EXPERIENCE AMERICAN LITERATURE
Introductory survey of the immigrant experience in the United States as reflected in literature, autobiography and film. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 240 - NATIVE AMERICAN LITERATURE AND CULTURE
Introduction to traditional oral and contemporary Native American texts with an emphasis on cultural contexts and continuity. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 255 - CULTURAL DIVERSITY IN CONTEMPORARY AMERICAN LITERATURE
This course examines cultural diversity as recorded in American literature since 1965, emphasizing literary and cultural values in poetry, fiction and drama. Readings focus on writers' views of life within historically marginalized groups based on ethnicity, gender and sexual identity. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 256 - INTRODUCTION TO AFRICAN-AMERICAN LITERATURE
Survey of African-American literature (selected fiction, autobiography, poetry and drama of the 19th and 20th centuries), placed in the context of major African-American achievements in the visual arts, music and film. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 261 - POPULAR CULTURE: SCIENCE FICTION
Focuses on the significance of science, technology and on such topics as the idea of the future and the "limits of the human" as revealed in popular culture through genres such as fiction, film, music, comics, anime and manga and advertising. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 262 - POPULAR CULTURE: THE AMERICAN WESTERN
Historical study of the Western story and the cowboy hero in American culture through genres such as fiction, film, song, art and advertising. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 263 - POPULAR CULTURE: DETECTIVE STORIES
Historical study of crime stories and the detective figure as revealed in popular culture through genres such as fiction, film, television, comics and journalism. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 264 - POPULAR CULTURE: SPY THRILLER
Thematic study of espionage stories and the spy figure, as revealed in popular culture through genres such as fiction, film, advertising and journalism. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 265 - POPULAR CULTURE: NOIR FILM AND FICTION
Historical, thematic and technical study of film noir and related fiction as a subversive force in popular culture. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 266 - POPULAR CULTURE: TRAVEL LITERATURE
Cross-cultural study of travel as exploration, personal narrative, anthropological inquiry and social criticism of places and peoples represented as "other" or "exotic." Examines popular culture as depicted in genres such as travel memoirs, journalism, advertising, educational videos and feature films that critique touristic assumptions. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 268 - DIGITAL GAMES CULTURE
This course will approach digital games through an academic socio-cultural lens, identifying key elements of evolving game studies theory, which considers digital game design, digital games play and digital games as a cultural practice that, in addition to play/entertainment, offers a new and developing medium for story-telling and learning. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 269 - POPULAR CULTURE GRAPHIC NOVELS
Examines the role of comic books and graphic novels as cultural and artistic creations in popular culture and literature. Identifies a vocabulary for discussing, explaining, writing, and analyzing comics. Explores relevant social and historical events in the development of comics. May include comics to film comparisons or principal author studies .
Recommended preparation: WR 121.
Credits: 4   Lecture: 4

HUM 299 - SELECTED TOPICS: HUMANITIES
This course is in development.
Credits: 1 to 4

ICHISHKIN

ICH 101 - FIRST YEAR ICHISHKIN NATIVE LANGUAGE I
Introduces the Ichishkin language of the Warm Springs (Sahaptin) people. First course of a three-term sequence of study of the Native American language, Ichishkin, at the first-year college level. The first term will introduce students to alphabet characters, sounds and simple phrases.
Credits: 4   Lecture: 4

ICH 102 - FIRST YEAR ICHISHKIN NATIVE LANGUAGE II
Introduces the Ichishkin language of the Warm Springs (Sahaptin) people. Second of a three-term sequence of study of the Native American language, Ichishkin, at the first-year college level. The second term will develop student familiarity with simple phrases and basic conversation. Recommended preparation: ICH 101.
Credits: 4   Lecture: 4

ICH 103 - FIRST YEAR ICHISHKIN NATIVE LANGUAGE III
Introduces students to the Ichishkin language of the Warm Springs (Sahaptin) people. Third of a three-term sequence of study of the Native American language, Ichishkin, at the first-year college level. The third term will focus on refining conversational skills. Recommended preparation: ICH 102.
Credits: 4   Lecture: 4

ITALIAN

IT 101 - FIRST YEAR ITALIAN I
Designed for beginners. Emphasizes active communication in Italian. Develops students' basic skills in listening, reading, writing and speaking in Italian. Successful completion of this sequence prepares students for entry into second-year level at COCC or any other university. Should be taken in sequence. Students who have previously learned Italian should contact the instructor for advice on which class to take. This class is intended for students who have no knowledge of Italian.
Credits: 4   Lecture: 4

IT 102 - FIRST YEAR ITALIAN II
Continues the development of reading, writing, listening and speaking skills. Students are expected to have completed IT 101 material, and are encouraged to review Italian 101 concepts and vocabulary prior to class. Course should be taken in sequence. Recommended preparation: IT 101 or one year of high school Italian; students who have previously learned Italian should contact the instructor for advice on which class to take.
Credits: 4   Lecture: 4

IT 103 - FIRST YEAR ITALIAN III
Continues the development of reading, writing, listening and speaking skills. Course should be taken in sequence. Recommended preparation: IT 102 or two years of high school Italian; students who have previously learned Italian should contact the instructor for advice on which class to take.
Credits: 4   Lecture: 4

IT 199 - SELECTED TOPICS: ITALIAN
This course is in development.
Credits: 4

IT 201 - SECOND YEAR ITALIAN I
Continues the work of first year Italian, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in Italian. Recommended preparation: IT 103; students who have previously learned Italian should contact the instructor for advice on which class to take.
Credits: 4   Lecture: 4

IT 202 - SECOND YEAR ITALIAN II
Continues the work of Italian 201, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in Italian. Recommended preparation: IT 201; students who have previously learned Italian should contact the instructor for advice on which class to take.
Credits: 4   Lecture: 4

IT 203 - SECOND YEAR ITALIAN III
Continues the work of Italian 202, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in Italian. Recommended preparation: IT 202; students who have previously learned Italian should contact the instructor for advice on which class to take.
Credits: 4   Lecture: 4

IT 298 - INDEPENDENT STUDY: ITALIAN
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

IT 299 - SELECTED TOPICS: ITALIAN
This course is in development.
Credits: 1 to 4

JOURNALISM

J 188 - SPECIAL STUDIES: JOURNALISM
Explores topics of current interest in the discipline.
Credits: 1 to 4

J 199 - SELECTED TOPICS: JOURNALISM
This course is in development.
Credits: 1 to 4

J 215 - PUBLICATIONS LAB
Practical application of communications instruction through work on the student newspaper. Students are involved in all areas of production including reporting, photojournalism, advertising, production and distribution. P/NP grading. Recommended preparation or recommended to be taken with: J 216.
Credits: 1   Lab: 3

J 216 - REPORTING 1
A beginning class in newswriting. Emphasis is placed on writing leads, developing the story and a sense for news. Character and communication of news and the rights and responsibilities of journalists explored. Open to all students. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

J 217 - REPORTING 2
A continuation of Reporting 1 with emphasis placed on comprehensive news story writing, covering speeches and meetings and interviewing. Recommended preparation: J 216.
Credits: 3   Lecture: 3

J 280 - JOURNALISM PRACTICUM
Community work experience in journalism (may include internships in local media). P/NP grading.
Credits: 1 to 3

J 298 - INDEPENDENT STUDY: JOURNALISM
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

J 299 - SELECTED TOPICS: JOURNALISM
This course is in development.
Credits: 1 to 4

KIKSHT

KIK 101 - FIRST YEAR KIKSHT NATIVE LANGUAGE I
Beginning Kiksht introduces students to the Kiksht language of the Wasco people. The first term will introduce students to alphabet characters, sounds and simple phrases. One of the techniques used to learn the language will be Total Physical Response© (TPR) which is an adopted method used by indigenous language teachers to hear and respond to verbal commands in the target language.
Credits: 4   Lecture: 4

KIK 102 - FIRST YEAR KIKSHT NATIVE LANGUAGE II
Beginning Kiksht introduces students to the Kiksht language of the Wasco people. The second term will build on student knowledge of alphabet characters, sounds and phrases. One of the techniques used to learn the language will be Total Physical Response© (TPR) which is an adopted method used by indigenous language teachers to hear and respond to verbal commands in the target language.
Credits: 4   Lecture: 4

KIK 103 - FIRST YEAR KIKSHT NATIVE LANGUAGE III
Beginning Kiksht introduces students to the Kiksht language of the Wasco people. The third term will focus on developing student ability to communicate meaningful phrases in predictable and culturally appropriate settings with particular attention to introducing students to verb affixes indicating aspect and tense. One of the techniques used to learn the language will be Total Physical Response© (TPR) which is an adopted method used by indigenous language teachers to hear and respond to verbal commands in the target language.
Credits: 4   Lecture: 4

KIK 201 - SECOND YEAR KIKSHT NATIVE LANGAUGE I
Develops communication skills in Kiksht, the language of the Wasco people. First course of a three-term sequence of study of the American Indian language, Kiksht, at the second-year college level. Focuses on improving pronunciation and developing conversational skills.
Credits: 4   Lecture: 4

KIK 202 - SECOND YEAR KIKSHT NATIVE LANGUAGE II
Develops communication skills in Kiksht, the language of the Wasco people. Second course of a three-term sequence of study of the American Indian language, Kiksht, at the second-year college level. Focuses on developing sentence skills to engage in short conversations.
Credits: 4   Lecture: 4

KIK 203 - SECOND YEAR KIKSHT NATIVE LANGUAGE III
Develops communication skills in Kiksht, the language of the Wasco people. Third course of a three-term sequence of study of the American Indian language, Kiksht, at the second-year college level. Focuses on conversational skills.
Credits: 4   Lecture: 4

KIK 298 - INDEPENDENT STUDY: KIKSHT
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

LIBRARY & INFORMATION SKILLS

LIB 100 - INTRO TO FINDING INFORMATION
Students will learn how to find, evaluate and responsibly use web-based and other information resources for college level research. This course is for those who want an introduction to information resources and research skills.
Credits: 1   Lecture: 1

LIB 199 - SPECIAL TOPICS: LIBRARY
This course is in development.
Credits: 1 to 3

MANUFACTURING

MFG 100 - MFG ORIENTATION
Provides new MATC students with the required information before participating in self-directed learning at MATC. Includes understanding MATC procedures, safety, manufacturing careers, introduction to lean manufacturing and computer login procedures. P/NP grading.
Credits: 1   Lecture: 1

MFG 101 - BLUEPRINT READING
Provides student with training to read and interpret various types of industrial blueprints. Includes interpretation of line types, geometric tolerancing and dimensioning, surface finish callouts, auxiliary views and orthographic projection. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 102 - BLUEPRINT READING SHEET METAL
Provides student with training to read and interpret various types of sheet metal blueprints. Covers line and print development, sheet metal layout, pattern drafting and bend allowances, maximum utilization of material, identification of sheet metal types and grades, correct use of sheet metal for the application and sheet metal bend and shear strengths. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 103 - WELDING TECHNOLOGY I
Introductory course covering basic welding processes. Includes relevant safety topics and introduction to shielded metal arc welding and gas metal arc welding. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 105 - WELDING TECHNOLOGY II
Intermediary course focused on welding carbon steel plate in specific out-of-position set-ups. Includes continuing practice in GMAW and SMAW welding and interpretation of inspection standards related to weld quality. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 107 - WELDING TECHNOLOGY III
Final course offered in the basic welding technology series. Includes welding practice utilizing electrodes F-1 through F-4 in the SMAW process and introduction to gas tungsten arc welding and flux core arc welding. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 109 - LEAN PRACTICES
Lean practices are methods used to eliminate waste in any process to which they are applied. This course provides students with an understanding of lean practices commonly used in industry including: value stream mapping, standardized work, 5S, structured problem solving, visual factory, Kanban/pull systems other lean tools. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lecture: 2

MFG 110 - MANUFACTURING PROCESSES I
Overview of manufacturing theory and manual operation of machine tools. Includes safety, using hand tools, bandsaw, drill press, lathe and milling machine operations. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 112 - MANUFACTURING PROCESSES II
Continued student proficiency development in machining operation including speed and feed calculations, milling machine and lathe

practice. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 114 - MANUFACTURING PROCESSES III
Final course in the basic manufacturing processes series. Continued student proficiency development in the operation of basic machine tools, introduction to computer numerical control programming and operations, and a capstone project to demonstrate machining proficiency. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 115 - DESIGN PROCESSES I
Introduction to computer-aided manufacturing. Includes interpretation and construction of technical drawings and technical sketching. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 116 - MANUFACTURING ELECTRICAL SYSTEMS
Studies electrical circuitry and components used in manufacturing applications. Includes introductory AC/DC electrical circuit construction and Ohm's Law. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 118 - FLUID POWER SYSTEMS I
Introductory fluid power class. Includes single/double-acting cylinder operations, directional control valve operations, fluid power symbols and the creating of operational hydraulic and pneumatic circuits. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 133 - QUALITY ASSURANCE
An introductory quality control course that includes precision and semi-precision measuring, digital measuring tool operations, measuring practice using digital gauges, micrometers, depth gauge and height gauge measuring tools. The course also includes an introduction to statistical process control and pneumatic gauging topics. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 160 - MATERIALS ENGINEERING
A continuation of Quality Assurance topics focused on materials. Includes shear, hardness, tensile and compression testing and other material analyzing techniques. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 199 - SELECTED TOPICS: MANUFACTURING
Offers selected topics of study through workshops and independent study format. Provides opportunities for students to investigate topics of interest beyond what is covered in current degree. Prerequisites: instructor approval.
Credits: 1 to 3

MFG 201 - BENCH WORK
Using hand tools, files, hacksaw, chisels and coated abrasives. Includes shop safety, hand tapping, thread measurement, arbor press operations, micrometer and vernier caliper reading. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 202 - METALS PREPARATION
Bandsaw, cold saw auto stop operations, ironworker hole punching and abrasive power tool operations. Includes safety, profile cutting, shearing, material identification, blade welding, blade selection and offhand grinding operations. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 203 - LAYOUT
Semi-precision and precision layout practices. Includes height gauge operations, surface plate set-ups, bolt circle layout and the use of hand

and power tools to produce accurate workpiece profiles. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 205 - DRILL PRESS
Drill press operations training. Includes safety, machine nomenclature, measuring and sharpening drills, machine set-up, cutting tool selection, magnetic based drill, electric drill motor and radial arm drill operations. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 206 - SURFACE GRINDING I
Horizontal grinding machine operations. Includes machine nomenclature, chucking methods, wheel dressing, workpiece setups and cutting operations. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 210 - VERTICAL MILLING
Vertical milling machine operations. Includes safety, work holding, table set-ups, power feeds, digital read-out operation, cutter selections, climb and conventional cutting and spindle speed changes. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 211 - CNC MILL OPERATOR
Computer numerical control machining center operator training. Includes safety, machine maintenance, tool offsets, controller editing and operations, cutting tool set-ups, carbide insert and holders and part running. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 213 - CNC TURNING OPERATOR
Computer numerical control turning center operator training. Includes safety, machine maintenance, coordinate systems, tool length offsets, controller editing and operations, overrides, tool set-ups and loading, carbide insert and holder selections, tool vectors and part running. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 214 - LATHE OPERATOR I
Introductory manual lathe operations training. Includes safety, machine maintenance, quick-change tooling, chuck set-ups, compound taper cutting, general turning and drilling operations. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 216 - LATHE OPERATOR II
Advanced lathe operations training. Four-jaw chucking, taper turning, carbide cutting tool selections, boring, single point threading, thread measurement and other precision turning operations. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 230 - CNC PROGRAMMING MILL
Programming computer numerical control mills and machining centers. Includes G & M programming, canned cycles, subroutines, profile milling, cutter diameter compensation, part proofing. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 232 - CNC PROGRAMMING LATHE
Programming computer numerical control turning center. Includes G & M manual programming, canned cycles, subroutines, profile shaping, TNR, tool vectors, cutter selection and part proofing. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 234 - CAD/CAM MILL
CAD/CAM operations related to programming a computer numerical control machining center. Includes drilling 2-1/2 D and 3-D milling operations using wire frame and solids model geometry. A student considering this course should be familiar with CNC milling machine

operations and G & M programming. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 236 - CAD/CAM LATHE
CAD/CAM operations related to programming computer numerical control turning centers. Includes drilling, grooving and threading operations using wire frame and solids model geometry. A student considering this course should be familiar with CNC lathe operations and G & M programming. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 238 - OPTICAL COMPARATOR
Optical comparator operations. Includes operation of H-14 metrology controller, stage set-up and fixturing, inspection of rectangular and round workpieces. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 1   Lab: 3

MFG 239 - COORDINATE MEASUREMENT MACHINE
Coordinate measuring machine operations. Includes establishment of part coordinate systems, touch probe calibration procedures and measuring workpiece geometry. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 1   Lab: 3

MFG 241 - ELECTRIC MOTOR CONTROL
Peripheral devices used to control motors. Includes study of components used to control industrial motors and automated systems. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 242 - PROGRAMMABLE LOGIC CONTROLLERS I
Introduction to programmable logic controller programming. Includes ladder logic, sealing circuits and event sequencing. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 243 - INDUSTRIAL SENSORS
Sensor applications. Includes study of mechanical, electronic and proximity sensor applications found in a typical manufacturing environment. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 244 - PROGRAMMABLE LOGIC CONTROLLERS II
Continuation of Programmable Logic Controller training. Includes advanced programming problems, discrete IO interfacing, PLC timers and counters. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 245 - ELECTRICAL CONTROL/FLUID POWER
Electrical control of pneumatic and hydraulic circuits. Includes pressure valves, sensors, interfacing with PLC, control sequencing, timing and circuit design. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 246 - MECHANICAL TROUBLESHOOTING
This course is an overview of mechanical drive systems and safety, key fasteners, power transmission systems, lubrication concepts, plain bearings, ball bearings, roller bearings and gaskets and seals. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 250 - ADDITIVE MANUFACTURING
This course provides students with a basic understanding of Additive Manufacturing concepts including various processes used in rapid prototyping. Students will be able to design and create sample parts using a 3-D printing process. Prerequisites: instructor approval. Recommended preparation: MFG 100 and CIS 135S1.
Credits: 2   Lab: 6

MFG 254 - MANUFACTURING JIGS AND FIXTURES
Jig and fixture design practices. Includes clamps, locators, degrees of freedom, radial and conical locators, templates, automated clamping and modular fixturing. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 262 - WELDING INSPECTION/QUALITY CONTROL
Studies quality control issues related to weld joint inspection. Includes student exposure to visual and nondestructive inspection techniques that are utilized by welders and inspectors to interpret and monitor AWS quality standards. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 264 - AUTOMATED WELDING AND CUTTING
Cutting and welding steel shapes using numerically controlled processes. Includes cutting torch settings, set-up, maintenance practices and plasma-cutting exercises. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 266 - MANUFACTURING COST ESTIMATION
Cost estimation techniques used in the analysis and planning of manufacturing projects. Includes software estimates, manufacturing costs, standard vs. actual costs, fixturing and welding-related topics. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 267 - OXYGEN-FUEL AND PLASMA CUTTING
Gas torch, air carbon arc and plasma gas cutting. Includes torch set-up and maintenance, flame setting, diagnostics, track torch operations, circle cutting and carbon arc scarfing practice. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 271 - SMAW I
Shielded metal arc welding. Includes machine set-up, fillet and groove welds on plain carbon steel in all positions. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 272 - GMAW I
Gas metal arc welding. Includes machine set-up for short-circuiting and spray transfer on plain carbon steel. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 273 - SMAW II
Shielded metal arc welding. Includes machine set-up, groove welds on plain carbon steel plate, stainless steel plate and pipe. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 274 - GMAW II
Gas metal arc welding. Includes machine set-up for groove welds on plain carbon steel pipe and plate and aluminum plate. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 275 - SMAW III
Shielded metal arc welding. Includes machine set-up, groove welds on plain carbon steel to a limited plate thickness of 3/4" and pipe in all positions. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 276 - GMAW III
Gas metal arc welding. Includes machine set-up, groove welds on plain carbon steel and stainless steel in all positions. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 280 - CO-OP WORK EXPERIENCE MANUFACTURING
Credit granted for applicable on-the-job work experience. Minimum of 90 hours of work for the three credits granted. P/NP grading. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 1 to 3

MFG 281 - GTAW I
Gas tungsten arc welding. Includes machine setup for fillet and groove welds on plain carbon steel in all positions. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 282 - FCAW I
Flux core arc welding. Includes machine set-up for fillet and groove welds on plain carbon steel in all positions. Limited thickness to 3/4" plate. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 283 - GTAW II
Gas tungsten arc welding. Includes machine set-up for fillet and groove welds on plain carbon steel, aluminum, stainless steel tubing and plate in all positions. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 284 - FCAW II
Flux core arc welding. Includes machine set-up for fillet and groove welds on pipe and plain carbon steel plate to a limited plate thickness to 3/4." Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 285 - GTAW III
Gas tungsten arc welding. Includes machine set-up, groove welds on plain carbon, aluminum and stainless steel pipe in all positions. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 286 - FCAW III
Flux core arc welding. Includes machine set-up and groove welds on plain carbon steel plate and pipe in limited positions to a plate thickness of less than 3/4." Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 2   Lab: 6

MFG 287 - CNC PRESS BRAKE AND SHEARING
Covers safety and operation of equipment utilized in parting, forming and fabricating sheet metal. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 288 - INDUSTRIAL FABRICATION
Sheet metal fabrication focusing on proper fit techniques, length and width allowances, welding processes, utilization of jigs and fixtures and the use of fasteners. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 3   Lab: 9

MFG 289 - MATERIAL HANDLING-FORK LIFT SAFETY
Focuses on identifying and ordering sheet metal materials plus the safe storage and handling of those materials. Includes OSHA safety regulations and fork lift operation and safety. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 1   Lab: 3

MFG 290 - CERTIFICATION TEST PREPARATION AWS I
Testing materials preparation for Level One Weld Certification Testing. Includes materials test sample preparation, set-up, testing, grinding

samples and evaluation. P/NP grading. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 1   Lab: 3

MFG 291 - CERTIFICATION TEST PREPARATION NIMS I
Testing materials preparation for Level One NIMS Certification Testing. Includes materials test workpiece preparation, set-up, testing and evaluation activities. P/NP grading. Prerequisites: instructor approval. Recommended preparation: MFG 100.
Credits: 1   Lab: 3

MASSAGE THERAPY

LMT 101 - INTRO MASSAGE THERAPY CAREER
Explore the education and academic requirements of the LMT program and the requirements for massage therapy licensure in Oregon.
Credits: 1   Lab: 2

LMT 113 - KINESIOLOGY FOR MASSAGE THERAPY I
Provides an introduction and overview of the basic principles of kinesiology. Emphasizes anatomical terminology, skeletal anatomy and function, the study of joints and their functions, and palpation skills. This is the first in a three-part series of kinesiology for massage therapists. Prerequisites: WR 065 or higher or minimum placement into WR 121, MTH 010 or higher or minimum placement into MTH 020. Recommended preparation: BI 121 or BI 122 or BI 231. Corequisites: LMT 130, LMT 155, LMT 170.
Credits: 4   Lecture: 3 Lab: 3

LMT 118 - KINESIOLOGY FOR MASSAGE THERAPY II
Continues study of the muscles that will include attachments, actions, nerves, joints and the boney landmarks. Second course in a three-part series of kinesiology for massage therapist. Prerequisites: LMT 113.
Credits: 4   Lecture: 3 Lab: 3

LMT 124 - KINESIOLOGY FOR MASSAGE THERAPY III
Continues a study of muscles that will include attachments, actions, nerves, joints and the boney landmarks; emphasizes palpation skills. Third course in a three-part series of kinesiology for massage therapists. Prerequisites: LMT 118.
Credits: 4   Lecture: 3 Lab: 3

LMT 130 - MASSAGE FUNDAMENTALS
Introduction to the history of massage, self-care, proper body mechanics, basic medical terminology, universal sanitation precautions, draping, communication and the effects of Swedish massage strokes. Prerequisites: WR 065 or higher or minimum placement into WR 121, MTH 010 or higher or minimum placement into MTH 020. Recommended preparation: BI 121 or BI 122 or BI 231. Corequisites: LMT 113, LMT 155, LMT 170.
Credits: 2   Lecture: 2

LMT 135 - MANAGING A MASSAGE PRACTICE
Managing a Massage Practice will explore business structures, legal and tax documentation requirements for a massage therapy practice. Students will formulate a marketing plan including advertising, market analysis and professional goals.
Credits: 3   Lecture: 3

LMT 140 - PATHOLOGY FOR MASSAGE THERAPY
The effects of massage therapy on the body systems will be discussed including the indications and contraindications to massage. The basic mechanisms of the disease process and medical terminology will be reviewed. Prerequisites: BI 121 or BI 231.
Credits: 4   Lecture: 4

LMT 145 - MASSAGE I
The theory of Swedish massage, physiological effects and the practical application will be incorporated into the development of a massage therapy routine. Basic Subjective Objective Action Plan (SOAP) charting skills are introduced. Prerequisites: LMT 130 and LMT 170.
Credits: 4   Lecture: 2.5 Lab: 4.5

LMT 150 - MASSAGE II
The theory and practice of various modalities including deep tissue, trigger point therapy, muscle energy technique and stretching are introduced. Incorporates client assessment and treatment planning for a massage session. Prerequisites: LMT 118 and LMT 145.
Credits: 4   Lecture: 2.5 Lab: 4.5

LMT 155 - EASTERN THEORY & PRACTICE
This course is philosophically neutral and will focus on Chinese Medicine as the primary model which includes an introduction to eastern philosophy and its complimentary healing techniques. Prerequisites: WR 065 or higher or minimum placement into WR 121, MTH 010 or higher or minimum placement into MTH 020. Recommended preparation: BI 121 or BI 122 or BI 231. Corequisites: LMT 113, LMT 130, LMT 170.
Credits: 2   Other: 4

LMT 160 - HYDROTHERAPY
The principles and techniques of water as it relates to a massage therapy session in its three forms; solid, liquid and vapor. Prerequisites: LMT 145.
Credits: 1   Other: 2

LMT 170 - PROFESSIONAL ETHICS AND RULES
The professional and ethical boundaries that govern the practice of massage therapy will be explored. The Oregon Administrative Rules and Statutes that apply to licensed massage therapists will be examined and discussed. Prerequisites: WR 065 or higher or minimum placement into WR 121, MTH 010 or higher or minimum placement into MTH 020. Recommended preparation: BI 121 or BI 122 or BI 231. Corequisites: LMT 113, LMT 130, LMT 155.
Credits: 2   Lecture: 2

LMT 175 - SWEDISH RELAXATION CLINIC
Swedish Relaxation Clinic will perform basic Swedish relaxation massage therapy techniques on the general public while demonstrating professionalism, client communication, and client consent during supervised public clinics. Prerequisites: LMT 145.
Credits: 2   Lecture: 1 Lab: 3

LMT 180 - THERAPEUTIC CLINIC
Therapeutic Clinic offers relaxation and treatment massage therapy techniques to the general public. Subjective Objective Action Plan (SOAP) charting, professionalism, client communication and client consent will be performed during supervised public clinics. P/NP grading. Prerequisites: LMT 150.
Credits: 3   Lecture: 1 Lab: 6

LMT 188 - SPECIAL STUDIES: LMT
Specific modules that relate to first year courses.
Credits: 1 to 4

LMT 199 - SELECTED TOPICS: LICENSED MASSAGE THERAPY
Selected Topics related to Massage Therapy.
Credits: 1 to 4

LMT 205 - MOVEMENT FOR MASSAGE
The student will explore their body mechanics and body awareness through the practice of Qigong to meet the physical demands of a massage therapy career.
Credits: 1   Other: 2

LMT 206 - THE SPIRIT OF MASSAGE
The Spirit of Massage will explore a holistic view of massage and facilitate a self-awareness of one's personal connection to the massage therapy session and client goals. P/NP grading.
Credits: 1   Lecture: 1

LMT 210 - COMMUNITY OUTREACH
Massage therapy research and case studies topics will be explored using methods of assessment of the benefits of massage. Internships and externships may be included. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 2   Lecture: 1 Other: 3

LMT 216 - AROMATHERAPY I
An introduction to the properties and benefits of essential oils and their effects on the body when used in clinical and holistic settings.
Credits: 2   Lecture: 2

LMT 217 - AROMATHERAPY II
Advanced exploration of the essential oils examined in Aromatherapy I and utilization in a massage therapy session. Prerequisites: LMT 216.
Credits: 2   Lecture: 2

LMT 226 - THAI MASSAGE I
Traditional fundamentals of Thai bodywork techniques will be explored. A basic Thai floor massage routine will be practiced using traditional Thai equipment. Students should have the ability to kneel and move around on their feet and knees. P/NP grading. Prerequisites: LMT 130 and LMT 155.
Credits: 2   Lecture: 1 Other: 2

LMT 227 - THAI MASSAGE II
Students will explore the deeper roots of Thai bodywork and the "Sen." Advanced techniques and stretches will be practiced in a Thai bodywork routine using traditional Thai equipment. Students should have the ability to kneel and move around on their feet and knees. P/NP grading. Prerequisites: LMT 226.
Credits: 2   Lecture: 1 Other: 2

LMT 228 - FOOT REFLEXOLOGY
Students will practice reflexology routines, pressure points and techniques that combine to make a unique foot massage similar to those enjoyed throughout the world. P/NP grading.
Credits: 2   Lecture: 1 Other: 2

LMT 229 - JAPANESE FACIAL MASSAGE
Japanese Facial Massage combines massage and acupressure to reduce muscular tensions, increase blood and energy flow, while restoring elasticity to the skin. P/NP grading.
Credits: 1   Other: 2

LMT 240 - NEUROMUSCULAR TREATMENTS I
This is advanced myofascial coursework that focuses on the treatment of specific conditions and injuries using neuromuscular massage therapy treatment protocols. Prerequisites: LMT 145, LMT 150, LMT 175.
Credits: 5   Lecture: 4 Lab: 3

LMT 241 - NEUROMUSCULAR TREATMENT-EXTREMETIES
This is advanced myofascial coursework that focuses on the treatment of specific injuries and conditions using massage therapy neuromuscular treatment protocols. Prerequisites: LMT 150.
Credits: 2   Lecture: 1 Other: 2

LMT 245 - EFFECTIVE OFFICE DECISIONS
This course will explore insurance billing, retail selling, target marketing, bookkeeping, credentialing and other issues a massage practice may encounter. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 2   Lecture: 2

LMT 250 - CRANIAL SACRAL LEVEL I
This course will offer a cranio sacral approach to massage therapy with an emphasis on relevant anatomy. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 5   Lecture: 4 Lab: 3

LMT 255 - ZEN SHIATSU
Zen Shiatsu history, basic theory and techniques used in this massage modality will be introduced. This class will offer hands-on experience while working with a clothed client in the style of Shizuto Masunaga. Recommended preparation: LMT 155 and LMT 130.
Credits: 3   Lab: 6

LMT 256 - ADVANCED ZEN SHIATSU
The incorporation of advanced Shiatsu theory, assessment strategies, and techniques using meridian therapy and psubo manipulation.

Hands-on experience in the style of Shizuto Masunaga will be included. Prerequisites: LMT 255.
Credits: 3   Other: 6

LMT 257 - CHINESE MEDICINE THEORY
Chinese Medicine Theory will provide a deeper understanding of Eastern/Asian foundational elements and the application of the elements as it relates to therapeutic massage therapy and bodywork. Prerequisites: LMT 155.
Credits: 3   Lecture: 2 Other: 2

LMT 258 - EASTERN CLINIC
Students will practice Shiatsu and/or Thai bodywork techniques on the general public during the supervised clinic. P/NP grading. Prerequisites: LMT 255 or LMT 226.
Credits: 2   Lecture: 1 Lab: 3

LMT 260 - SPA TREATMENTS
Spa treatment commonly used in spa facilities will be explored. A variety of spa treatments will be practiced in class. Contraindications, hygiene, sanitation and spa etiquette will be examined. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 5   Lecture: 4 Lab: 3

LMT 261 - ANCIENT HAWAIIAN MASSAGE
Introduction to the history and the traditions of ancient Hawaiian precepts on bodywork and healing. P/NP grading.
Credits: 1   Other: 2

LMT 265 - SPORTS MASSAGE
The principles of Deep Tissue, Myofasical Release and Muscle Energy Techniques will be applied to target sports performance and exercise recovery and will be integrated in the rehabilitation of athletic related injuries. Prerequisites: LMT 150.
Credits: 3   Other: 6

LMT 266 - SPORTS MASSAGE CLINIC
Students will practice sports massage techniques targeting athletic performance, exercise recovery and soft tissue rehabilitation of athletic related injuries. P/NP grading. Prerequisites: LMT 265.
Credits: 2   Lecture: 1 Lab: 3

LMT 270 - CLINICAL ASSESSMENTS
This is a nontreatment course that will evaluate and assess ROM, posture, gait and soft tissue injury when determining massage therapy treatment options. Students taking Advanced Treatment courses are advised to enroll. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 4   Lecture: 3 Lab: 3

LMT 271 - PREGNANCY MASSAGE
Advanced massage training when working with pregnant clients that will include precautions, draping, positioning and how massage can support women in labor. Prerequisites: LMT 145.
Credits: 1   Other: 2

LMT 288 - SPECIAL STUDIES: LMT
Specific coursework related to massage therapy. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 1 to 4

LMT 295 - INTEGRATED THERAPIES
This course will explore the history and cultural aspects of Ayurveda principles and bodywork and how it may be integrated into a traditional massage therapy setting. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 3   Lecture: 2 Lab: 3

LMT 299 - SELECTED TOPICS: LMT
Selected topics related to massage therapy. Recommended preparation: Massage Therapy certificate, LMT, or other related health care professional.
Credits: 1 to 7

MATHEMATICS

MTH 010 - DEVELOPMENTAL MATHEMATICS
Introduces mathematics and its application; explains language and symbols used in math; develops concepts in whole number, fraction and decimal operations and applications; and develops analytical thinking while emphasizing study and learning skills necessary for success in math courses and overcoming anxiety toward math.
Credits: 4   Lecture: 4

MTH 020 - PRE-ALGEBRA
Emphasizes applications of basic arithmetic skills. Equips students to handle everyday arithmetic problems and lays a foundation for algebra. Topics include ratio, proportion, percent, measurement, perimeter, area, volume and integers. Recommended preparation: MTH 010.
Credits: 4   Lecture: 4

MTH 029 - FRACTION REVIEW WORKSHOP
Provides a concentrated experience for students needing a review of fractions and associated number theory skills. This course is not a replacement for students who place into or need to take MTH 010. May be taken concurrently with another math class. P/NP grading.
Credits: 2   Lecture: 2

MTH 031 - HEALTH CARE MATH
This is a three-credit course designed for students majoring in Addiction Studies, Massage Therapy, Health Information Technology, among others. Includes topics from pre-algebra and descriptive statistics. MTH 031 is not designed to serve as a prerequisite to MTH 060. Recommended preparation: MTH 010.
Credits: 3   Lecture: 3

MTH 058 - MATH LITERACY I
Presents mathematics in context. Introduces pattern recognition, estimation and number sense, working with units, linear equations and inequalities. Explores how to clearly communicate arguments supported by quantitative evidence using words, tables, graphs and mathematical equations. TI-83 or TI-84 calculator required. Recommended preparation: MTH 010 or minimum placement into MTH 020.
Credits: 4   Lecture: 4

MTH 060 - ALGEBRA I
Introduction to algebra, integers, rational and real numbers, algebraic expressions, linear equations in one and two variables, and systems of linear equations. Recommended preparation: MTH 020.
Credits: 4   Lecture: 4

MTH 065 - ALGEBRA II
Continues development of manipulative algebra skills from MTH 060. Includes algebraic expressions and polynomials, factoring algebraic expressions, rational expressions, roots and radicals and quadratic equations. Recommended preparation: MTH 060.
Credits: 4   Lecture: 4

MTH 085 - TECHNICAL MATHEMATICS I
First in a two-term sequence designed for majors in forest technology, fire science, CADD and GIS, among others. Includes introduction to algebra and geometry with a focus on units of measurement, formula manipulation, solving linear and literal equations, exponents, three-dimensional geometry and preparation for trigonometry. Real-world applications are emphasized. Recommended preparation: MTH 020 and/or MTH 060.
Credits: 4   Lecture: 4

MTH 086 - TECHNICAL MATHEMATICS II
Second in a two-term sequence designed for majors in forest technology, fire science, CADD and GIS, among others. Includes a review of geometry and a thorough discussion of trigonometry with an introduction to vectors and their applications. The second half of the term includes an introduction to functions and their applications including graphing equations, developing equations from graphs, analysis of linear and non-linear functions and functions as models. Students will work in teams

to develop and analyze a complex, real-world application and submit a technical report detailing the results. A graphing calculator is required. TI-83 or TI-84 recommended. Recommended preparation: MTH 085.
Credits: 4   Lecture: 4

MTH 095 - INTERMEDIATE ALGEBRA
Continues the algebra foundation necessary to study college-level mathematics and statistics. Includes systems of equations and inequalities, linear and quadratic regressions, functions and function notation, equation solving through manual and graphical means, inequalities and complex numbers. Graphing calculator required. TI-83 or TI-84 recommended. Recommended preparation: MTH 065.
Credits: 4   Lecture: 4

MTH 098 - MATH LITERACY II
Introduces normal distribution and regression/curve fitting. Covers modeling, graphing and solving of linear and quadratic equations. Introduces problem solving with linear systems of equations. Explores how to clearly communicate sophisticated arguments supported by quantitative evidence using words, tables, graphs and mathematical equations as appropriate. TI-83 or TI-84 calculator required. Prerequisites: MTH 058.
Credits: 4   Lecture: 4

MTH 099 - SELECTED TOPICS: MATHEMATICS
Offers selected topics in mathematics for courses generally available only once. Topics and credits to be arranged. P/NP grading.
Credits: 1 to 4

MTH 105 - MATH IN SOCIETY
Math in Society is a rigorous mathematics course designed for students in Liberal Arts and Humanities majors. The course provides a solid foundation in quantitative reasoning, symbolic reasoning and problem solving techniques needed to be a productive, contributing citizen in the 21st century. Prerequisites: MTH 095 or higher or minimum placement into MTH 105.
Credits: 4   Lecture: 4

MTH 111 - COLLEGE ALGEBRA
Introduces graphs and functions (linear, quadratic, polynomial, rational, exponential and logarithmic) using a graphing calculator. First term of a precalculus sequence for science students. Graphing calculator required. TI-83 or TI-84 recommended. Recommended preparation: MTH 095.
Credits: 4   Lecture: 4

MTH 112 - TRIGONOMETRY
Examines the applied, real-world and theoretical mathematical implications of the trigonometric functions. The symbolic, numerical and graphical representations of these functions and their applications form the core of the course. Emphasizes solving problems symbolically, numerically and graphically and understanding the connections among these methods in interpreting and analyzing results. Graphing calculator required. TI-83 or TI-84 recommended. Recommended preparation: MTH 111.
Credits: 4   Lecture: 4

MTH 113 - TOPICS IN PRECALCULUS
Examines topics chosen from the applied, real-world and theoretical mathematical implications of analytic geometry, nonrectangular coordinate systems, vectors, matrices and sequences. The symbolic, numerical, and graphical representations of these functions and their applications form the core of the course. Emphasizes solving problems symbolically, numerically and graphically and understanding the connections among these methods in interpreting and analyzing results. The primary focus is preparation for Calculus. Graphing calculator required. TI-83 or TI-84 recommended. Recommended preparation: MTH 112.
Credits: 4   Lecture: 4

MTH 188 - SPECIAL STUDIES: MATHEMATICS
Explores topics of current interest in the discipline.
Credits: 1 to 4

MTH 198 - PRACTICUM IN MATHEMATICS
Allows students to gain exposure to an elementary classroom setting, gain experience in teaching/tutoring math to elementary-school-age children and gain an understanding of learning theory and processes as they apply to mathematics education.
Credits: 2   Lecture: 1 Other: 3

MTH 199 - SELECTED TOPICS: MATHEMATICS
Offers selected topics in mathematics for courses generally available only once. Topics and credits to be arranged.
Credits: 1 to 4

MTH 211 - FUNDAMENTALS OF ELEMENTARY MATHEMATICS I
Introduces problem-solving, sets, natural and whole numbers, number theory and fractions. First term of a sequence for students planning to become elementary teachers but open to any students wanting to study the foundations of mathematics. Recommended preparation: MTH 095.
Credits: 4   Lecture: 4

MTH 212 - FUNDAMENTALS OF ELEMENTARY MATHEMATICS II
Covers decimals, percents, ratio and proportion, integers, rational and real numbers and statistics and probability. Second term of a sequence for students planning to become elementary teachers but open to any student wanting to study the foundations of mathematics. Recommended preparation: MTH 211.
Credits: 4   Lecture: 4

MTH 213 - FUNDAMENTALS OF ELEMENTARY MATHEMATICS III
Covers geometric shapes, measurement, congruence and similarity, and coordinate and transformational geometry. Third term of a sequence for students planning to become elementary teachers but open to any student wanting to study the foundations of mathematics. Recommended preparation: MTH 211.
Credits: 4   Lecture: 4

MTH 231 - DISCRETE MATHEMATICS
Topics in the course will examine in detail the applied, real-world and theoretical mathematical implications of the mathematical concepts elementary logic and set theory, functions, direct proof techniques, contradiction and contraposition, mathematical induction and recursion, elementary combinatorics, basic graph theory, minimal spanning trees. The symbolic, numerical and graphical representations of the mathematical concepts will be expanded and explored. Emphasis will be on solving problems symbolically, numerically and graphically and understanding the connections among these methods in interpreting and analyzing results. Recommended preparation: MTH 112.
Credits: 4   Lecture: 4

MTH 241 - CALCULUS FOR MANAGEMENT/SOCIAL SCIENCE
Introduces basic concepts of differential and integral calculus for students majoring in management and social science. Includes elementary differential and integral calculus of polynomial, logarithmic and exponential functions, and their applications to business, management and social sciences. A graphing calculator is required. TI-83 or TI-84 recommended. Recommended preparation: MTH 111.
Credits: 4   Lecture: 4

MTH 243 - INTRODUCTION TO PROBABILITY AND STATISTICS I
Introduces probability and descriptive statistics. Includes critical readings of graphs and data, basic probability theory, random variables and binomial and normal probability distributions. Culminates with the Central Limit Theorem. A graphing calculator is required. TI -83 or TI -84 recommended. Recommended preparation: MTH 111 (for those needing MTH 241 or MTH 251), MTH 105.
Credits: 4   Lecture: 4

MTH 244 - INTRODUCTION TO PROBABILITY AND STATISTICS 2

Introduces methods of inferential statistical analysis. Includes sampling techniques, confidence intervals, hypothesis testing, tests of association, linear regression and categorical analysis. Basic computer skills (especially spreadsheet knowledge) are desirable. A graphing calculator is required. TI -83 or TI -84 recommended. Prerequisites: MTH 243.
Credits: 4　Lecture: 4

MTH 245 - MATHEMATICS FOR MANAGEMENT, LIFE AND SOCIAL SCIENCES

This is a Finite Math course that covers techniques of counting, probability and elements of statistics including binomial and normal distributions, introductory matrix algebra and elements of linear programming. Recommended preparation: MTH 111.
Credits: 4　Lecture: 4

MTH 251 - CALCULUS I

Introduces concepts of differential calculus for science, mathematics and engineering students. Includes limits and continuity; the derivative; rates of change; derivatives of polynomial, rational and trigonometric functions; applications including maximum-minimum problems; antiderivatives and definite integrals. Topic presentation includes group discovery activities. Real applications, technical writing, group activities and group projects are emphasized. A graphing calculator is required. TI-83 or TI-84 is recommended. Computer literacy recommended. Recommended preparation: MTH 112 or MTH 113.
Credits: 4　Lecture: 3 Lab: 3

MTH 252 - CALCULUS II

Introduces concepts of integral calculus to science, mathematics and engineering students. Includes antidifferentiation, fundamental theorem, integration techniques, numerical methods, improper integrals and mathematical modeling with applications to geometry, physics, economics and population dynamics. Topic presentation includes group discovery activities. Real applications, technical writing, group activities and group projects are emphasized. A graphing calculator is required. TI-83 or TI-84 recommended. Computer literacy recommended. Recommended preparation: MTH 251.
Credits: 4　Lecture: 3 Lab: 3

MTH 253 - CALCULUS III

Introduces further calculus concepts to science, mathematics and engineering students. Includes infinite sequences, infinite series, Taylor series, parametric equations and functions in polar coordinates and an introduction to linear algebra including systems of linear equations, vectors, matrices, linear independence/dependence, matrix inverses, determinants, eigenvalues, eigenvectors. Real applications, technical writing, group activities and group projects are emphasized. A graphing calculator is required. TI-83 or TI-84 is recommended. Computer literacy recommended. Recommended preparation: MTH 252.
Credits: 4　Lecture: 3 Lab: 3

MTH 254 - VECTOR CALCULUS I

Introduces concepts of vector calculus to science and engineering students. Includes vectors and vector functions, parametric curves, functions of several variables, partial derivatives, gradients, directional derivatives and optimization problems. A graphing calculator is required. TI-83 or TI-84 is recommended. Computer skills required. Recommended preparation: MTH 253.
Credits: 4　Lecture: 3 Lab: 3

MTH 255 - VECTOR CALCULUS II

Continuation of the study of vector analysis for science and engineering students. Includes double and triple integrals with applications to area, volume and center of mass; introduction to vector analysis including divergence, curl, line integrals and work, surface integrals; conservative fields and the theorems of Green and Stokes. A graphing calculator is required. TI-83 or TI-84 recommended. Basic computer skills required. Recommended preparation: MTH 254.
Credits: 4　Lecture: 3 Lab: 3

MTH 256 - APPLIED DIFFERENTIAL EQUATIONS

Introduction to the application of differential equations for science and engineering students. Includes first- and second-order linear and nonlinear equations, systems of linear first-order differential equations and applications appropriate for science and engineering; numerical, graphical, series and analytical solutions are covered. Computer skills are recommended and a graphing calculator is required. TI-83 or TI-84 is recommended. Recommended preparation: MTH 253.
Credits: 4　Lecture: 3 Lab: 3

MTH 261A - INTRODUCTION TO LINEAR ALGEBRA

Provides an introduction to linear algebra concepts for science, math and engineering majors. Topics include vectors, matrices, systematic solution to linear systems, determinants, linear dependence and independence, linear transformations and eigenvalues and eigenvectors. Recommended preparation: MTH 252.
Credits: 2　Lecture: 2

MEDICAL ASSISTANT

MA 110 - INTRODUCTION TO CLINICAL MEDICAL ASSISTING

First of two classes that introduce key cognitive, psychomotor and affective competencies related to the clinical responsibilities of the medical assistant as identified by the CAAHEP and the MAERB. Covered concepts include application of standard precautions and infection control, patient preparation and education, performance of vital signs, delivery of oral and parenteral medications, vision screening and application of skills to begin assisting with medical exams and procedures. Math component includes basic skills in preparation for understanding and calculating medication dosage. Body structure, function, pathology and medical terminology are reviewed in relationship to their impact on various body systems. Prerequisites: AH 111; AH 112; AH 113; Choose either (BI 121 and BI 122) or (BI 231; BI 232 and BI 233); CIS 120 (or computer competency test); MTH 095 or higher; SP 218; and WR 121. Corequisites: MA 111.
Credits:　7　Lecture: 5 Lab: 6

MA 111 - INTRODUCTION TO PROFESSIONAL MEDICAL ASSISTING

First of two classes that introduce key competencies related to office practices and administrative responsibilities of the medical assistant as defined by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Medical Assisting Educational Review Board (MAERB). Includes concepts related to professionalism, diversity, confidentiality, written and oral communication, application of telephone techniques, legal concepts, introductory scheduling and triage skills and office safety. See MA 110 for Medical Assisting program prerequisites. Corequisites: MA 110.
Credits: 5　Lecture: 5

MA 120 - CLINCAL MEDICAL ASSISTING II

Second of two classes covering key cognitive, psychomotor and affective competencies related to clinical responsibilities of the medical assistant as identified by the CAAHEP and the MAERB. Students will expand skills required to assist with diagnostic testing, outpatient procedures and office-based lab testing. Students will demonstrate greater mastery of concepts such as standard precautions, infection control, medical and surgical asepsis, patient preparation and delivery of oral and parenteral medications. Math components include basic skill review in preparation for understanding, calculating and delivering oral and parenteral medications. Body structure, function, pathology and medical terminology are reviewed in relationship to their impact on various body systems. Prerequisites: MA 110 and MA 111. Corequisites: MA 121.
Credits: 7　Lecture: 5 Lab: 6

MA 121 - ADMINISTRATIVE MEDICAL ASSISTING

Second of two courses that cover key competencies related to office practices and administrative responsibilities of the medical assistant as identified by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Medical Assisting Educational Review

Board (MAERB). Includes concepts related to coding, billing, accounting, insurance, electronic medical records, practice management systems, office management and administrative communication. Prerequisites: MA 110 and MA 111. Corequisites: MA 120.
Credits: 5   Lecture: 2 Other: 6

MA 137 - APPLICATION OF PROFESSIONAL MEDICAL ASSISTING
Final medical assisting lecture and lab class focusing on skills related to specialty practice, office management, national exam passage and job acquisition. Topics include assisting with specialty exams, pandemic response, management tools, and specialty-specific diagnostic procedures and treatments. Students will prepare resumes and practice job interview skills. National exam material is reviewed. Prerequisites: MA 110, MA 111, MA 120, MA 121, MA 140 and MA 150. Corequisites: MA 147.
Credits: 4   Lecture: 3 Lab: 3

MA 140 - NUTRITION, CPR AND FIRST AID FOR MEDICAL ASSISTANTS
This class is designed to cover key competencies for medical assistants related to nutritional interventions and office-based emergencies as identified by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Medical Education Review Board (MAERB). Students have the opportunity to obtain provider level CPR and first aid cards that meet MA program requirements during the course of this class. Prerequisite with concurrency: MA 110.
Credits: 3   Lecture: 1 Other: 4

MA 147 - MEDICAL ASSISTANT PRACTICUM I
The clinical practicum is a required, supervised, unpaid learning experience, which takes place on site at a prearranged clinical facility. It provides students with the opportunity to perform clearly identified competencies within the clinical setting. Students must have a total of five clinical credits. A minimum of 160 hours in the clinical setting is required. Students must be available during all potential weekday hours indicated in the class schedule to attend practicum as placements become available. Students must be able to provide transportation to sites in Central Oregon. Students must have updated adult/infant/child CPR and First Aid cards as well as updated background checks and immunization required by practicum sites. P/NP grading. Prerequisites: instructor approval; see MA 137 for prerequisites. Corequisites: MA 137.
Credits: 5   Other: 16

MA 150 - PHARMACOLOGY FOR MEDICAL ASSISTANTS
This course introduces medical assistant students to the general principles of pharmacology as required by the standards adopted by the American Association of Medical Assistants (AAMA) and the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Drugs are discussed in the context of drug classes, mechanics of action, disease types and body systems. The goal is to provide medical assistants with sufficient background information so that they will be able to play a key role avoiding dispensing errors, as well as a basic understanding of pharmacologic categories and factors affecting drug kinetics. Prerequisite with concurrency: MA110.
Credits: 3   Lecture: 3

MA 199 - SELECTED TOPICS: MEDICAL ASSISTANT
This course is in development.
Credits: 1 to 4

MILITARY SCIENCE

MS 111 - LEADERSHIP AND PERSONAL DEVELOPMENT
This course introduces students to the personal challenges and competencies that are critical for effective leadership. Students will learn the basic skills related to leadership and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership dimensions while gaining a comprehensive understanding of the ROTC program, its purpose in the Army, and its advantages for the student. This course is open to any student in any course of study.
Credits: 1   Lecture: 1

MS 112 - INTRODUCTION TO TACTICAL LEADERSHIP
This course introduces students to the personal challenges and competencies that are critical for effective leadership. Topics include developing life skills such as goal setting, time management, physical fitness and stress management relative to leadership, officership and the Army profession. Students will further explore Army leadership dimensions in depth, as they relate to tactical leadership. This class is open to any student in any course of study. Recommended preparation: MS 111.
Credits: 1   Lecture: 1

MS 113 - ORIENTEERING AND LAND NAVIGATION
This course introduces students to basic orienteering and map reading. Students will gain confidence in their ability to read different types of maps, plan routes and find their location on the ground using a military map and compass. Students will learn to identify terrain features on a map and on the ground. Students will use these skills to move from one point to another by orienteering and terrain association. This class is open to any student in any course of study. Recommended preparation: MS 112.
Credits: 1   Lecture: 1

MS 180 - ARMY PHYSICAL FITNESS
The course familiarizes the students with the Army Physical Fitness Program and FM 21-20 through an individually-regimented physical fitness training program. Students will receive guidance on proper nutrition and fitness to excel in a physically demanding environment as well as being given the opportunity to plan and implement their own total fitness program. Class is open to any student in any course of study.
Credits: 1   Lab: 3

MS 211 - FOUNDATIONS IN LEADERSHIP
This course explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and effective communication techniques. Aspects of personal motivation and team building are practiced during the conduct of leadership coursework. The focus continues to build on developing knowledge of the skills that Army leaders need to excel, as well as broadening knowledge of operations of the current military. No military obligation is incurred through participation in the course. This class is open to any student in any course of study. Recommended preparation: MS 113.
Credits: 2   Other: 4

MS 212 - EFFECTIVE TEAM BUILDING
This course examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). This course explores dimensions of terrain analysis and land navigation, small unit tactics and the fundamentals of patrolling. It continues to explore the dimension of creative and innovative tactical leadership strategies and styles by examining team dynamics and effective time management techniques. Aspects of personal motivation and team building are practiced during the conduct of Leadership Labs. No military obligation is incurred through participation in the course. This course is open to any student in any course of study. Recommended preparation: MS 211.
Credits: 2   Other: 4

MS 213 - FUNDAMENTALS OF MILITARY OPERATIONS
This course introduces the fundamentals of military operations by exploring the military approach to conducting various operations, and the planning and procedures required to be successful in these operations. It continues to explore the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and effective time-management techniques. An introduction to squad-level tactics will focus on applying military decision-making processes and delivering military orders. No military obligation is incurred through participation in the course. Leadership coursework will be used to reinforce the tactical and operational concepts covered in the course. Recommended preparation: MS 212.
Credits: 2   Other: 4

MS 299 - SELECTED TOPICS: MILITARY SCIENCE
This course is in development.
Credits: 1 to 4   Lecture: 4 Lab: 12 Other: 12

MUSIC

MUS 101 - MUSIC FUNDAMENTALS
Presents the fundamentals of music making, including notation of pitch, rhythm, music terminology, scales, key signatures, intervals and chord spelling. Requires no previous musical experience. This course is an ideal preparation for students who intend to enroll in MUS 111, Music Theory. Students interested in learning about music history, styles and composers (Baroque, Classical, Romantic, etc.) should consider MUS 201, MUS 202 or MUS 203.
Credits: 3   Lecture: 3

MUS 111 - MUSIC THEORY IA
Harmony of the common-practice period with attention to part writing, and analysis. An entrance placement exam will be given during the first class session. This sequence of courses should be taken by all students who intend to major or minor in music. Recommended preparation: MUS 101; recommended to be taken with MUS 114.
Credits: 3   Lecture: 3

MUS 112 - MUSIC THEORY IB
Harmony of the common-practice period with attention to part writing and analysis. Recommended preparation: MUS 111; recommended to be taken with: MUS 115.
Credits: 3   Lecture: 3

MUS 113 - MUSIC THEORY IC
Harmony of the common-practice period with attention to part writing and analysis. Recommended preparation: MUS 112; recommended to be taken with: MUS 116.
Credits: 3   Lecture: 3

MUS 114 - MUSICIANSHIP IA
Builds aural acuity through drill and practice in ear training, sight singing and dictation. Computer based exercises and tests are an important part of the work. Recommended to be taken with: MUS 111.
Credits: 2   Lecture: 2

MUS 115 - MUSICIANSHIP IB
Builds aural acuity through drill and practice in ear training, sight singing and dictation. Computer based exercises and tests are an important part of the work. Recommended preparation: MUS 114; recommended to be taken with MUS 112.
Credits: 2   Lecture: 2

MUS 116 - MUSICIANSHIP IC
Builds aural acuity through drill and practice in ear training, sight singing and dictation. Computer based exercises and tests are an important part of the work. Recommended preparation: MUS 115; recommended to be taken with MUS 113.
Credits: 2   Lecture: 2

MUS 123 - OPERA PERFORMANCE
Study, rehearsal and performance of operas for vocalists, instrumentalists and production technicians. An audition is required before enrollment. May be repeated, no limit.
Credits: 1   Other: 3

MUS 131 - PIANO CLASS I
Teaches fundamentals of piano performance in a class format.
Credits: 2   Lecture: 2

MUS 132 - PIANO CLASS II
Teaches fundamental piano skills in a class format.
Credits: 2   Lecture: 2

MUS 133 - PIANO CLASS III
Teaches fundamental piano skills in a class format.
Credits: 2   Lecture: 2

MUS 134 - VOICE CLASS I
Teaches fundamentals of vocal performance in a class format.
Credits: 2   Lecture: 2

MUS 135 - VOICE CLASS II
Teaches fundamental vocal skills in a class format.
Credits: 2   Lecture: 2

MUS 136 - VOICE CLASS III
Teaches fundamental vocal skills in a class format.
Credits: 2   Lecture: 2

MUS 137 - CLASS GUITAR I
Teaches fundamentals of guitar performance in a class format.
Credits: 2   Lecture: 2

MUS 138 - CLASS GUITAR II
Teaches fundamental guitar skills in a class format.
Credits: 2   Lecture: 2

MUS 139 - CLASS GUITAR III
Teaches fundamental guitar skills in a class format.
Credits: 2   Lecture: 2

MUS 161 - JAZZ IMPROVISATION
Introduces students to jazz improvisation in a laboratory (performance) setting. No previous experience or knowledge about jazz or improvisation necessary. Students should have some previously developed proficiency on an instrument or voice. May be repeated, no limit.
Credits: 2   Lecture: 2

MUS 188 - SPECIAL STUDIES: MUSIC
Credits: 1 to 4

MUS 194 - BIG BAND JAZZ
Study and performance of music for large jazz band. One major concert is presented each term. May be repeated, no limit. Contact ensemble conductor for information about required audition.
Credits: 1   Other: 3

MUS 195 - CONCERT BAND
Study and performance of music for the concert band. One major concert is presented each term. May be repeated; no limit. Contact ensemble conductor for information about required audition.
Credits: 1   Other: 3

MUS 196 - SYMPHONY
The study and performance of music for symphony orchestra. One major concert is presented each term. May be repeated, no limit. Contact ensemble conductor for information about required audition.
Credits: 1   Other: 3

MUS 197 - CASCADE CHORALE
Study, rehearsal and performance of choral literature. Meets Tuesday evenings and welcomes both college students and community members. Performs a major concert each term. May be repeated; no limit. Please note: purchase of concert dress outfit required. Contact choral program director for information about required audition.
Credits: 1   Other: 3

MUS 197A - COLLEGE CHOIR
Focuses on preparation and performance of choral literature from a wide variety of styles and periods. Performs one major concert each term and occasionally other concerts off campus. May be repeated, no limit.
Credits: 2   Lecture: 1 Lab: 3

MUS 199 - SELECTED TOPICS: MUSIC
This course is in development.
Credits: 1 to 3

MUS 201 - UNDERSTANDING MUSIC
Introduces the history of Western fine-art music and its literature. Encompasses the study of musical vocabulary, style, form, principal composers and the historical development of music in various style periods. The content of each course varies somewhat from term to term, but typically MUS 201 covers Medieval, Renaissance, Baroque and Classical era music while MUS 202 discusses music and composers from the Romantic, 20th century and Contemporary periods. MUS 203 typically diverges from Western fine-art music and focuses on various musical styles from around the world. The classes need not be taken in sequence and do not require any previous musical experience. Students interested in learning how to read musical notation (rhythm, notes) should enroll in MUS 101.
Credits: 3   Lecture: 3

MUS 202 - UNDERSTANDING MUSIC
Introduces the history of Western fine-art music and its literature. Encompasses the study of musical vocabulary, style, form, principal composers and the historical development of music in various style periods. The content of each course varies somewhat from term to term, but typically MUS 201 covers Medieval, Renaissance, Baroque and Classical era music while MUS 202 discusses music and composers from the Romantic, 20th century and Contemporary periods. MUS 203 typically diverges from Western fine-art music and focuses on various musical styles from around the world. The classes need not be taken in sequence and do not require any previous musical experience. Students interested in learning how to read musical notation (rhythm, notes) should enroll in MUS 101.
Credits: 3   Lecture: 3

MUS 203 - UNDERSTANDING MUSIC
Introduces the history of Western fine-art music and its literature. Encompasses the study of musical vocabulary, style, form, principal composers and the historical development of music in various style periods. The content of each course varies somewhat from term to term, but typically MUS 201 covers Medieval, Renaissance, Baroque and Classical era music while MUS 202 discusses music and composers from the Romantic, 20th century and Contemporary periods. MUS 203 typically diverges from Western fine-art music and focuses on various musical styles from around the world. The classes need not be taken in sequence and do not require any previous musical experience. Students interested in learning how to read musical notation (rhythm, notes) should enroll in MUS 101.
Credits: 3   Lecture: 3

MUS 205 - INTRODUCTION TO JAZZ HISTORY
Introduction to the history of jazz. Major styles and significant jazz artists are studied in depth. No previous musical knowledge required.
Credits: 3   Lecture: 3

MUS 207 - HISTORY OF ROCK MUSIC
Students will learn the history of rock music from its beginnings in earlier forms of popular music to the present; to understand the relationship of this music to larger cultural, political and economic formations; and to become familiar with aspects of musical structure that have been used in rock music. Students will communicate their knowledge through participation with discussion groups, activities, listening examples and a written project about an artist or rock band that came out of rock music.
Credits: 3   Lecture: 3

MUS 211 - MUSIC THEORY IIA
A continuation of common-practice period harmony (Music Theory I) with stress on chromatic resources, musical form and style analysis including an introduction to harmonic practices of the 20th and 21st centuries. Recommended preparation: MUS 113; recommended to be taken with MUS 214.
Credits: 3   Lecture: 3

MUS 212 - MUSIC THEORY IIB
A continuation of common-practice period harmony (Music Theory I) with stress on chromatic resources, musical form and style analysis including an introduction to harmonic practices of the 20th and 21st centuries. Recommended preparation: MUS 211; recommended to be taken with MUS 215.
Credits: 3   Lecture: 3

MUS 213 - MUSIC THEORY IIC
A continuation of common-practice period harmony (Music Theory I) with stress on chromatic resources, musical form and style analysis including an introduction to harmonic practices of the 20th and 21st centuries. Recommended preparation: MUS 212; recommended to be taken with MUS 216.
Credits: 3   Lecture: 3

MUS 214 - MUSICIANSHIP IIA
Builds aural acuity through drill and practice in ear training, sight singing and dictation. Computer based exercises and tests are an important part of the work. Recommended preparation: MUS 116; recommended to be taken with MUS 211.
Credits: 2   Lecture: 2

MUS 215 - MUSICIANSHIP IIB
Builds aural acuity through drill and practice in ear training, sight singing and dictation. Computer based exercises and tests are an important part of the work. Recommended preparation: MUS 214; recommended to be taken with MUS 212.
Credits: 2   Lecture: 2

MUS 216 - MUSICIANSHIP IIC
Builds aural acuity through drill and practice in ear training, sight singing and dictation. Computer based exercises and tests are an important part of the work. Recommended preparation: MUS 215; recommended to be taken with MUS 213.
Credits: 2   Lecture: 2

MUS 298 - INDEPENDENT STUDY: MUSIC
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

MUSIC -SMALL ENSEMBLES/LESSONS

MUP 105 - JAZZ COMBO
Performance of wide range of jazz styles in a small-group setting with an emphasis on developing knowledge and skills in improvising. Students should have some previously developed proficiency on an instrument or voice. May be repeated, no limit.
Credits: 2   Lecture: 2

MUP 111 - WOODWIND ENSEMBLE
The study and performance of chamber music for woodwind instruments in an ensemble such as a woodwind or a clarinet quartet. May be repeated, no limit. Prerequisites: instructor approval.
Credits: 2   Lecture: 2

MUP 114 - VOCAL ENSEMBLE
A select group of singers that focuses on various jazz idioms: blues, funk, Latin and straight-ahead. Enrollment is by audition. Recommended to be taken with MUS 197A, College Choir. Contact choral program director for information about required audition. May be repeated, no limit.
Credits: 2   Lecture: 2

MUP 146 - STRING ENSEMBLE
Study and performance of chamber music for bowed string instruments in a group such as string quartet or for string ensembles including a keyboard instrument. May be repeated, no limit. Prerequisites: instructor approval.
Credits: 2   Lecture: 2

MUP 171 - APPLIED PIANO
Private lessons provide individual instruction in techniques of performance for voice, guitar, keyboard and all standard string, woodwind, brass and percussion instruments. Instructor's permission and additional fee required. Contact the department chair or administrative assistant for additional information. May be repeated, no limit.
Credits: 1   Other: .5

MUP 174 - APPLIED VOICE
Credits: 1   Other: .5

MUP 175 - APPLIED VIOLIN
Credits: 1   Other: .5

MUP 176 - APPLIED VIOLA
Credits: 1   Other: .5

MUP 177 - APPLIED CELLO
Credits: 1   Other: .5

MUP 178 - APPLIED BASS
Credits: 1   Other: .5

MUP 180 - APPLIED GUITAR
Credits: 1   Other: .5

MUP 181 - APPLIED FLUTE
Credits: 1   Other: .5

MUP 182 - APPLIED OBOE
Credits: 1   Other: .5

MUP 186 - APPLIED TRUMPET
Credits: 1   Other: .5

MUP 187 - APPLIED FRENCH HORN
Credits: 1   Other: .5

MUP 188 - APPLIED TROMBONE
Credits: 1   Other: .5

MUP 271 - APPLIED PIANO
Private lessons provide individual instruction in techniques of performance for voice, guitar, keyboard and all standard string, woodwind, brass and percussion instruments. Additional fee required. Contact the department chair or administrative assistant for additional information. May be repeated, no limit. Prerequisites: instructor approval.
Credits: 1   Other: .5

MUP 274 - APPLIED VOICE
Credits: 1   Other: .5

MUP 276 - APPLIED VIOLA
Credits: 1   Other: .5

MUP 277 - APPLIED CELLO
Credits: 1   Other: .5

MUP 280 - APPLIED GUITAR
Credits: 1   Other: .5

NURSING

NUR 088 - SPECIAL STUDIES: NURSING
Allows nursing students to pursue a special content area. Special study arrangements must be made through the nursing program coordinator.
Credits: 1 to 8

NUR 099 - SPECIAL TOPICS: NURSING
This course is in development.
Credits: 1 to 8

NUR 103 - NURSING ASSISTANT
Covers basic nursing assistant level one care and effective communication skills for clients in acute and longterm care facilities. Issues of confidentiality, client rights and role of the nursing assistant are discussed. Students are eligible to sit for the Oregon State Board of Nursing-sanctioned certified nursing assistant level one examination upon satisfactory performance of course outcomes and assessments; and completion of the minimum 155 mandatory student contact hours: 80 hours of lecture/lab and 75 hours of clinical experience. Clinic takes place in acute and long-term care facilities. To enroll in the course, students must hold a current American Heart Association, Health Care Provider CPR card, pass a criminal history check, pass a urine drug screen and meet immunization and TB test requirements. CNA Program Director approval required.
Credits: 7   Lecture: 3.2 Lab: 4.8 Other: 7.5

NUR 104 - CERTIFIED NURSING ASSISTANT: LEVEL 2
Provides an Oregon State Board of Nursing-approved standardized curriculum and competency evaluation for the designation of Certified Nursing Assistant Level 2. This course focuses on technical skills, interpersonal skills and communication, safety, infection control and documentation with the outcome of demonstrated proficiency in knowledge, skills and abilities in these areas. The course has a clinical component to be scheduled at with a clinical partner. Requires that students hold a current, unencumbered Oregon CNA 1 certificate (verified prior to registration) as well as hold a current American Heart Association BLS Provider CPR card, pass a criminal history check and meet immunization and TB test requirements (required after registration but prior to class participation). Prerequisites: department approval based on review of current, unencumbered Oregon CNA1 certificate. Recommended preparation: NUR 103.
Credits: 6   Lecture: 4 Lab: 3 Other: 3

NUR 106 - NURSING I
Introduces fundamental concepts of nursing practice (nursing process, critical thinking, therapeutic communication and cultural considerations); includes a clinical lab focused on core beginning level nursing skills and clinical practicum for application of knowledge and skills. Addresses issues associated with clients with altered states of health. Introduces the major drug classifications and pharmacological principles. First term of the practical nurse and registered nurse programs. Prerequisites: admission to the Nursing program and department approval.
Credits: 12   Lecture: 7 Lab: 6 Other: 9

NUR 107 - NURSING II
Develops knowledge and skills in nursing practice concepts that are necessary in providing nursing care to patients experiencing health alterations. Includes a learning resource center lab for developing skills in the areas of medication administration, intravenous therapy, simple wound management and urinary catheterization and a clinical practicum to apply knowledge and skills to the adult patient with medical-surgical nursing needs. Second term of the practical nurse and registered nurse programs. Prerequisites: admission to the Nursing program and department approval.
Credits: 10   Lecture: 4 Lab: 4.5 Other: 13.5

NUR 108 - NURSING III
Provides students with the opportunity to obtain the knowledge and skills that are necessary to implement the role of a practical nurse in providing care to acutely ill patients across the lifespan. Concepts of mental health and maternal child nursing are introduced. The ability to communicate effectively, therapeutically and professionally is emphasized. The learning resource center lab focuses on developing skills in parenteral, and nutritional therapies. Students will also complete a simulation experience and a comprehensive assessment of a complete set of core nursing skills from the first year of the Nursing program. The clinical practicum provides the opportunity for patient-centered care based on established standards and contributes to nursing care delivery at the practical nurse level. Final term of the practical nursing sequence and the third term of the Nursing program. Prerequisites: admission to the Nursing program and department approval.
Credits: 11   Lecture: 6 Lab: 3 Other: 12

NUR 188 - SPECIAL STUDIES: NURSING I
Allows first-year nursing students to pursue a special content area in nursing. Special study arrangements must be made through the designated Nursing department special studies coordinator.
Credits: 1 to 8

NUR 199 - SELECTED TOPICS: NURSING I
Presents selected topics of study in the field of nursing offered on a temporary or experimental basis for first year Nursing students.
Credits: 1 to 8

NUR 206 - NURSING IV
Focuses on the integration of knowledge and skills acquired in the first year of the Nursing program as the student transitions from the practical nurse to the registered nurse role. Nursing curriculum expands on the concepts of nursing process, caring, holism and professionalism at the registered nurse level. Emphasis is on the development of competency in critical thinking and caring interventions toward individuals and families. The learning resource center lab focuses on the development of higher-level assessment and intravenous medication and fluid therapy. Clinical practicum provides the students with an opportunity to provide holistic, individualized nursing care for complex medical-surgical and mentally ill clients. Fourth term of the Nursing program, first term of the RN sequence. Prerequisites: admission to the nursing program and department approval.
Credits: 11   Lecture: 6 Lab: 4.5 Other: 10.5

NUR 207 - NURSING V
Introduces community–based nursing care of individuals and families, care of the critically ill patient, as well as maternal child care of the high-risk patient. The nursing curriculum continues to expand on the role of the RN to promote critical thinking and clinical decision-making. Students further develop their skills in patient teaching, patient care planning and management. A simulation experience allows the students to manage the care of a patient through multiple stages of an illness using a team approach. The clinical practicum focuses on mastering the nursing process to provide and direct holistic and individualized patient care to increasingly complex patients. Students are provided additional experiences in the community-based and mental health settings. Fifth term of the Nursing program, second term of the RN sequence of the program. Prerequisites: admission to the nursing program and department approval.
Credits: 10   Lecture: 5 Other: 15

NUR 208 - NURSING VI
Focuses on refining clinical decision-making skills related to the complex health care needs of patients across the lifespan in a variety of health care settings. Concepts of quality nursing care, legal and ethical issues, professional communication, leadership and management of care, and collaborative practice are addressed in relation to nursing practice. Students participate in a four-week, full-time capstone clinical experience focusing on managing groups of patients or individual patients with high-level needs. The course concludes with a capstone case study presentation and a national board preparation exam. Sixth term of the Nursing program, third term of the RN sequence. Prerequisites: admission to the Nursing program and department approval.
Credits: 9   Lecture: 4 Other: 15

NUR 218 - BASIC EKG
Basic three-lead electrocardiograph interpretation. Open to allied health, exercise science and nursing students.
Credits: 1   Lecture: 1

NUR 280A - CWE NURSING I
Provides an opportunity for first year Nursing students who also possess their CNA license to obtain college credit while providing direct patient care in acute or long-term care facility. P/NP grading. Prerequisites: admission to the Nursing program and certified nursing assistant status and department approval.
Credits: 1 to 4

NUR 280B - CWE NURSING II
Provides an opportunity for second year Nursing students who also possess their LPN license to obtain college credit for providing direct patient care while employed in a long-term or acute-care facility. P/NP grading. Prerequisites: admission to the nursing program and LPN status and department approval.
Credits: 1 to 4

NUR 288 - SPECIAL STUDIES: NURSING
Allows second-year nursing students to pursue a special content area in nursing. Special study arrangements must be made through the nurse administrator.
Credits: 1 to 8

NUR 298 - INDEPENDENT STUDY: NURSING
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

NUR 299 - SELECTED TOPICS: NURSING
Presents selected topics of study in the field of nursing offered on a temporary or experimental basis for second year Nursing students.
Credits: 1 to 3

OUTDOOR LEADERSHIP

OL 111 - INTRODUCTION TO OUTDOOR LEADERSHIP
Designed to introduce students to the field of outdoor recreation, outdoor education, adventure education, therapeutic recreation and experiential education. Upon completion of this course, students should have a good understanding of the differences between the subspecialties in the field. Includes the history of programs, an introduction to theories, current topics, career options and preparation needed for those careers. Course may help students decide if an educational path in outdoor leadership is something they wish to pursue. Guest speakers representing various careers/areas will present their experiences to the class. This course is a recommended foundation for other outdoor leadership program courses. Prerequisites: WR 065 or higher.
Credits: 3   Lecture: 3

OL 160 - PROCESSING THE EXPERIENCE
Students will be introduced to a variety of creative processing tools to be used either during or after the experience. The use of a field journal for reflection notes, as well as for processing through creative pursuits like sketching or painting will be introduced, as will group-based processing tools like formal debriefs, creating skits and collaborative art projects.
Credits: 2   Lecture: 2

OL 171 - TECHNICAL SKILLS FOR OUTDOOR LEADERSHIP
This course focuses on introducing students to a variety of basic skills, gear and systems necessary for a variety of Outdoor pursuits, including alpine mountaineering, challenge course and rock climbing. Students are introduced to a variety of skills, with the intention of moving into more guide-oriented courses later in their program. This class will present students with various technical skills that will serve as a foundation for the advanced training in specific outdoor disciplines. Students will be introduced to gear, such as software (ropes, webbing, harnesses) and hardware (carabiners, friction devices); skills, such as knots, belaying, rappelling; and systems such as anchors, raises, lowers.
Credits: 2   Other: 4

OL 194AA - AVALANCHE LEVEL I
This course is designed to introduce the student to the various factors that contribute to avalanche hazard including terrain, weather, snowpack and the human component (good vs. bad decision making). Avalanche safety equipment such as transceivers, probes and shovels are also presented, with instruction on how to use each of these critical pieces of safety gear. Additional field time is spent on practicing transceiver search

techniques (single and multiple burial), snowpack assessment (through a 'Test-pit Plus') and safe travel practices/group travel skills. The course includes one or more mock avalanche rescues.
Credits: 1   Other: 2

OL 194AB - AVALANCHE LEVEL I REFRESHER
This course is designed to review the materials from Avalanche Level I, including the various factors that contribute to avalanche hazard including terrain, weather, snowpack and the human component (good vs. bad decision making). Avalanche safety equipment such as transceivers, probes and shovels are also reviewed, along with how to use each of these critical pieces of safety gear. Field time is spent practicing transceiver search techniques (single and multiple burial), snowpack assessment (through a 'Test-pit Plus') and safe travel practices and group travel skills. Students must have completed an Avalanche Level I course within the past five years. Recommended preparation: OL 194AA.
Credits: 1   Other: 2

OL 194AC - AVALANCHE LEVEL II
This course is designed to build on the skills developed in an Avalanche Level I course. The various factors that contribute to avalanche hazard including terrain, weather, snowpack and the human component (good vs. bad decision making) will be reviewed, as will avalanche safety equipment such as transceivers, probes and shovels and their correct use. New material will include use of a field notebook and standardized data recording, as well as completing full pit profiles. Field time is spent practicing and reviewing transceiver search techniques (single and multiple burial), snowpack assessment (through test pit, test pit plus and full pit), and safe travel practices and group travel skills. Students must have completed an Avalanche Level I or Level I Refresher course within the past five years. Recommended preparation: OL 194AA or OL 194AB.
Credits: 2   Lecture: 1 Other: 2

OL 199 - SELECTED TOPICS: OUTDOOR LEADERSHIP
This course is in development.
Credits: 1 to 4

OL 207 - SEMINAR IN OUTDOOR LEADERSHIP
This course will help prepare students for entering the job market and/or setting up a professional practicum through the following: where to search for jobs, how to apply and how to interview; and how to prepare professional resumes, cover letters, experience resumes and professional portfolios. Professional development opportunities such as conferences, certifications, trainings, etc. will be discussed, as will current research and trends in employment in fields related to outdoor leadership.
Credits: 2   Lecture: 2

OL 244 - PSYCHOLOGY OF RISK AND ADVENTURE
Introduces students to psychological theories and topics relevant to adventure and risk, including perception, motivation, anxiety, arousal and risk-taking. This course will provide a theoretical and skills-based approach to understanding why the psychological components of risk and adventure play a pinnacle role in outdoor leadership. Recommended preparation: or to be taken with WR 121.
Credits: 3   Lecture: 3

OL 251 - WILDERNESS FIRST AID
Designed to provide the student with the necessary knowledge and skills to care for an injured or suddenly ill person in a remote location. The methods and protocols presented follow the Wilderness Medical Society guidelines for a 16 hour certification and are specific to a wilderness setting. The Wilderness Medical Society defines wilderness as a remote geographical location more than one hour from definitive care. Open to all and counts as an elective for Outdoor Leadership students.
Credits: 1   Lecture: 1 Lab: 1

OL 253 - WILDERNESS ADVANCED FIRST AID
This course is designed to provide the student with the necessary knowledge and skills to care for an injured or suddenly ill person in a remote location. The methods and protocols presented in this class follow the Wilderness Medical Society guidelines for a 36 hour certification and are specific to a wilderness setting. The Wilderness Medical Society

defines wilderness as a remote geographical location more than one hour from definitive care.
Credits: 3   Lecture: 2 Other: 2

OL 255 - OUTDOOR LIVING SKILLS
Educates the student on how to travel safely for extended periods in the backcountry. Presents essentials of life (water, food and shelter/clothing) and how they can be provided in an outdoors setting. Also, discusses navigation, backcountry medicine and wilderness use/wilderness concepts. Lecture, discussion and lab (demonstration, practical application and practice) used. Students conduct one solo overnight and one group weekend outing. This course is a recommended foundation for other outdoor leadership program courses.
Credits: 5   Lecture: 4 Lab: 3.6

OL 263 - BASIC WILDERNESS LIFE SUPPORT
Basic Wilderness Life Support is a wilderness first responder course designed to provide an individual with an in-depth knowledge of wilderness medicine and the basic skills to treat the most common injuries and illnesses encountered in the wilderness. This course is appropriate for those who spend a lot of time in remote locations (professionally or recreationally). The methods and protocols presented in this class follow the Wilderness Medical Society guidelines for a 74 hour certification and are specific to a wilderness setting. The Wilderness Medical Society defines wilderness as a remote geographical location more than one hour from definitive care. Students are required to complete a 1 credit CPR course with certification in order to satisfy the BWLS certification. A specific section of the American heart Association's Healthcare Provider CPR course will be offered exclusively for BWLS students. Registration for the CPR class will be separate from registration for the BWLS class.
Credits: 5   Lecture: 3 Other: 4

OL 271 - FACILITATING GROUP EXPERIENCES
Introduces the broad concepts of group facilitation and presents the various "generations" of adventure facilitation. Students will become familiar with various models of the facilitation process and how each relates to experiential learning. Coursework integrates introductory concepts of leadership, foundational experiential education theory and the practice of facilitation in a variety of modes, including both high and low elements. Students are responsible for facilitating various group initiatives as a way to further comprehend the concepts presented. Successful students will be prepared to effectively and confidently facilitate groups in a variety of learning environments. This is a foundation course and a recommended preparation for other Outdoor Leadership program courses. Prerequisites: OL 111, OL 263, OL 255 and WR 121.
Credits: 5   Lecture: 4 Lab: 3

OL 273 - OUTDOOR RECREATION LEADERSHIP
This course is designed to provide both theoretical and practical knowledge of group leadership in an outdoor setting. Topics will be presented in lecture, discussed in various leadership scenarios and then applied in group outings that the students will plan and lead. Special emphasis will be placed on group safety issues and risk assessment/risk management. Prerequisites: OL 111, OL 263, OL 255 and WR 121.
Credits: 5   Lecture: 4 Lab: 3.6

OL 280 - CO-OP WORK EXPERIENCE - OL
Provides practicums by the department in conjunction with the community in outdoor recreation, outdoor education, adventure education, environmental education, experiential education and wilderness therapy. Students must be approved for enrollment by an HHP-OL advisor before registering for this course. P/NP grading. Prerequisites: instructor approval. Recommended preparation: complete a minimum of three OL classes.
Credits: 2   Other: 6

OL 294AC - ALPINE CLIMBING
Designed to introduce the student to guiding, teaching and leading technical mountain travel with specific emphasis on rock, snow and ice anchors; glacier travel and crevasse rescue; and climbing steeper

snow and ice. Additional relevant topics may also be introduced (e.g., avalanche safety, high altitude). Prerequisites: OL 171, OL 271, OL 273.
Credits: 3   Other: 6

OL 294CA - CANOE PROGRAM INSTRUCTION AND GUIDING
Introduce students to guiding, teaching and leading flat and moving water canoe programs. May also introduce swift water rescue, whitewater techniques, etc.. Students will be instructed on the use of a variety of canoeing equipment and techniques used for travel by canoe within instructing/guiding situations (this course will teach much of the preliminary level material). Topics will include such areas as: water dynamics, rescue, client care and welfare, managing a group setting, risk assessment, as well as specific technical skills. Emphasis will be placed on advanced technical skill development and practical application. Although some time will be spent canoeing, this is not an activity course; all aspects of the course will be designed to teach the basic concepts of leading others in a variety of canoeing situations. Prerequisites with concurrency: OL 271 and OL 273.
Credits: 3   Other: 6

OL 294MB - MOUNTAIN BIKE GUIDING AND TRAIL STEWARDSHIP
This course is designed to instruct the student how to provide a fun and safe guided mountain bike experience to people of all ages through a combination of field lecture and hands-on practice. Students will learn how to teach basic mountain bike skills, design and lead group trips, diagnose trailside mechanical issues and perform basic trailside bike maintenance, and understand the characteristics and importance of sustainable mountain bike trail development and stewardship. The majority of the class time for this course will be spent in the field. Prerequisites: OL 271 and OL 273.
Credits: 3   Other: 6

OL 294RC - TEACHING ROCK CLIMBING
This course is designed as an introduction to guiding/teaching rock climbing. Students will be instructed on the use of a variety of climbing equipment and techniques used for top-roped and lead climbing in guiding/teaching situations (this course will not teach beginning level material except in how to teach such material to a beginner student/client/friend). Topics will include such areas as: client care and welfare, managing a group setting, risk assessment, as well as technical skills. Emphasis will be placed on group work, discussion and practical application. Although some time will be spent climbing, this is not an activity course; all aspects of the course will be designed to teach the basic concepts of leading others in a variety of rock climbing situations. Prerequisites: OL 171, OL 271 and OL 273.
Credits: 3   Other: 6

OL 294WG - WHITEWATER RAFT GUIDING
This course is designed to instruct the student on how to provide a fun and safe whitewater raft experience to people of all ages through a combination of lecture and hands-on practice. Students will learn how to guide paddle rafts and oar rafts, read whitewater, lead group trips and execute various whitewater rescue techniques. The majority of the class time for this course will be spent in the field, including overnight camping, and a variety of weather conditions may be encountered. A background in camping or outdoor living skills is strongly recommended. Please dress appropriately. Prerequisites: OL 271, OL 273 and OL 171.
Credits: 3   Other: 6

OL 298 - INDEPENDENT STUDY: OL
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

PHARMACY TECHNICIAN

PHM 100 - PHARMACY TECHNICIAN PRACTICE I
This course teaches pharmacy technician students information, techniques and procedures needed to assist the pharmacist in delivery of pharmaceutical products and services. The main objective is to provide the students with a working knowledge of the many aspects of pharmacy in community, institution and other practice settings. Progressive learning takes place as new information and skill sets are studied throughout the course. Students will understand the regulatory agencies and laws that affect pharmacy practice. Emphasis is placed on the duties and responsibilities of the pharmacy technician to assist the pharmacist. This course explores employment opportunities, interpretation and processing of prescriptions, pharmacy law, standards of practice and orientation to the skills required for the occupation of a pharmacy technician. Prerequisites: WR 065 or higher or minimum placement into WR 121 and MTH 058 or higher, or minimum placement into MTH 095. Corequisites: PHM 101, PHM 120.
Credits: 5   Lecture: 5

PHM 101 - PHARMACY TECH LAW AND ETHICS
This course orients students to the work of pharmacy technicians. Students learn the concept of direct patient care and the technician's role in its delivery with emphasis on the complementary roles of pharmacists and technicians in both the community and institutional pharmacy setting. Students are introduced to the federal and state laws as well as the standards of practice which govern the practice of pharmacy. Students will be able to identify examples of professionalism in pharmacy and discuss the important areas of the Health Insurance Portability and Accountability Act (HIPAA) as it relates to patient confidentiality. Corequisites: PHM 100, PHM 120.
Credits: 3   Lecture: 3

PHM 110 - PHARMACY CALCULATIONS
This online course reviews basic mathematics related to the application of math concepts to the duties of the pharmacy technician. This course covers the systems of weight, measurement and temperature and the conversion from one system to the other. Emphasis is placed on the math skills needed to calculate doses, drug quantity or volume, intravenous flow rates and percentage concentrations and to learn the mechanics of proportions related to pharmaceutical dosing. The basics of retail pricing and accounting are introduced. Prerequisites: MTH 095 or higher, PHM 100, PHM 101 and PHM 120. Corequisites: PHM 130, PHM 140.
Credits: 3   Lecture: 3

PHM 115 - RETAIL SIMULATION LAB
Laboratory instruction complements the lecture with hands-on experience in medication preparation, dispensing, calculations and business applications.
Credits: 2   Other: 4

PHM 120 - PHARMACOLOGY I
This online course introduces students to trade and generic names of commonly prescribed drugs used in prevention and treatment of various disease entities. Emphasis is placed on important contraindications, side effects, precautions and interaction of drugs and the process of drug utilization review. The course will provide a basic understanding of pharmacological categories and factors than can affect drug kinetics. Corequisites: PHM 100, PHM 101.
Credits: 5   Lecture: 5

PHM 130 - PHARMACOLOGY II
This online course continues the introduction to trade and generic names of commonly prescribed drugs used in prevention and treatment of various disease entities. Emphasis is placed on important contraindications, side effects, precautions and interaction of drugs and the process of drug utilization review. The course will provide a basic understanding of pharmacological categories and factors than can affect drug kinetics. Corequisites: PHM 110, PHM 140.
Credits: 5   Lecture: 5

PHM 140 - PHARMACY TECHNICIAN PRACTICE II

Teaches the information, techniques and procedures needed to assist the pharmacist in delivery of pharmaceutical products and services. Provides a working knowledge of the many aspects of pharmacy in a community, institution and other practice settings. Progressive learning takes place as new information and skill sets are studied throughout the course. Students will understand the regulatory agencies and laws that affect pharmacy practice. Emphasis is placed on the duties and responsibilities of the pharmacy technician. This course explores employment opportunities, interpretation and processing of prescriptions, pharmacy law, standards of practice and orientation to the skills required for the occupation of a pharmacy technician. Application of skills in a practical setting will be covered. This is a four-credit hybrid course and students should expect to spend nine to 12 hours per week completing the required course work. In addition to the online section, this course requires a one-credit (20 hour) lecture-lab session. Lab sessions are 1.5 hours once a week (days and times to be determined). The labs will be held on the COCC Bend campus and students are responsible for all travel expenses. Corequisites: PHM 110, PHM 130.
Credits: 5   Lecture: 5

PHM 145 - INSTITUTIONAL SIMULATION LAB

Laboratory instruction completes the lecture with hands-on experience in intravenous medication preparation, sterile compounding, calculations and maintaining drug stocks.
Credits: 2   Other: 4

PHM 181 - PHARMACY TECHNICIAN SEMINAR

This online seminar presents discussions on various aspects of the practicum. Students will share work related experiences with the instructor and their peers. Students will prepare to take the Pharmacy Technician National Certification exam. Covers employment opportunities, resume writing, completing job applications and interviewing skills. P/NP grading. Prerequisites: PHM 110, PHM 130 and PHM 140. Corequisites: PHM 190, PHM 191.
Credits: 2   Lecture: 2

PHM 190 - PHARMACY TECHNICIAN PRACTICUM I: HOSPITAL/INSTITUTIONAL

This course is an unpaid learning experience which takes place on site at a prearranged clinical facility and is supervised by a registered pharmacist. Each credit is equivalent to 30 hours participation in the clinical worksite. Passing grade will require completion of 120 hours of practice at a facility registered with the Central Oregon Community College Pharmacy Technician program. You must keep a notebook to log experiences at the worksite and report in the Journal Section of the Pharmacy Seminar Course (PHM 181). A satisfactory evaluation must be submitted by your preceptor that you have successfully exhibited skills in a hospital (institutional) pharmacy. P/NP grading. Corequisites: PHM 181, PHM 191.
Credits: 1 to 4

PHM 191 - PHARMACY TECHNICIAN PRACTICUM II: RETAIL/COMMUNITY

This course is an unpaid learning experience which takes place on-site at a prearranged clinical facility and is supervised by a registered pharmacist. Each credit is equivalent to 30 hours participation in the clinical setting. Passing grade will require completion of 120 hours of practice at a facility registered with the Central Oregon Community College Pharmacy Technician program. You must keep a notebook to log experiences at the worksite and report in the Journal Section of the Pharmacy Seminar Course (PHM 181). A satisfactory evaluation must be submitted by your preceptor that you have successfully exhibited skills in a retail (community) pharmacy. P/NP grading.Corequisites: PHM 181, PHM 190.
Credits: 1 to 4

PHILOSOPHY

PHL 170 - PHILOSOPHY OF LOVE AND SEX

Provides an overview of the primary historical and contemporary Western views on the nature and meaning of romantic love. Students will analyze the links philosophers have found among beauty, friendship, passion, loyalty and transcendence and will also create their own philosophies of romantic love.
Credits: 3   Lecture: 3

PHL 199 - SELECTED TOPICS: PHILOSOPHY

This course is in development.
Credits: 1 to 3

PHL 200 - FUNDAMENTALS OF PHILOSOPHY

Explores some of the major questions and philosophical subject areas of the Western World. Includes questions such as the existence of God, or not; how we know what we think we know; social and political philosophy; ethics; free will and determinism; the existence of other minds; questions concerning the existence of a mind-independent external world; and philosophical underpinnings of science. Recommended preparation: WR 121
Credits: 4   Lecture: 4

PHL 201 - PROBLEMS OF PHILOSOPHY-EPISTEMOLOGY

Explores basic problems and different theories of knowledge along with related issues in metaphysics, for example: how to define the nature and limits of knowledge; rationalist vs. empiricist perspectives; assumptions about reality and existence; and arguments for and against the existence of God. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

PHL 202 - PROBLEMS OF PHILOSOPHY - ETHICS

Explores basic problems in moral and social philosophy along with issues related to human nature, for example: how to define a good life or a good society; what is the nature of happiness, pleasure, virtue and justice; consequence vs. duty-based theories; the role of reason and/or passion; and arguments for and against natural law. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

PHL 203 - PROBLEMS OF PHILOSOPHY - LOGIC

Introduction to the study of reasoning and critical thinking. This involves identifying and evaluating deductive and inductive forms, distinguishing validity from truth/soundness, examining informal fallacies and the limits of language, constructing different types of arguments and applying these tools to issues in science, politics, morality and everyday life. Recommended preparation: MTH 095 or minimum placement into MTH 105 and WR 121.
Credits: 3   Lecture: 3

PHL 298 - INDEPENDENT STUDY: PHILOSOPHY

Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

PHYSICS

PH 201 - GENERAL PHYSICS I

Studies Newtonian Mechanics beginning with basic math concepts and continuing into kinematics, dynamics, uniform circular motion, energy, momentum and rotational equivalents of some of these topics. Lab addresses experiments and applied settings of Newtonian Mechanics along with explorations of diverse methods for analyzing and interpreting scientific data. Meets the basic requirements for many pre-health and life science programs. Should be taken in sequence. Recommended to be taken with MTH 111.
Credits: 5   Lecture: 4 Lab: 3

PH 202 - GENERAL PHYSICS II
Studies basic electrostatic and magnetic interactions. Builds on concepts from PH 201 and continues into electrostatic forces, electric field concepts, electric potential, basic DC circuit concepts, magnetic interactions and forces, sources of magnetic fields and Faraday's Law. Lab addresses concepts and measurements in thermal physics and continues to explore the processes by which science seeks answers to questions. Meets the basic requirements for many pre-health and life science programs. Should be taken in sequence. Recommended to be taken with MTH 112.
Credits: 5   Lecture: 4 Lab: 3

PH 203 - GENERAL PHYSICS III
Studies periodic behavior and topics from modern physics. Builds on concepts from previous terms and considers the physics of periodic motion, mechanical waves, wave interference, standing waves, acoustic waves, electromagnetic waves, geometric optics, diffractions and topics from special relativity to quantum mechanics. Lab includes basic optical experiences along with a long-term project to affirm student abilities to integrate investigative lab concepts from previous terms. Meets the basic requirements for many pre-health and life science programs. Should be taken in sequence.
Credits: 5   Lecture: 4 Lab: 3

PH 211 - GENERAL PHYSICS I
Studies Newtonian Mechanics beginning with basic math concepts and continuing into kinematics, dynamics, uniform circular motion, energy, momentum and rotational equivalents of some of these topics. At all stages, applications of calculus to the solving of problems will be explored. Lab addresses experiments and applied settings of Newtonian Mechanics along with explorations of diverse methods for analyzing and interpreting scientific data. Required for engineering students and most students planning programs in the physical sciences. Should be taken in sequence. Recommended preparation: MTH 251.
Credits: 5   Lecture: 4 Lab: 3

PH 212 - GENERAL PHYSICS II
Studies basic electrostatic and magnetic interactions. Builds on concepts from PH 211 and continues into electrostatic forces, electric field concepts, electric potential, basic DC circuit concepts, magnetic interactions and forces, sources of magnetic fields and Faraday's Law. At all stages, applications of calculus to the solving of problems will be explored. Lab addresses concepts and measurements in thermal physics and continues to explore the processes by which science seeks answers to questions. Required for engineering students and most students planning programs in the physical sciences. Should be taken in sequence. Recommended preparation: MTH 252 and PH 211.
Credits: 5   Lecture: 4 Lab: 3

PH 213 - GENERAL PHYSICS III
Studies periodic behavior and topics from modern physics. Builds on concepts from previous terms and considers the physics of periodic motion, mechanical waves, wave interference, standing waves, acoustic waves, electromagnetic waves, geometric optics, diffractions and topics from special relativity to quantum mechanics. At all stages, applications of calculus to the solving of problems will be explored. Lab includes basic optical experiences along with a long-term project to affirm student abilities to integrate investigative lab concepts from previous terms. Required for engineering students and most students planning programs in the physical sciences. Should be taken in sequence. Recommended preparation: MTH 253 and PH 212; recommended to be taken with MTH 256.
Credits: 5   Lecture: 4 Lab: 3

PH 299 - SELECTED TOPICS: PHYSICS
This course is in development.
Credits: 1 to 5

POLITICAL SCIENCE

PS 188 - SPECIAL STUDIES: POLITICAL SCIENCE
Explores topics of current interest in the discipline.
Credits: 1 to 4

PS 198 - CO-OP WORK EXPERIENCE POLITICAL SCIENCE INTERNSHIP
Credits: 1 to 15

PS 199 - SELECTED TOPICS: POLITICAL SCIENCE
This course is in development.
Credits: 1 to 4

PS 201 - INTRODUCTION TO US GOVERNMENT AND POLITICS
Examines the American political system with its separation of powers, limited authority and guarantee of individual liberty. Includes a study of political ideology, parties, voting, media and interest groups. Special emphasis will be placed on a detailed study of the Constitution and its application in today's America. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

PS 203 - STATE/LOCAL GOVERNMENT
Examines the thousands of governments located at the state and local levels. Explores separation of powers between governors, legislatures and state court systems. Opportunity for individual involvement in the administration, innovation and promotion of democracy is investigated. Recommended preparation: or to be taken with WR 121.
Credits: 3   Lecture: 3

PS 204 - INTRODUCTION TO COMPARATIVE POLITICS
Surveys the field of comparative politics through in-depth analyses of countries in Europe, the Middle East, Asia, Africa and the Americas. Comparative structures of these governments will be explored and analyzed in light of separation of powers, limited authority and individual rights. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

PS 205 - INTRODUCTION TO INTERNATIONAL RELATIONS
Introduces complex relations among the nations of a rapidly changing world. Focuses on the nature of the international system and factors affecting conflict and cooperation within the system. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

PS 206 - INTRODUCTION TO POLITICAL THOUGHT
Introduces the broad range of issues and approaches in political theory. Examines the diversity of the field, as it includes both classic and historical texts as well as contemporary thought. From Plato to Machiavelli, and from Locke to Nietzsche, this course examines the major political themes of justice, equality, democracy, power and liberty. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

PS 207 - POLITICS OF THE MIDDLE EAST
This course is intended as an introduction to politics in the Middle East and therefore provides a general overview of some of the chief issues of contemporary Middle Eastern politics. These include the impact of colonialism, nationalism and nation-state formation, regional crisis, the Arab-Israeli conflict, the politics of oil, Islamism, democratization, political economy, globalization and human rights.
Credits: 4   Lecture: 4

PS 250 - TERRORISM AND THE AMERICAN PUBLIC
The course defines terrorism, considers the motivations of terrorists, considers policy proposals that might be taken to reduce the likelihood of terrorism, and investigates the tensions inherent in democracies between civil liberties and national security. Recommended preparation: WR121.
Credits: 4   Lecture: 4

PS 280 - CO-OP WORK EXPERIENCE POLITICAL SCIENCE
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 3

PS 298 - INDEPENDENT STUDY: POLITICAL SCIENCE
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

PS 299 - SELECTED TOPICS: POLITICAL SCIENCE
This course is in development.
Credits: 1 to 4   Lecture: 4 Lab: 12 Other: 12

PSYCHOLOGY

PSY 101 - APPLIED PSYCHOLOGY
This course introduces the basic foundation of psychology to degree-seeking students and career and technical students. Focuses on practical applications of psychological principles in the workplace and everyday life. Topics include motivation, emotions, individual development, identifying problem behavior, coping resources, group dynamics and communication skills.
Credits: 3   Lecture: 3

PSY 188 - SPECIAL STUDIES: PSYCHOLOGY
Explores topics of current interest in the discipline.
Credits: 1 to 4

PSY 199 - SELECTED TOPICS: PSYCHOLOGY
This course is in development.
Credits: 1 to 4

PSY 201 - MIND AND BRAIN
Introduces psychology as a scientific study of the biological bases of behavior. Includes history of psychology as a science and surveys methods of inquiry, statistics, sensation, perception, states of consciousness including drug effects, motivation, emotion, learning, memory, language, thinking and intelligence. The major theoretical approaches to psychology are included. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

PSY 202 - MIND AND SOCIETY
Emphasizes psychology as a scientific process, surveying methods of inquiry. Overview of selected areas of psychological study including: human development through the life span; human sexuality; health psychology; personality theories and assessment; psychological disorders; intervention and therapy; social psychology and human factors psychology. The major theoretical approaches to psychology are included. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

PSY 204 - RESEARCH METHODS: DESIGN AND ANALYSIS
Learn scientific method and deepen your appreciation of why it is a valuable method for learning about the world. Teaches scientific concepts and terminology, how the scientific literature is used to generate hypotheses and interpret research findings, how research studies are designed, how data are collected and managed, and how statistics are used to understand data. Class will include discussions of parametric and nonparametric analyses, between subject designs, within subject designs, differences between experimental and correlational research and the differences between qualitative and quantitative data. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 3 Lab: 3

PSY 213 - INTRODUCTION TO PHYSIOLOGICAL PSYCHOLOGY
This course provides a scientific introduction to the brain's anatomy and function. It builds a foundation for understanding sensory and motor systems, brain rhythms and brain plasticity. Essential neurophysiological processes that underlie topics such as human development, cognitive and emotional behavior, gender and psychological disorders will be presented. Recommended preparation: BI 121, BI 122, BI 231, BI 232, BI 233 or PSY 201.
Credits: 4   Lecture: 3 Lab: 3

PSY 214 - PERSONALITY PSYCHOLOGY
Examines the major theoretical perspectives on personality formation, including biological, psychodynamic, humanistic, cognitive, behavioral and sociocultural influences. Personality tests and measures are also discussed. The major theoretical approaches to psychology are included. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

PSY 215 - DEVELOPMENTAL PSYCHOLOGY
Comprehensive study of human development over the life span from prenatal through late adult development. Focuses on physical, cognitive and psychosocial changes throughout the human life cycle and emphasizes an interactionist approach to explain developmental processes and outcomes. The major theoretical approaches to psychology are included. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

PSY 216 - SOCIAL PSYCHOLOGY
Surveys influence of psychological processes on groups and the influence of culture, society and groups on individuals. Includes analysis and exploration of behavior from a social psychology perspective. Topics include aggression, prejudice, conformity, affiliation, altruism, persuasion, interpersonal attraction, social cognition, conflict resolution, attitude formation and change, and applied social psychology. Recommended preparation: WR 060 or minimum placement into WR 065; and PSY 202 or SOC 201.
Credits: 4   Lecture: 4

PSY 219 - ABNORMAL PSYCHOLOGY
Introductory survey of the variety of emotional, mental and behavioral disorders experienced by humans. History, theoretical perspectives, diagnostic criteria and issues, etiology and treatment strategies are covered for the major forms of psychopathology. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

PSY 225 - EATING DISORDERS
This course explores eating behavior, weight regulation and body image in contemporary society. Cultural, familial, social, personal and biological factors in eating and weight problems will be examined. The course will cover the full continuum from normal, healthy eating to clinical eating disorders and related behaviors, which include chronic dieting, excessive exercise, emotional eating, binge eating, obesity or poor body image. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 3   Lecture: 3

PSY 227 - ANIMAL BEHAVIOR
This course will cover the fundamental aspects of animal behavior: how and why animals behave and how animal behavior is studied. Topics include mechanisms of behavior, behavioral ecology, feeding, predation, mating, parenting, communication and social behavior.
Credits: 4   Lecture: 3 Lab: 3

PSY 228 - POSITIVE PSYCHOLOGY
This course explores the components necessary to help a person flourish in their environment by addressing the biopsychosocial aspects that contribute to positive behaviors and human strengths. Material will provide an overview of the theories of happiness, importance of self-care and positive social cognitions, utilizing strengths in personal and professional venues, and means of achieving healthy relationships

personally and with one's community. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

PSY 233 - PSYCHOLOGY OF VIOLENCE & AGGRESSION
Addresses the developmental, social, physiological and cultural aspects that contribute to violence and aggression as well as the legal issues involved. Includes an overview of the theories of aggression, as well as factors influencing family violence, violent children, mob mentality, hate crimes, war and terrorism, stalking, sex crimes and murder. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

PSY 250 - READINGS IN PSYCHOLOGY
Provides a scientific introduction to how to critically read and discuss scientific literature. Prerequisites: instructor approval.
Credits: 1   Other: 2

PSY 261 - INDONESIA FIELD STUDY
Prepares students for International Field Study Program in Indonesia. Topics include Indonesian culture and history, Indonesian language and development and design of a field research project to be conducted in Indonesia. Prerequisites: instructor approval.
Credits: 3   Lecture: 3

PSY 280 - CO-OP WORK EXPERIENCE PSYCHOLOGY
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 4

PSY 298 - INDEPENDENT STUDY: PSYCHOLOGY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

PSY 299 - SELECTED TOPICS: PSYCHOLOGY
This course is in development.
Credits: 1 to 4

READING

RD 099 - SELECTED TOPICS: READING
This course is in development.
Credits: 1 to 4

RD 117 - COLLEGE READING
Offers instruction in flexible reading skills. Focuses on building reading speed and comprehension, and acquiring a repertoire of reading strategies suitable for understanding and retaining information acquired in typical college reading.
Credits: 3   Lecture: 3

RD 199 - SELECTED TOPICS: READING
This course is in development.
Credits: 1 to 3

SOCIOLOGY

SOC 141 - FILM & SOCIETY: RACE, GENDER AND CLASS
Examines the representation of race, social class and gender in film. Special attention is given to how particular representations reflect the broader historical context surrounding when the films were produced and culturally based audience sentiments. Anthropological and sociological analyses of the films will be provided to give a multi-disciplinary account of how films reflect, create and support various ideological positions regarding race, class and gender. This course is also offered as ANTH 141; students cannot use credit from both courses.
Credits: 2   Lecture: 1   Lab: 3

SOC 142 - FILM & SOCIETY: GLOBAL CULTURES
Examines global issues in both foreign and domestic films from sociological and anthropological perspectives. Selected films cover topics that are relevant to understanding global processes such as global economy and Islam in the contemporary world, as well as films that address the more regionally localized processes of community and family. The purpose of the course is to use film to expose students to diverse perspectives and to encourage the critical awareness of the global interconnections that influence and constrain our modern lives. Films will include documentaries, as well as feature films.
Credits: 2   Lecture: 1   Lab: 3

SOC 143 - FILM & SOCIETY: CONTEMPORARY ISSUES
Examines contemporary issues in film from sociological and anthropological perspectives. Selected films cover such topics as youth culture, nationalism, local culture and poverty, mental health or other social problems. The content of the films, as well as issues of film production, historical context and audience reception will be the major focus of analysis.
Credits: 2   Lecture: 1   Lab: 3

SOC 199 - SELECTED TOPICS: SOCIOLOGY
This course is in development.
Credits: 1 to 4

SOC 201 - INTRODUCTION TO SOCIOLOGY
Provides conceptual tools for analyzing and understanding social forces that shape our lives. The relationships among socialization and social groups, as well as economic, political and religious systems are investigated. This course is considered a human relations component. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

SOC 208 - SPORT AND SOCIETY
While we use sociology to help make sense of sport, we also use sport to develop the ability to think sociologically about society. Subjects include sport and: values, socialization, deviance, social problems and social inequities. Recommended preparation: SOC 201.
Credits: 4   Lecture: 4

SOC 211 - SOCIAL DEVIANCE
Examines the definition of deviant behavior. Focuses on deviant behavior of societies as well as individuals including issues such as drugs, organized crime, government deviance and crimes against women. Recommended preparation: WR 121 or SOC 201.
Credits: 4   Lecture: 4

SOC 212 - RACE, CLASS AND GENDER
Analyzes the relationship between race, class, and gender and political and economic systems. Critically examines the interrelationship between race, class and gender and societal structures and history. Recommended preparation: WR 121 or SOC 201.
Credits: 4   Lecture: 4

SOC 215 - SOCIAL ISSUES AND SOCIAL MOVEMENTS
Applies sociological analysis to contemporary issues and movements. Examples include the environmental crisis, race and ethnic relations, sexual deviancy, drug abuse, health care and violence. Recommended preparation: WR 121 or SOC 201.
Credits: 4   Lecture: 4

SOC 219 - SOCIOLOGY OF RELIGION
Surveys a variety of religious traditions and introduces the sociological perspective for the study of religion as part of a larger social order. Explores the nature of religious beliefs and practices, both historically and in contemporary context. Examines the relationship between religious traditions and the current globalization of the institution of religion in culture and society. Recommended preparation: SOC 201.
Credits: 4   Lecture: 4

SOC 222 - SOCIOLOGY OF FAMILY
The course examines the interrelationships between family life and society. By focusing on the interaction between family and society, the course addresses the impact of economic, social and political conditions on the institution of family past and present. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

SOC 250 - SOCIOLOGY OF POPULAR CULTURE
Course applies a sociological perspective to the study of films, music, advertising and other forms of popular culture. Three separate elements of popular culture are examined: the production of culture, the reception of culture and the text or symbols themselves. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

SOC 298 - INDEPENDENT STUDY: SOCIOLOGY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

SOC 299 - SELECTED TOPICS: SOCIOLOGY
This course is in development.
Credits: 1 to 4

SPANISH

SPAN 101 - FIRST YEAR SPANISH I
Course designed for beginners; students with prior Spanish experience should contact COCC Spanish instructors to determine which Spanish course is appropriate for them. Begins the development of reading, writing, listening and speaking skills. Focuses on the concepts of pronunciation, gender, descriptions, possessives, present tense -ar verbs, numbers, question words and vocabulary that includes the following categories: alphabet, people, greetings, school items, family and activities.
Credits: 4   Lecture: 4

SPAN 102 - FIRST YEAR SPANISH II
Continues the development of reading, writing, listening and speaking skills. Focuses on the concepts of weather, time & date, clothing, colors, regular -er/-ir verbs, the verb gustar, interrogatives, stem-changing verbs (i-ie, e-i, o-ue), the city, the home, furniture & appliances, the verb estar (used with prepositions, adjectives, the present progressive and contrasted with the verb ser), the verb ir and the phrase ir + inifinitivo (used to refer to the future) and adjectives referring to physical and emotional states. Students are encouraged to review SPAN 101 concepts and vocabulary prior to class. Recommended preparation: SPAN 101 or one year of high school Spanish.
Credits: 4   Lecture: 4

SPAN 103 - FIRST YEAR SPANISH III
Final course in the first-year sequence. Continues the development of reading, writing, listening and speaking skills. Focuses on the concepts of professions, verbs with changes in the first person (yo), saber/conocer, body parts, reflexive verbs, adverbs of time and frequency, sports and outdoor activities, the preterite tense (including regular, stem-changing, and irregular verbs), food vocabulary, por/para, vocabulary related to meals and table settings and direct object pronouns. Students are encouraged to review the concepts of SPAN 101 and SPAN 102 prior to class. Recommended preparation: SPAN 102 or two years of high school Spanish.
Credits: 4   Lecture: 4

SPAN 188 - SPECIAL STUDIES: SPANISH
Explores topics of current interest in the discipline.
Credits: 1 to 4

SPAN 199 - SELECTED TOPICS: SPANISH
This course is in development.
Credits: 1 to 4

SPAN 201 - SECOND YEAR SPANISH I
First course of the second-year sequence. Continues, after SPAN 103, with the intermediate development of reading, writing, listening and speaking skills. Includes review of the preterite tense and vocabulary from SPAN 103. Focuses on the imperfect tense, (usages with and in conjunction with the preterite), indirect, direct and double object pronouns, indefinite and negative words, por/para, creating adverbs and vocabulary including the following categories: chores and housework, fiestas and other celebrations, pastimes and diversion, and accidents. Recommended preparation: SPAN 103 or three years of high school Spanish.
Credits: 4   Lecture: 4

SPAN 202 - SECOND YEAR SPANISH II
Continues with the intermediate development of reading, writing, listening and speaking skills. Focuses on the concepts of relative pronouns, the imperative (commands: formal, informal, plural and singular), the use of pronouns with the imperative, the impersonal and passive se, comparisons, using se to describe unplanned occurrences or accidents, the simple future tense and vocabulary including the following categories: travel, shopping, fine art and nature and the environment. Recommended preparation: SPAN 201 or four years of high school Spanish.
Credits: 4   Lecture: 4

SPAN 203 - SECOND YEAR SPANISH III
Final course in the second-year sequence. Continues with the intermediate development of reading, writing, listening and speaking skills. Focuses on the concepts of estar used with past participles, the presente perfecto, the present subjunctive (used with: impersonal expressions, expressions of doubt, expressions of desire, expressions of emotion, adjective clauses, adverbial clauses and conjunctions), reciprocal verbs, the conditional tense, the past subjunctive, the past perfect tense and vocabulary covering the following: animals, personal relationships, popular culture, health and medical emergencies, and nationalities and political terms. Recommended preparation: SPAN 202 or four years of high school Spanish.
Credits: 4   Lecture: 4

SPAN 211 - SPANISH CONVERSATION AND CULTURE I
Designed for students who wish to continue mastering fluency in the speaking of Spanish. Objective is to study various Spanish-speaking cultures. Taught exclusively in Spanish and some student participation is required. Does not meet baccalaureate degree language requirements. Recommended preparation: or to be taken with SPAN 203.
Credits: 3   Lecture: 3

SPAN 212 - SPANISH CONVERSATION AND CULTURE II
Designed for students who wish to continue mastering fluency in the speaking of Spanish. Objective is to study various Spanish-speaking cultures. Taught exclusively in Spanish and some student participation is required. Does not meet baccalaureate degree language requirements. Recommended preparation: or to be taken with SPAN 203.
Credits: 3   Lecture: 3

SPAN 213 - SPANISH COVERSATION AND CULTURE III
Designed for students who wish to continue mastering fluency in the speaking of Spanish. Objective is to study various Spanish-speaking cultures. Taught exclusively in Spanish and some student participation is required. Does not meet baccalaureate degree language requirements. Recommended preparation: or to be taken with SPAN 203.
Credits: 3   Lecture: 3

SPAN 288 - SPECIAL STUDIES: SPANISH
Explores topics of current interest in the discipline.
Credits: 1 to 4

SPAN 298 - INDEPENDENT STUDY: SPANISH
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

SPAN 299 - SELECTED TOPICS: SPANISH
This course is in development.
Credits: 1 to 4

SPEECH

SP 111 - FUNDAMENTALS OF PUBLIC SPEAKING
Emphasizes enhancing the relationship between speaker and audience through the content, organization and delivery of short oral presentations. Helps relieve student speech anxiety.
Credits: 4   Lecture: 4

SP 114 - ARGUMENTATION AND CRITICAL DISCOURSE
Explores theories of argumentation. Students will develop skills of inquiry and advocacy through oral and written discourse, including critical analysis and rules of evidence. Students will also practice planning, constructing and delivering persuasive arguments in a variety of extemporaneous formats. Through this course, students will learn how to more effectively influence others as well as raise their awareness of others trying to influence them.
Credits: 3   Lecture: 3

SP 115 - INTRODUCTION TO INTERCULTURAL COMMUNICATION
Explores the influence of cultural differences in communication styles and social values and their impact on work, family, legal and economic systems.
Credits: 4   Lecture: 4

SP 188 - SPECIAL STUDIES: SPEECH
Explores topics of current interest in the discipline.
Credits: 1 to 4

SP 199 - SELECTED TOPICS: SPEECH
This course is in development.
Credits: 1 to 3

SP 218 - INTERPERSONAL COMMUNICATION
Promotes enhanced personal and work relationships by presenting the theoretical concepts and practical skills used in effective one-to-one communication.
Credits: 3   Lecture: 3

SP 219 - SMALL GROUP COMMUNICATION
Provides theory and practice in teamwork, leadership and conflict management through participation in small group situations. The emphasis will be on task-oriented, decision-making groups.
Credits: 4   Lecture: 4

SP 220 - GENDER COMMUNICATION
Introduces students to the differences between masculine and feminine communication styles and gives them the tools to manage those differences. Also reviews how communication is used to create, structure and maintain gender identities in a variety of contexts.
Credits: 3   Lecture: 3

SP 230 - INTRODUCTION TO THE RHETORIC OF FILM
Introduces students to the visual and aural languages of moving pictures (film and video) and gives them the tools necessary to analyze the social impact of both overt persuasion (in propaganda and commercials) and covert persuasion (in entertainment). Films that manage audience perceptions of race, class, gender, religion and the environment will be discussed. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

SP 234 - INTRODUCTION TO VISUAL RHETORIC
Analyzes the power of visual communication and persuasion, including composition, color and content, and how such concepts produce both overt and covert influence on the ideas, attitudes and behaviors of others. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

SP 241 - MEDIA, COMMUNICATION, SOCIETY
Analyzes the social and cultural impact of media, including broadcast, print, film and digital communication. Also examines careers in selected areas of media. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

SP 242 - INTRODUCTION TO AUDIO BROADCASTING AND PODCASTING
Learn audio production for broadcast or podcast. Create original PSAs and news-stories while developing on-air and pre-recorded audio delivery techniques.
Credits: 4   Lecture: 4

SP 250 - LISTENING
Gives students a deeper understanding of and more practical skills in listening to increase understanding and to help others.
Credits: 1   Lecture: 1

SP 251 - EMOTIONAL INTELLIGENCE
Gives students a basic understanding of the biological roots of emotion and the skills needed for the appropriate management and sharing of their feelings. This one-credit course is currently available on request.
Credits: 1   Lecture: 1

SP 252 - TEAM SKILLS
Gives students an understanding of the systems nature of small groups and gives them the skills needed to manage decision-making, leadership and the communication climate of the team setting.
Credits: 1   Lecture: 1

SP 253 - CONFLICT MANAGEMENT
Gives students an understanding of conflict management and the skills needed to become more successful in the conflict situation.
Credits: 1   Lecture: 1

SP 255 - FREE EXPRESSION AND PUBLIC ASSEMBLY
Learn and practice civic rights and responsibilities under Federal and State laws pertaining to free expression and public demonstrations.
Credits: 3   Lecture: 3

SP 270 - COMMUNICATING LOVE
Provides an overview of the bio-psychological roots of romantic/erotic love, a critique of media images of love and offers practical training in communication skills that maintain and enhance long-term love relationships. Recommended preparation: WR 121.
Credits: 3   Lecture: 3

SP 280 - CO-OP WORK EXPERIENCE SPEECH INTERNSHIP
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 3

SP 298 - INDEPENDENT STUDY: SPEECH
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

SP 299 - SELECTED TOPICS: SPEECH
Explores an area of communication not included in the regular curriculum. Possible topics include gender communication, media issues and relational communication.
Credits: 1 to 3

STRUCTURAL FIRE SCIENCE

SFS 101 - INTRODUCTION TO EMERGENCY SERVICES
Provides an overview to fire protection and EMS; career opportunities, related fields, philosophy and history, organization and function of public and private agencies, nomenclature, functions. In addition, provides new students a broad overview of college and life success strategies as related to this field.
Credits: 4   Lecture: 4

SFS 102 - FIRE SERVICE SAFETY AND SURVIVAL
This course broadens the scope of the national firefighter life-safety initiatives and emphasizes their importance to firefighters and on up the ranks through management levels. It is designed to create a positive attitude toward firefighter safety; to have the student recognize how serious the firefighter injury and death problem is; to recognize their responsibility for reducing future injuries and deaths; to provide information for improving safety considerations; to demonstrate that most firefighter injuries and deaths are preventable.
Credits: 3   Lecture: 3

SFS 105 - FIRE BEHAVIOR & COMBUSTION I
Explores the theories and fundamentals of how and why fires start, spread and how they are controlled. Prerequisites: department approval. Prerequisites with concurrency: GS105 or CH104 or higher.
Credits: 3   Lecture: 3

SFS 110 - BUILDING CONSTRUCTION FOR FIRE PERSONNEL
Studies building construction with emphasis on how buildings fail when subjected to fire. Case studies used to illustrate points. Studies of roof and wall construction enable the student to predict failure points and adapt fire fighting strategies accordingly. Buildings under construction and those subjected to external forces will also be studied. Field trips take students into the community to study various construction techniques. Recommended preparation: SFS 101, SFS 102.
Credits: 3   Lecture: 3

SFS 112 - PUBLIC EDUCATION AND FIRE PREVENTION
Studies fundamentals of public relations pertaining to fire service including emergency operations, general public appearances, writing news releases, articles and speeches and general media contact. Students work in developing an effective public education campaign for delivery. Audience type and message content is carefully analyzed. Recommended to be taken with WR 121, SFS 101 and SFS 102.
Credits: 3   Lecture: 3

SFS 120 - FIXED SYSTEMS AND EXTINGUISHERS
Studies portable and fixed extinguisher equipment, fire alarm and detection systems, sprinkler systems and standpipes, and special hazard protection systems. Covers extinguishing agents, system design and maintenance procedures. Field exercises expose students to systems discussed in class. Recommended preparation: SFS 101 and SFS 102.
Credits: 3   Lecture: 3

SFS 121 - FIRE LAW
Introduces the modern legal system with emphasis on cases related to fire service. Case law is studied to understand underlying concepts. Reviews case law affecting modern fire service agencies. Explores laws relating to medical treatment of patients, fire protection, codes, emergency response and department activities on the fire ground. Recommended preparation: SFS 101, SFS 102.
Credits: 1   Lecture: 1

SFS 122 - FIRE DEPARTMENT BUDGET
Outlines the budget process as required by Oregon laws to include types of budgets, the process of preparing the budget and classifying expenditures.
Credits: 1   Lecture: 1

SFS 123 - HAZMAT AWARENESS & OPERATIONS
Designed to prepare individuals to safely respond to hazardous materials emergencies. Individuals will learn to analyze an incident; detect the presence of hazardous materials; survey the scene; collect hazard information from the DOT Emergency Response Guidebook; implement actions consistent with standard operating procedures; initiate protective actions and initiate the notification process. Students complete all training and education requirements for Hazardous Materials Awareness and Operations level certification, per National Fire Protection Association (NFPA) Standard 472 and State certification requirements per Oregon Department of Public Safety Standards and Training (DPSST).
Credits: 3   Lecture: 2 Other: 2

SFS 133 - FIRE ENTRY EXAMS
Introduces and prepares student for employment testing in a structural fire agency; beneficial for both initial employment testing and promotional examinations within their agency. Exposure to testing in a variety of methods currently in use in the fire service hiring processes, offers strategies for improving test performance as well as job search skills.
Credits: 3   Lecture: 3

SFS 188 - SPECIAL STUDIES: STRUCTURAL FIRE SCIENCE
Explores topics of current interest in the discipline.
Credits: 1 to 4

SFS 199 - SELECTED TOPICS: SFS
This course is in development.
Credits: 1 to 4

SFS 205 - FIRE BEHAVIOR AND COMBUSTION II
Builds on the foundational knowledge and skills objectives developed in SFS 105, Fire Behavior & Combustion 1 and Firefighter I academy. Due to safety and OSHA requirements, students must be affiliated with a fire department and have passed within the previous year an SCBA Fit test. This course is designed for 2nd year students to be taken the year of graduation. Prerequisites: SFS 105, Firefighter I Academy and department approval.
Credits: 3   Lecture: 2 Lab: 3

SFS 210 - FIRE INVESTIGATION
Provides basic information in fire cause determination. Studies arson detection, protection of point of origin, fire indicators, motives and vehicle fire investigation. Field trips and classroom props aid the student in understanding the science of fire investigation. Prerequisites: department approval. Recommended preparation: SFS 101 and SFS 102.
Credits: 3   Lecture: 3

SFS 212 - FIRE CODES AND ORDINANCES
Introduces the International Fire and Building Code (IFC) and laws promulgated by the Office of the State Fire Marshal relating to fire safety and prevention. Includes overview of administrative provisions and many of the applicable standards in the codes. Students apply the codes to specific situations to illustrate understanding and application of the codes and related laws. Students also identify applicable sections of the codes in response to scenarios presented in the classroom or in the field. Recommended preparation: SFS 101, SFS 102.
Credits: 3   Lecture: 3

SFS 230 - RESCUE PRACTICES
Explores techniques and applications of specialized rescue practices in modern fire service. Focuses on vehicle rescue, steep-angle rescue and swift-water rescue with basic overviews of ice rescue, electrical rescue and trench rescue techniques. Using modern tools and techniques, students apply classroom learning in several comprehensive and dynamic field exercises. Emergency Medical Technician - Basic training allows students to integrate fire and EMS activities at an emergency rescue scene. Prerequisites: department approval. Recommended to be taken with SFS 101 and SFS 102.
Credits: 3   Lecture: 2 Lab: 3

SFS 232 - FIRE PROTECTION HYDRAULICS AND WATER SUPPLY
This course provides a foundation of theoretical knowledge in conjunction with hands-on labs in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems. Prerequisites: department approval.

Recommended preparation: MTH 065 or higher, GS 104, GS 105, SFS 105, and access to engines or affiliation are highly recommended for students' success in the class.
Credits: 4   Lecture: 3 Lab: 3

SFS 263 - HUMAN BEHAVIOR IN FIRE
Provides fundamental information on human behavior as it relates to fire and mass casualties. Understanding human behavior is important as it relates to building design, evacuation and fire department operations. It is especially important where populations are large or include the disabled or persons having limited mobility. Prerequisites: SFS 101; SFS 102, SFS 110, SFS 112, SFS 120, MTH 060 or higher or minimum placement into MTH 065.
Credits: 3   Lecture: 3

SFS 275 - CAPSTONE: TACTICS & STRATEGIES
Provides a capstone experience to the Structural Fire AAS program with an in-depth analysis of the principles of fire control through the utilization of personnel, equipment and extinguishing agents on the fire ground. Taken in the final term prior to program completion. Prerequisites: department approval.
Credits: 3   Lecture: 2 Other: 2

SFS 288 - SPECIAL STUDIES: STRUCTURAL FIRE
Explores topics of current interest in the discipline.
Credits: 1 to 4

SFS 299 - SELECTED TOPICS: STRUCTURAL FIRE SCIENCE
This course is in development.
Credits: 1 to 4

THEATER ARTS

TA 141 - ACTING I
Acquaints students with fundamental principles of acting. In-class performance of memorized material required. Grading based primarily on in-class participation. Attendance is mandatory.
Credits: 3   Lecture: 3

TA 142 - ACTING II
Emphasizes in-depth character study and textual analysis through preparation of scenes from modern American plays. Attendance is mandatory. Repeatable for credit. Recommended preparation: TA 141.
Credits: 3   Lecture: 3

TA 143 - ACTING III
Further in-depth character study and scene work. Attendance is mandatory. Repeatable for credit. Recommended preparation: TA 141 and TA 142.
Credits: 3   Lecture: 3

TA 153 - REHEARSAL/PERFORMANCE
Practical application of classroom theory through participation in Magic Circle Theatre and Magic Circle Dance Theatre productions. Credit can be earned in three areas: dance, technical theater and acting. Prerequisites: instructor approval through audition or interview.
Credits: 1 to 3

TA 188 - SPECIAL STUDIES: THEATER
Explores topics of current interest in the discipline.
Credits: 1 to 4

TA 200 - INTRODUCTION TO THEATER
Introduces student to the world of theater. Combines overview of historical facts and theory with contemporary practice. Explores career options in theatrical production.
Credits: 3   Lecture: 3

TA 207 - READINGS IN THEATER
Offers a study of selected plays, loosely grouped by country of origin, theme, era or playwrights. Emphasis placed on texts in performance rather than on literary analysis. Repeatable for credit.
Credits: 3   Lecture: 3

TA 280 - CO-OP WORK EXPERIENCE THEATER
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: instructor approval.
Credits: 1 to 3

TA 298 - INDEPENDENT STUDY: THEATER ART
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. Prerequisites: instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

VETERINARY TECHNICIAN

VT 101 - INTRO TO VETERINARY TECHNICIAN
Introduces the role of the veterinary technician within the veterinary health care team, career opportunities for veterinary technicians, the history of veterinary medicine, ethics, common small animal breeds and effective communication techniques within the veterinary teams and with clientele. Prerequisites: BI 101 or BI 211; GS 105 or CH 104; MTH 095, MTH 111 or higher; WR 121 and SP 218. Corequisites: VT 102, VT 103, VT 117.
Credits: 3   Lecture: 3

VT 102 - VETERINARY TERMINOLOGY
Introduces veterinary medical terminology, including medical word parts, common medical terms and a basic knowledge of word construction. Corequisites: VT 101, VT 103, VT 117.
Credits: 3   Lecture: 3

VT 103 - ANIMAL HOSPITAL AND OFFICE PROCEDURES
Introduces veterinary medical records, admintting procedures and record maintenance. Covers basic bookkeeping skills, inventory control measures, marketing and the use of computer software specifically designed for use in a veterinary hospital. Corequisites: VT 101, VT 102, VT 117.
Credits: 2   Lecture: 2.4

VT 108 - SMALL ANIMAL NURSING
Introduces basic techniques necessary for the provision of nursing care to small animals, including small animal restraint, husbandry, behavior, physical examination, medication administration and grooming. Includes kennel duty experience in the care of a variety of companion animals. Prerequisites: VT 101, VT 102, VT 103 and VT 117. Corequisites: VT 110, VT 114, VT 118.
Credits: 4   Lecture: 3 Lab: 3

VT 110 - PARASITOLOGY AND PATHOLOGY
Explores the life cycles, modes of transmission and diseases associated with common parasites of animals. Lab introduces diagnostic procedures and covers identification of parasites using prepared slides and collected specimens. Prerequisites: VT 101, VT 102, VT 103 and VT 117. Corequisites: VT 108, VT 114, VT 118.
Credits: 4   Lecture: 3 Lab: 3

VT 111 - HEMATOLOGY AND URINALYSIS
Covers laboratory techniques of hematology, serum chemistry and urinalysis. Also explores special commercial laboratory test procedures. Prerequisites: VT 108, VT 110, VT 114, VT 118. Corequisites: VT 112, VT 113, VT 116.
Credits: 5   Lecture: 4 Lab: 3.6

VT 112 - ADVANCED SMALL ANIMAL NURSING
Covers advanced nursing techniques including parenteral administration of medication, bandaging and wound care, cardiopulmonary resuscitation (CPR), physical rehabilitation, diagnostic sample collection, and vaccination of small animals. Prerequisites: VT 108, VT 110, VT 114 and VT 118. Corequisites: VT 111, VT 113, VT 116.
Credits: 4   Lecture: 3 Lab: 3

VT 113 - EXOTIC AND LAB ANIMAL MEDICINE
Provides an overview of the anatomy and physiology, the care and handling, and diseases of common laboratory and exotic small animals. Covers the principles of lab animal use in research with an emphasis on animal welfare. Prerequisites: VT 108, VT 110, VT 114 and VT 118. Corequisites: VT 111, VT 112, VT 116.
Credits: 3   Lecture: 2 Lab: 3

VT 114 - PHARMACEUTICAL MATH
Covers pharmacological mathematics, including drug dosage calculations and fluid calculations. Introduces prescription terminology and labeling. Prerequisites: VT 101, VT 102, VT 103 and VT 117. Corequisites: VT 108, VT 110, VT 118.
Credits: 3   Lecture: 3

VT 116 - PHARMACOLOGY
Explores pharmacological principles, including classes, mechanisms and side effects of drugs used in veterinary medicine. Prerequisites: VT 108, VT 110, VT 114 and VT 118. Corequisites: VT 111, VT 112, VT 113.
Credits: 4   Lecture: 4

VT 117 - VETERINARY ANATOMY & PHYSIOLOGY I
This is the first of two courses covering the structure and function of animal bodies and the anatomical and physiological differences between selected species. Examines body organization, cellular biology, histology and gross anatomy and physiology of the integumentary, skeletal, muscular and nervous systems. Concurrent labs include the use of skeletons, models, virtual anatomy tools and dissection of cadavers. Corequisites: VT 101, VT 102, VT 103.
Credits: 6   Lecture: 4 Lab: 6

VT 118 - VETERINARY ANATOMY & PHYSIOLOGY II
This is the second of two courses covering the structure and function of animal bodies and the anatomical and physiological differences between domestic species. Continues the study of the interrelationship of organ systems, including the endocrine, reproductive, cardiovascular, lymphatic, digestive, respiratory and urinary systems. Prerequisites: VT 101, VT 102, VT 103 and VT 117. Corequisites: VT 108, VT 110, VT 114.
Credits: 5   Lecture: 4 Lab: 3

VT 188 - SPECIAL STUDIES VET TECHNICIAN
Special studies for Veterinary Technician.
Credits: 1 to 4

VT 200 - RADIATION SAFETY
Covers the physics of x-ray photon production, radiation safety, quality control measures, federal and state radiation regulations, film processing, radiographic technique evaluation, positioning of animals and proper identification and storage of radiographic images. Prerequisites: VT 111, VT 112, VT 113 and VT 116. Corequisites: VT 201, VT 203, VT 208, VT 212.
Credits: 2   Lecture: 2

VT 201 - ANESTHESIOLOGY AND SURGERY TECHNIQUES
Covers the principles and practices of veterinary anesthesia and surgical assistance. Prerequisites: VT 111, VT 112, VT 113 and VT 116. Corequisites: VT 200, VT 203, VT 208, VT 212.
Credits: 4   Lecture: 3 Lab: 3

VT 202 - SURGICAL NURSING AND DENTISTRY
Covers common dental problems and dental prophylaxis. Explores pre-operative, operative and post-operative protocols for routine surgical procedures. Provides hands-on experience in anesthesiology, surgical patient preparation, surgical assistance and dentistry. Prerequisites: VT 200, VT 201, VT 203, VT 208 and VT 212. Corequisites: VT 204, VT 206, VT 209.
Credits: 4   Lecture: 2 Lab: 6

VT 203 - LARGE ANIMAL NURSING
Covers common large animal breeds (ruminant, equine, swine and chickens). Introduces techniques necessary for the provision of nursing care to large animals, including restraint, husbandry, behavior, physical examination, medication administration, diagnostic sample collection, grooming, bandaging, nutrition and vaccination. Includes animal husbandry experience in the care of large animals. Prerequisites: VT 111, VT 112, VT 113 and VT 116. Corequisites: VT 200, VT 201, VT 208, VT 212.
Credits: 4   Lecture: 3 Lab: 3

VT 204 - DIAGNOSTIC IMAGING
Covers the operation and use of fixed, portable and dental x-ray machines; the care and development of films; radiographic positioning of animals; and evaluation of radiographic technique. Explores additional diagnostic imaging modalities, such as ultrasound, MRI, CT and endoscopy. Prerequisites: VT 200, VT 201, VT 203, VT 208 and VT 212. Corequisites: VT 202, VT 206, VT 209.
Credits: 3   Lecture: 2 Lab: 3

VT 206 - SMALL ANIMAL DISEASES
Covers preventative medicine and diseases of small animals including the public health significance of relevant small animal diseases. Examines the role of the veterinary technician in performing diagnostics, nursing care and client education. Prerequisites: VT 200, VT 201, VT203, VT 208 and VT 212. Corequisites: VT 202, VT 204, VT 209.
Credits: 4   Lecture: 4

VT 208 - ANIMAL NUTRITION
Covers the basic principles of nutrition, the development of nutrition protocols based on the life stage and health status of the patient, and explores special prescription diets used in veterinary medicine. Prerequisites: VT 111, VT 112, VT 113 and VT 116. Corequisites: VT 200, VT 201, VT 203, VT 212.
Credits: 2   Lecture: 2

VT 209 - LARGE ANIMAL DISEASES
Covers preventative medicine and diseases of large animals including the public health significance of relevant large animal diseases. Examines the role of the veterinary technician in performing diagnostics, nursing care, and client education. Prerequisites: VT 200, VT 201, VT 203, VT 208 and VT 212. Corequisites: VT 202, VT 204, VT 206.
Credits: 3   Lecture: 3

VT 212 - VETERINARY MICROBIOLOGY
Explores clinical microbiology and cytology as it relates to veterinary technology. Covers the basic principles of microbial classification, growth and pathogenicity as well as various laboratory methods used in identification of microorganisms. Prerequisites: VT 111, VT 112, VT 113 and VT 116. Corequisites: VT 200, VT 201, VT 203, VT 208.
Credits: 4   Lecture: 3 Lab: 3

VT 280 - CLINICAL PRACTICUM I
Provides hands-on experience working with actual animal cases in a clinical veterinary setting. Links prior coursework with off-campus learning experiences providing development of increased proficiency of essential skills necessary for a career as a veterinary technician. In this first practicum course, students are matched to two different practicum sites, each for a three-week period. Each student is expected to attend 120 total hours for each three-week period at a clinical site. Prerequisites: VT 202, VT 204, VT 206 and VT 209. Corequisites: VT 281.
Credits: 6   Other: 21.6

VT 281 - CLINICAL PRACTICUM II
Provides hands-on experience working with actual animal cases in a clinical veterinary setting. Links prior coursework with off-campus learning experiences providing development of increased proficiency of essential

COURSE DESCRIPTIONS

skills necessary for a career as a veterinary technician. In this second practicum course, students will be matched to a practicum site for a three-week period. Each student is expected to attend 120 total hours for the three-week period at the clinical site. Reflection upon the practicum experiences will occur during the final week of the course. Prerequisites: VT 202, VT 204, VT 206 and VT 209.
Credits: 4   Other: 14.4

VT 288 - SPECIAL STUDIES VET TECHNICIAN
Special Studies for Veterinary Technician.
Credits: 1 to 4

VT 299 - SPECIAL TOPICS VET TECHNICIAN
Special Topics Veterinary Technician.
Credits: 1 to 4   Lecture: 4 Lab: 12 Other: 8

WILDLAND FIRE

WF 101 - FIREFIGHTER TYPE II TRAINING
The purpose of this course is to train new firefighters in basic firefighting skills and the basic fire behavior factors that will aid them in the safe and effective control of wildland fires. Students will receive NWCG certification in S-130, S-190, L-180 and S-133.
Credits: 3   Other: 6

WF 103 - SAFETY FOR SURVIVAL
Provides the fundamentals and technical knowledge needed for fire line safety as it pertains to: entrapment avoidance, fire shelter deployment, hazards, injuries and safety issues, mental and physical health, fitness and current issues. Meets the NWCG requirement for RT-130.
Credits: 3   Lecture: 3

WF 111 - TACTICAL DECISION SIMULATIONS
The course uses classroom and simulations to focus on the fire environment and the indicators fireline personnel should recognize in order to anticipate or predict problem fire behavior during fireline operations while utilizing lookouts, communications, escape routes and safety zones. Upon completion of the course and given a Fireline Handbook, Incident Response Pocket Guide (IRPG), and specific problem situations related to fire assignments, student will be provided with the knowledge and practice in decision making necessary to effectively apply tactical decisions making in wildland fire. P/NP grading.
Credits: 2   Lecture: 1 Other: 2

WF 131 - S-131, FIREFIGHTER TYPE I
Firefighter Type 1, S-131, is designed to meet the training needs of the Firefighter Type 1 (FFT1). This course is designed to be interactive in nature. It contains several tactical decision games designed to facilitate learning the objectives and class discussion. Topics include fireline reference materials, communications and tactical decision making. Recommended preparation: WF 100 and WF 101.
Credits: 2   Lecture: 2

WF 134 - S-134 LOOKOUTS, COMMUNICATION, ESCAPE ROUTES, SAFETY ZONES
Students become engaged in the process of designing their own safety program. The small group exercises will discuss and develop the L, C, E, S, creating a list of performance standards. The entire class will then work together to produce and edit a contract, based on consensus, which guides performance.
Credits: 2   Lecture: 2

WF 188 - SPECIAL STUDIES: WILDLAND FIRE
Explores topics of current interest in the discipline.
Credits: 1 to 4

WF 199 - SELECTED TOPICS: WILDLAND FIRE
This course is in development.
Credits: 1 to 4

WF 200 - S-200 INITIAL ATTACK INCIDENT COMMAND
Designed to meet the training needs of the ICT4. Presented in a lecture/discussion format and supplemented with group exercises. The six instructional units cover: readiness and mobilization; size up, planning and ordering; deployment and containment; administrative requirements; and post-fire evaluation.
Credits: 2   Lecture: 2

WF 201 - NFPA INSTRUCTOR 1
NFPA Instructor 1 is an intensive, instructional methodology program. It addresses the job performance requirement of the National Fire Protection Agency, 1041 Standard for Fire Service Instructor Professional Qualifications and the National Wildfire Coordinating Group. The course prepares students for planning instruction, using a variety of instructional methods, teaching diverse learners and evaluating course outcomes. The course also provides guidelines for addressing the critical issues of safety and the legal issues of training, and it provides opportunities for participants to participate in application activities. P/NP grading.
Credits: 3   Lecture: 3

WF 203 - S-203 INTRODUCTION TO INCIDENT INFORMATION
Provides students with the knowledge and skills they need to serve as public information officers (PIOF). Touches on virtually all aspects of establishing and maintaining an incident information operation, from communicating with internal and external audiences to handling special situations. Format of the course is lecture and exercises with a final simulation.
Credits: 3   Lecture: 3

WF 210 - FI-210 WILDFIRE ORIGIN/CAUSE
The primary purpose of this course is to provide a consistent knowledge and skill base for the wildland fire origin and cause determination investigator (INVF). The concepts taught in this course will help an INVF perform at an acceptable level on a national basis without regard to geographic boundaries. The course is presented by lectures, electronic presentations, field exercises and class discussion.
Credits: 3   Lecture: 3

WF 211 - S-211 PORTABLE PUMPS
This is an instructor-led course intended to be presented at the local level. The course consists of three skill areas: supply, delivery and application of water. Students will be required to demonstrate their knowledge of correct water use, basic hydraulics and equipment care. The field exercise requires set up, operation and maintenance of pump equipment. To receive credit for this course, students must have field work observed and approved, and take a closed-book written final examination. Recommended preparation: WF 100 and WF 101.
Credits: 2   Lecture: 2

WF 215 - S-215 FIRE OPERATIONS IN THE URBAN INTERFACE
This course is designed to assist structure and wildland firefighters who will be making tactical decisions when confronting wildland fire that threatens life, property and improvements, in the wildland/urban interface. Instructional units include interface awareness, size-up, initial strategy and incident action plan, structure triage, structure protection tactics, incident action plan assessment and update, follow-up and public relations, and firefighter safety in the interface. Recommended preparation: WF 100 and WF 101.
Credits: 3   Lecture: 3

WF 219 - S-219 FIRE OPERATIONS
The course introduces the roles and responsibilities of a firing boss (FIRB) and outlines duties of other personnel who may engage firing operations. The course discusses and illustrates common firing devices and techniques. Although comprehensive in nature, the course work is not a substitute for the dynamic fire environment. Prerequisites: department approval.
Credits: 2   Lecture: 2

WF 230 - S-230 CREW BOSS
Designed to produce student proficiency in the performance of duties associated with the single resource boss position from initial dispatch through demobilization to the home unit. Topics include: operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization and post incident responsibilities.
Credits: 3   Lecture: 3

WF 231 - S-231 ENGINE BOSS
Skill course designed to produce student proficiency in the performance of all duties associated with the single resource engine boss. Topics include tactical use and safety precautions required to establish an effective engine operation on a large incident.
Credits: 1   Lecture: 1

WF 236 - S-236 HEAVY EQUIPMENT BOSS
This is a skill course designed to meet the training needs of a Heavy Equipment Boss on an incident as outlined in the PMS 310-1 and the Position Task Book developed for the position. Primary considerations are tactical use and safety precautions required to establish and maintain an effective dozer operation. Prerequisites: department approval.
Credits: 2   Lecture: 2

WF 244 - S-244 FIELD OBSERVER
Provides students with the necessary skills to perform as a field observer (FOBS) and/or a prescribed fire effects monitor (FEMO). Topics include: identifying and interpreting maps, making map calculations, using observation aids and instruments, performing field observations and communicating information. There will be a daylong field trip.
Credits: 2   Lecture: 2

WF 248 - S-248 STATUS/CHECK-IN RECORDER
This course is designed to introduce students to the tools and techniques used to perform the duties of a status check-in recorder (SCKN). The course provides an overview of what a student can expect if dispatched to an incident. Prerequisites: department approval.
Credits: 2   Lecture: 2

WF 261 - S-261 APPLIED INTERAGENCY INCIDENT BUSINESS MANAGEMENT
This course is designed to provide the prerequisite skills/knowledge necessary to perform the tasks of the entry-level finance positions, i.e., commissary manager, personnel time recorder, equipment time recorder, compensation for injury specialist and claims specialist, in the Incident Command System (ICS). It is designed to be taken after completion of Interagency Incident Business Management (S-260).
Credits: 2   Lecture: 2

WF 270 - S-270 BASIC AIR OPERATIONS
Covers aircraft types and capabilities, aviation management and safety, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Recommended preparation: WF 131 and WF 134.
Credits: 2   Lecture: 2

WF 281 - L-280 FOLLOWERSHIP/LEADERSHIP
Training course designed as a self-assessment opportunity for individuals preparing to step into a leadership role. There is one day of classroom instruction followed by a day in the field with small teams of students working through a series of problem-solving events (Field Leadership Assessment Course). Topic areas include: leadership values and principles; transition challenges for new leaders; situational leadership; team cohesion factors; ethical decision making.
Credits: 2   Lecture: 2

WF 286 - PACIFIC NORTHWEST ENGINE ACADEMY
Students attending the Pacific Northwest Engine Academy will receive training utilizing a variety of methods and techniques, which will provide information about water handling and will improve engine operation skills. These skills are applicable to both fuels management and fire suppression activities. The student will be instructed using ICS terminology. P/NP grading.
Credits: 3   Lecture: 2 Lab: 3

WF 288 - SPECIAL STUDIES: WILDLAND FIRE
Explores topics of current interest in the discipline.
Credits: 1 to 4

WF 290 - S-290 INTERMEDIATE WILDFIRE BEHAVIOR
This is a classroom-based skills course designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary; instructor should stress local conditions. Recommended preparation: WF 131, WF 260 and WF 134.
Credits: 3   Lecture: 3

WF 293 - RX-340 (RX-310) FIRE EFFECTS
Provides the student with the knowledge and skills to recognize basic fire regimes, the results of fire treatment on first order fire and fire effects, and to manipulate fire treatments to achieve desired first order fire effects.
Credits: 3   Lecture: 3

WF 294 - S-300 IC EXTENDED ATTACK
Meets the training needs of the incident commander, type 3 (ICT3). Presented in a lecture/discussion format and supplemented with group exercises. There are six instructional units that cover information gathering, planning, supporting organization, operations, transitioning and demobilization/administrative requirement.
Credits: 2   Lecture: 2

WF 295 - S-330 TASK FORCE/STRIKE TEAM LEADER
Prepares the student to perform in the role of task force leader (TFLD) or any strike team leader. Examples and exercises are specific to wildland fire suppression. If the student is expected to perform in another risk area, applicable examples and exercises area will be added.
Credits: 3   Lecture: 3

WF 297 - S-339 DIVISION GROUP SUPERVISOR
Prepares student to perform in the role of division/group supervisor. Provides instruction in support of the specific tasks of division/group supervisor, but will not instruct the student in general management/supervision or in the incident command system (ICS). Topics include: division/group management, organizational interaction and division operations.
Credits: 2   Lecture: 2

WF 298 - S-390 FIRE BEHAVIOR CALCULATION
This is an NWCG (National Wildfire Coordinating Group) Certified course. This course is designed to introduce fire behavior calculations by manual methods, using nomograms and the Fire Behavior Handbook Apendix B. Students gain an understanding of the determinants of fire behavior through studying inputs (weather, slope, fuels and fuel moisture). Students also learn how to interpret fire behavior outputs, documentation processes and fire behavior briefing components. Prerequisites: department approval.
Credits: 3   Lecture: 3.2

WF 299 - SELECTED TOPICS: WILDLAND FIRE
This course is in development.
Credits: 1 to 4

WOMEN'S STUDIES

WS 101 - INTRODUCTION TO WOMEN'S AND GENDER STUDIES
Explores the impact of women's and gender studies in many academic fields. Examines women's status and achievements, and the issues raised for men and women by feminism and the women's movement. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

WRITING

WR 060 - RHETORIC AND CRITICAL THINKING I
Introduce concepts of rhetorical reading, thinking and writing as tools for college-level study. Establish an understanding and basic familiarity with key rhetorical concepts, such as audience and purpose, for both reading and writing. Reflect on their reading and writing as processes in order to understand their own practice as readers and writers. Demonstrate familiarity with using MLA conventions for format and citations in writing. Produce at least 1,500 words of revised, final draft copy, including at least one thesis-driven, minimum 750-word academic essay. P/NP grading. Recommended preparation: Minimum placement into WR 060.
Credits: 4   Lecture: 4

WR 065 - RHETORIC AND CRITICAL THINKING II
Develop rhetorical reading, thinking and writing skills as tools for success in reading and writing college level texts. Develop an understanding and basic fluency with key rhetorical concepts, such as audience and purpose, for both reading and writing. Evaluate their reading and writing as processes in order to examine and develop their own practice. Employ MLA conventions for format and citations in writing. Produce at least 2,000 words of revised, final draft copy, including at least one thesis-driven, minimum 1,000-word academic essay. Recommended preparation: WR 060 or minimum placement into WR 065.
Credits: 4   Lecture: 4

WR 095 - BASIC WRITING II
Provides instruction and practice in basic essay structures and development. Students learn effective options for introductions, transitions, body paragraphs and conclusions. Includes brief review of sentence mechanics and paragraphing principles within the context of student's own writing. Also provides practice and instruction in the writing process, including peer review and analysis. WR 095 is an optional course in the developmental writing sequence for students who need or want additional preparation for WR 121. This course is not suitable for students who place into WR 060 or WR 065. Recommended preparation: WR 065 or minimum placement into WR 121.
Credits: 3   Lecture: 3

WR 098 - WRITING SEMINAR
A companion course to WR 121 for students who place into WR 098. Supports students by incrementally breaking down assignments while building self-efficacy and growth mindset to increase academic success. P/NP grading. Prerequisites: Minimum placement into WR 098. Corequisites: WR 121.
Credits: 2   Lecture: 2

WR 099 - SELECTED TOPICS: WRITING
This course is in development. P/NP grading.
Credits: 1 to 4

WR 121 - ACADEMIC COMPOSITION
WR 121 focuses on rhetorical reading, thinking and writing as a means of inquiry. Students will gain fluency with key rhetorical concepts and utilize these in a flexible and collaborative writing process, reflecting on their writing process with the goal of developing metacognitive awareness. They will employ conventions, including formal citations, appropriate for a given writing task, attending to the constraints of audience, purpose, genre and discourse community. Students will compose in two or more genres. Prerequisites: WR 065 or WR 095 or minimum placement into WR 121.
Credits: 4   Lecture: 4

WR 122 - ARGUMENT, RESEARCH AND MULTIMODAL COMPOSITION
WR 122 continues the focus of WR 121 in its review of rhetorical concepts and vocabulary, in the development of reading, thinking and writing skills, along with metacognitive competencies understood through the lens of a rhetorical vocabulary. Specifically, students will identify, evaluate and construct chains of reasoning, a process that includes an ability to distinguish assertion from evidence, recognize and evaluate assumptions, and select sources appropriate for a rhetorical task. Students will employ a flexible, collaborative, and appropriate composing process, working in multiple genres and utilizing at least two modalities. Prerequisites: WR 121.
Credits: 4   Lecture: 4

WR 170 - DOCUMENTATION
Instruction emphasizes what constitutes plagiarism and how to avoid it by applying college-level documentation practices, using accepted discipline-appropriate academic and professional styles, in research-based writing assignments across the curriculum.
Credits: 1   Lecture: 1

WR 188 - SPECIAL STUDIES: WRITING
Explores topics of current interest in the discipline.
Credits: 1 to 4

WR 199 - SELECTED TOPICS: WRITING
This course is in development.
Credits: 1 to 3

WR 227 - TECHNICAL WRITING
Prepares students to produce instructive, informative and persuasive technical documents. Grounded in rhetorical theory, the course focuses on producing usable, reader-centered content that is clear, concise and ethical. Students will engage in current best practices and work individually and in groups to learn strategies for effective communication in the digital and networked, global workplace. Prerequisites: WR 121.
Credits: 4   Lecture: 4

WR 240 - INTRODUCTION TO CREATIVE WRITING: NONFICTION
Introduces the many forms and purposes of creative nonfiction such as science or nature writing, travel writing, memoir, biography and journalistic essay. Requires individual and collaborative workshop activities to develop skills in drafting and revision. Examines topics, purposes for writing, and elements of craft, including voice, scene, description and structure. Requires creation of a portfolio of works reflecting various stages of their writing process. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

WR 241 - INTRODUCTION TO CREATIVE WRITING: FICTION
Practical study of effective strategies for creating vivid, dramatic stories. Students learn the basic craft of generating conflict and plot, openings that grab the reader, complications that build tension and details that reveal character. Critical reading of published authors, prose craft exercises and responding constructively to other student work are essential learning processes. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

WR 242 - INTRODUCTION TO CREATIVE WRITING: POETRY
Introduces students to the craft of poetry through study of the poetry and notebooks of established writers for writing techniques, forms, styles and work processes and through the writing and submission of approximately one complete poem per week for class discussion and analysis. Recommended preparation: WR 121.
Credits: 4   Lecture: 4

WR 243 - INTRODUCTION TO CREATIVE WRITING: SCRIPTWRITING

Introduces students to dramatic writing for both stage and screen. Essential learning processes in the course include scene and dialogue craft exercises, developing strong characters and viable narrative structures, critical reading of plays, screenplays, and/or teleplays and responding constructively to other student work. Recommended preparation: WR 121.

Credits: 4   Lecture: 4

WR 288 - SPECIAL STUDIES: WRITING

Explores topics of current interest in the discipline.

Credits: 1 to 4

WR 299 - SELECTED TOPICS: WRITING

This course is in development.

Credits: 1 to 4

OSU BACCALAUREATE CORE

This information reflects an accurate picture of OSU requirements at the time of approval, using the OSU catalog, advisors and web resources for consultation. However, degree requirements can and do change. Students can verify transfer information at the OSU website: oregonstate.edu/admissions/main/baccalaureate-core-course-equivalencies-central-oregon-community-college.

BACCALAUREATE CORE

SKILLS COURSES

Writing I	WR 121	Academic Composition	4
Writing II	WR 122	Argmt, Rsrch & Multimodal Comp	4
	or WR 227	Technical Writing	4
	or WR 240	Intro Creative Writing: Nonfiction	4
	or WR 241	Intro Creative Writing: Fiction	4
	or WR 242	Intro Creative Writing: Poetry	4
	or WR 243	Intro Creative Writing: Scriptwriting	4
Writing III	SP 111	Fundamentals of Public Speaking	3
	or SP 114	Argumentation and Critical Discourse	3
	or SP 115	Intro Intercultural Communication	3
	or SP 218	Interpersonal Communication	3
	or SP 219	Small Group Communication	3
Mathematics	MTH 105	Intro to Contemporary Math	4
	or MTH 111	College Algebra	4
	or MTH 112	Trigonometry	4
	or MTH 113	Topics in Precalculus	4
	or MTH 211	Fundamentals of Elementary Math I	4
	or MTH 241	Calculus for Mangt/Social Science	4
	or MTH 245	Math for Mgmt/Social Science	4
	or MTH 251	Calculus I	4
Fitness	HHP 295	Health and Fitness	3

PERSPECTIVES COURSES

No more than two courses (or lecture/lab combinations) from any one department may be used by a student to satisfy the Perspectives category of the core. GEO courses listed under Physical Science are considered to be from a different department than GEO courses listed under any other Perspective category. Choose one Biological Science lecture/lab combination, one Cultural Diversity, one Literature and the Arts, one Physical Science lecture/lab combination, one Social Processes and Institutions, one Western Culture, one Difference, Power and Discrimination, plus one additional lecture/lab combination from either Physical Science or Biological Science.

Physical Science

CH 104	Intro Chemistry I	5
or CH 105	Intro Chemistry II	5
or CH 106	Intro Chemistry III	5
or CH 221	General Chemistry I	5
or CH 222	General Chemistry II	5
or CH 223	General Chemistry III	5
or FOR 208	Soils: Sustainable Ecosystems	4
or FOR 265	Wood Technology & Utilization	4
or G 148	Volcanoes and Earthquakes	4
or G 201	Geology I	4
or G 202	Geology II	4
or G 203	Geology III	4
or GEOG 265	Geographic Information Systems	4

or GEOG 278	Physical Geography-Landforms, Water	4
or GEOG 279	Physical Geography-Weather & Climate	4
or GS 104	Physical Science: Physics	4
or GS 105	Physical Science: Chemistry	4
or GS 106	Physical Science: Geology	4
or GS 107	Physical Science: Astronomy	4
or GS 108	Physical Science: Oceanography	4
or PH 201	General Physics I	5
or PH 202	General Physics II	5
or PH 203	General Physics III	5
or PH 211	General Physics I	5
or PH 212	General Physics II	5
or PH 213	General Physics III	5

Biological Science

BI 101	General Biology I	4
or BI 102	General Biology II	4
or BI 103	General Biology III	4
or BI 211	Principles of Biology I	5
or BI 212	Biology of Plants II	5
or BI 213	Biology of Animals III	5
or BI 214	Biochemistry and Genetics	5
or BI 234	Microbiology	4
or BOT 203	General Botany	4
or FOR 208	Soils: Sustainable Ecosystems	4

Physical or Biological Science

Choose one additional course from the Physical Science or Biological Science lists above	4-5

Western Culture

ARH 201	Intro Art History	4
or ARH 202	Intro Art History	4
or ARH 203	Intro Art History	4
or ARH 206	Modern Art History	4
or ENG 107	Western World Lit: Ancient	4
or ENG 108	Western World Lit: Middle Ages	4
or ENG 109	Western World Lit: Modern	4
or ENG 201	Shakespeare	4
or ENG 202	Shakespeare	4
or ENG 204	Survey British Literature I	4
or ENG 205	Survey British Literature II	4
or ENG 253	Survey American Literature I	4
or ENG 254	Survey American Literature II	4
or FA 257	Literature into Film	3
or GEOG 201	World Regional Geography I	4
or HST 101	History of Western Civilization	4
or HST 102	History of Western Civilization	4
or HST 103	History of Western Civilization	4
or HST 104	World History	4
or HST 105	World History	4

OSU BACCALAUREATE CORE *(continued)*

or HST 106	World History	4
or HST 201	United States History to 1820	4
or HST 202	United States History 1820-1920	4
or HST 203	United States History 1920-Present	4
or HST 270	20th Century European History	4
or HUM 106	British Life and Culture	3
or PHL 170	Philosophy of Love and Sex	3
or PHL 200	Fundamentals of Philosophy	4
or PHL 201	Problems of Phil: Epistemology	3
or PHL 202	Problems of Phil: Ethics	3
or PS 206	Introduction to Political Thought	4

Cultural Diversity

ANTH 283	Intro to Medical Anthropology	4
or ARH 207	Native American Art History	4
or ES 213	Intro to Chicano/Latino Studies	4
or GEOG 107	Cultural Geography	4
or GEOG 202	World Regional Geography II	4
or HS 208	Multicultural Issues in Human Services	4
or HST 104	World History	4
or HST 105	World History	4
or HST 106	World History	4
or HST 207	History of the American West	4
or HST 218	Native American History	4
or HST 258	Colonial Latin American History	4
or HST 259	Modern Latin American History	4
or HST 260	History of the Middle East	4
or HST 290	East Asian History	4
or HST 291	East Asian History	4
or HST 292	East Asian History	4
or HUM 210	Culture and Literature of Asia	4
or HUM 211	Culture and Literature of Africa	4
or HUM 212	Culture and Literature of the Americas	4
or HUM 213	Culture and Literature of Middle East	4
or HUM 230	Immigrant Experience American Lit	4
or HUM 240	Native American Literature and Culture	4
or HUM 255	Cultural Diversity in Cont American Culture	4
or HUM 256	Intro to African American Lit	4

Literature and the Arts

ARH 201	Intro Art History	4
or ARH 202	Intro Art History	4
or ARH 203	Intro Art History	4
or ARH 206	Modern Art History	4
or ARH 207	Native American Art History	4
or ART 101	Introduction to the Visual Arts	4
or ENG 104	Intro to Literature: Fiction	4
or ENG 105	Intro to Literature: Drama	4
or ENG 106	Intro to Literature: Poetry	4
or ENG 107	Intro to Literature: Ancient	4
or ENG 108	Intro to Literature: Middle Ages	4
or ENG 109	Intro to Literature: Modern	4
or ENG 201	Shakespeare	4
or ENG 202	Shakespeare	4
or ENG 204	Survey British Literature I	4
or ENG 205	Survey British Literature II	4
or ENG 232C	Topics in Am Lit: Contemp Fiction	4
or ENG 250	Intro Folklore and Mythology	

or ENG 253	Survey American Literature I	4
or ENG 254	Survey American Literature II	4
or ENG 260	Intro Women Writers	4
or FA 101	Introduction to Film	3
or FA 125	World Cinema	4
or FA 257	Literature into Film	4
or HUM 210	Culture and Literature of Asia	4
or HUM 211	Culture and Literature of Africa	4
or HUM 212	Culture and Literature of the Americas	4
or HUM 230	Immigrant Experience American Lit	4
or HUM 240	Native American Literature and Culture	4
or HUM 256	Intro to African-American Literature	4
or MUS 201	Understanding Music	3
or MUS 202	Understanding Music	3
or MUS 203	Understanding Music	3
or MUS 205	Introduction to Jazz History	3
or TA 200	Introduction to Theater	3

Social Processes and Institutions

ANTH 103	Cultural Anthropology	4
or EC 201	Microeconomics	4
or EC 202	Macroeconomics	4
or GEOG 106	Economic Geography	4
or HHP 210	Intro to the Health Care System	3
or HHP 231	Human Sexuality	3
or HHP 248	Human Psychology	4
or HST 101	History of Western Civilization	4
or HST 102	History of Western Civilization	4
or HST 103	History of Western Civilization	4
or PS 201	Intro US Government and Politics	4
or PS 204	Intro Comparative Politics	4
or PS 205	Intro International Relations	4
or PSY 201	Mind and Brain	4
or PSY 202	Mind and Society	4
or SOC 201	Introduction to Sociology	4
or SOC 206	Social Psychology	4

Difference, Power and Discrimination

or HST 201	United States History to 1820	4
or HST 202	United States History 1820-1920	4
or HST 203	United States History 1920-Present	4
or HST 225	US Women's History	4
or SOC 212	Race, Class, Ethnicity	4
or SOC 215	Social Issues and Social Movements	4
or WS 101	Introduction to Women's and Gender Studies	4

FACULTY, ADMINISTRATION & STAFF

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B.A. in English, St. Bonaventure University; M.A. in English, Bucknell University; Ph.D. in English, University of Nebraska-Lincoln. At COCC since 2018.

REBECCA L. WALKER-SANDS
Professor of Psychology
B.S. in Psychology, Southern Oregon State College; M.A. in Experimental Psychology, University of Nevada, Reno; Ph.D. in Psychology, University of North Carolina at Greensboro. At COCC since 1995.

MICHEL WALLER
Assistant Professor II of Anthropology
B.A. in Journalism, University of North Dakota; B.S. in General Science, University of Oregon; M.A. in Anthropology, Iowa State University. At COCC since 2010.

SHANNON WALLER
Assistant Professor II of Pharmacy Technician Education/
Program Director
Pharmacy Technician Diploma, Apollo College; A.A. in Liberal Arts, Solano Community College; B.A. in Education, Western Governors University; M.Ed. in Instructional Design, Western Governors University. At COCC since 2012.

WENDI WAMPLER
Assistant Professor II of Engineering and Physics
B.S. in Chemical Engineering, Purdue University; B.S. in Physics, Purdue University; Ph.D. in Physics with specialization in Physics Education, Purdue University. At COCC since 2014.

HAROLD WERSHOW
Assistant Professor I of Geology
B.A. in Geology, Pomona College; M.A. in Geology, Western Washington University. At COCC since 2018.

AMY WHEARY
Assistant Professor I of Nursing
B.S. Nursing, Arizona State University. At COCC since 2016.

MALINDA M. WILLIAMS
Assistant Professor II of English
B.A. in English and Biblical Studies, Hope International University; M.A. in English, California State University, Chico; Ph.D. in English, University of Denver. At COCC since 2013.

JONATHAN WOLF
Assistant Professor II of Economics
B.A. in Sociology and Economics, Claremont Men's College; M.A. in Economics, Claremont Graduate School. At COCC since 2014.

ANDRIA J. WOODELL
Professor of Psychology
B.A. in Psychology, University of Arkansas; M.A. in Experimental Psychology, University of Arkansas; Ph.D. in Experimental Psychology, University of Arkansas. At COCC since 2004.

WENDY WORTHINGTON
Temporary Instructor of Human Development
B.S. in Nursing, University of Washington; M.S. in Counseling, Oregon State University – Cascades. At COCC since 2011.

WAYNE YEATMAN
Assistant Professor II of Culinary Arts
A.S. in Culinary Arts, Newbury College; B.S. in Hotel Restaurant Management, University of Massachusetts; M.B.A. in Business Administration, Southwest Texas State University. At COCC since 2012.

ZELDA ZIEGLER
Professor of Chemistry
B.S. in Chemistry, Idaho State University; Ph.D. in Analytical Chemistry, Purdue University. At COCC since 2002.

ANNE ZMYSLINSKI-SEELIG
Assistant Professor II of Speech
B.A. in Communication, North Dakota State University; M.A in Communication, North Dakota State University. At COCC since 2015.

FACULTY ACHIEVEMENT AWARD RECIPIENTS

The Faculty Achievement Award recognizes excellence in teaching. It is awarded each year at the College's faculty convocation ceremony. Those who have been honored are:

1986 Bruce Nolf, Professor of Geology
1987 Jack R. McCown Jr., Professor of Mathematics
1988 C. Wayne Eshelman, Professor of Biological Sciences
1989 Millie MacKenzie, Professor of Office Administration
1990 Raymond R. Hatton, Professor of Geography
1991 Michael A. Sequeira, Associate Professor of Mathematics
1992 Ellen M. Howe, Associate Professor of Nursing
1993 Darla J. Quesnell, Professor of Psychology
1994 Bruce W. McClelland, Professor of Chemistry
1995 E. Robert Powell, Professor of Physical Science and Chemistry
1996 Diana Glenn, Associate Professor of Office Administration
1997 Cora Agatucci, Associate Professor of English
1998 Mark E. Eberle, Associate Professor of Biological Sciences
1999 Patricia O'Neill, Associate Professor of History
2000 Bruce L. Emerson, Associate Professor of Physics
2001 Terry Krueger, Professor of English
2002 Gloria Ahern, Professor of Health Information Technology
2003 Julie A. Keener, Professor of Mathematics
2004 Rebecca L. Walker-Sands, Associate Professor of Psychology
2005 Charles T. Naffziger, Associate Professor of Mathematics
2006 Michael C. Gesme, Associate Professor of Music
2007 Robert W. Reynolds, Professor of Geology
2008 Stacey L. Donohue, Professor of English
2009 Karen Huck, Professor of Speech
2010 Julie F. Downing, Professor of Health and Human Performance
2011 Julie F. Hood, Associate Professor of Human Biology
2012 Kathleen M. McCabe, Associate Professor of Criminal Justice
2013 Deborah S. Davies, Professor of Dental Assisting
2014 Carol Higginbotham, Professor of Chemistry
2015 Amy Van Dusen Howell, Associate Professor of Education
2016 Beverlee Jackson, Professor of Health Information Technology
2017 Andria Woodell, Professor of Psychology
2018 Jennifer Cruickshank, Assistant Professor of Health and Human Performance

ADJUNCT FACULTY

TRAVIS ALLEN
Adjunct Instructor of Music

MICHELLE BUTCHER
Adjunct Instructor of Mathematics

KENDA CALIGURE
Adjunct Instructor of Mathematics

CHRISTIN CAPPY
Adjunct Instructor of Anthropology

AMBER CLARK
Adjunct Instructor of License Massage Therapy

RODNEY CROSS
Adjunct Instructor of License Massage Therapy

KERI DONOVAN
Adjunct Instructor of Humanities

STEVE EDWARDS
Adjunct Instructor of Biology

KAREN ELLIS
Adjunct Instructor of Fine Arts/Art

TARA ENDRIES
Adjunct Instructor of Health and Human Performance

DAVID ENGEL
Adjunct Instructor of Spanish

IAN FACTOR
Adjunct Instructor of Fine Art

ERIC FISHER
Adjunct Instructor of Computer and Information Systems

NISSA GARCIA
Adjunct Instructor of Science

JANET GESME
Adjunct Instructor of World Languages and Cultures

MELINDA GESUALE
Adjunct Instructor of Nursing

SHELLY GRIFFIN
Adjunct Instructor of Humanities

PATRICIA HAMMER
Adjunct Instructor of Mathematics

GARRETT HANDKE
Adjunct Instructor of Health and Human Performance

BECKY HEINRICK
Adjunct Instructor of Health and Human Performance

KATHERINE HILST
Adjunct Instructor of Business/Aviation

KELLY JAQUISS-POFAHL
Adjunct Instructor of Writing

GINGER KARNES
Adjunct Instructor of Nursing

JAMIE KERTAY
Adjunct Instructor of Nursing

REBECCA LARO
Adjunct Instructor of Social Science

TAMRA MARSH
Adjunct Instructor of Nursing

JACK McKENZIE
Adjunct Instructor of Science

SUE MEYER
Adjunct Instructor of Business

DANIEL MONTOYA
Adjunct Instructor of Health and Human Performance

KELLY MUSGROVE
Adjunct Instructor of Social Science

LAUREL NESS
Adjunct Instructor of Nursing

REBECCA RIGGS
Adjunct Instructor of Psychology

ANTHONY ROSSO
Adjunct Instructor of Writing

ANNMARIE SARGENT
Adjunct Instructor of Writing

JULIE SCHMIDT
Adjunct Instructor of Mathematics

KEVIN SIVERTSON
Adjunct Instructor of Aviation

TERRY STEELE
Adjunct Instructor of Automotive

ROXIE SUPPLEE
Adjunct Instructor of Criminal Justice

GREGG TERHAAR
Adjunct Instructor of Health and Human Performance

JANE THIELSEN
Adjunct Instructor of Writing

MICHAEL THILLE
Adjunct Instructor of Biology

JACQUELINE VANCE
Adjunct Instructor of Early Childhood Development

PATRICIA WAGNER
Adjunct Instructor of Mathematics

THERESA WILSON
Adjunct Instructor of Chemistry

SARAH WUEPPER
Adjunct Instructor of Mathematics

BEN YOUNG
Adjunct Instructor of Computer and Information Systems

JANE YOUNGS
Adjunct Instructor of Nursing

TEACHING AWARD FOR PART-TIME AND ADJUNCT FACULTY

Central Oregon Community College recognizes excellence in teaching. The teaching award for part-time and adjunct faculty is presented each year to an outstanding member of the College's part-time and adjunct faculty. Those who have been honored are:

2010 Carolyn Esky, Adjunct Instructor of Human Development
2011 Peter Meyer, Adjunct Instructor of Art
2012 Patricia Hammer, Adjunct Instructor of Mathematics
2013 Carl Cavallo, Adjunct Instructor of Automotive
2014 Jim Stedman, Adjunct Instructor of Writing
2015 Heather VanDiest-Kolb Adjunct Instructor of Criminal Justice
2016 Rodney Cross, Adjunct Instructor of License Massage Therapy
2017 David Engel, Adjunct Instructor of Spanish
2018 Katie Sheldon, Adjunct Instructor of Engineering

ADULT BASIC SKILLS INSTRUCTORS

LISA BOHARD
Adult Basic Skills Instructor
B.S. in Science, Oregon State University - Cascades; M.A.T with Mathematics Endorsement, Western Oregon University. At COCC since 2013.

ANITA GOODWIN
Adult Basic Skills Instructor, Deer Ridge Correctional Institution
B.A. in German and Geology, University of North Alabama; B.S. in Elementary Education, University of North Alabama; M.S. in Elementary Education, Jacksonville State University. At COCC since 2014.

JENNIFER JUDD
Adult Basic Skills Instructor
B.A. in Anthropology, Whitman College; M.Ed. in Adult Education and Training − Adult Basic Education, Seattle University. At COCC since 2013.

KAREN LEEP
Adult Basic Skills Instructor
B.A. in Secondary Education, Western Oregon State College. At COCC since 1995.

ANGELINA PTOMEY
Adult Basic Skills Instructor, Deer Ridge Correctional Institution
B.S. in Human Development and Family Science, Oregon State University; M.S. in Higher Education Leadership and Administration, Capella University. At COCC since 2012.

AMY STANCLIFF
Adult Basic Skills Instructor
B.A. in English, Brigham Young University; M.Ed., University of Alberta. At COCC since 2005.

AMY STINARD
Adult Basic Skills Instructor
B.S. in Business/Marketing, Ball State University. At COCC since 1997.

COREY TAYLOR
Adult Basic Skills Instructor
B.A. in English, University of Oregon; M.A.T. in Teaching in Language Arts, Oregon State University − Cascades. At COCC since 2012.

FACULTY EMERITUS

CORA AGATUCCI
Professor of English
B.A. in English, San Diego State University; M.A. in Literature, University of California, San Diego; Ph.D. in Literature, University of California, San Diego. At COCC from 1988 to 2018.

GLORIA AHERN, R.R.A.
Professor of Health Information Technology
B.A. in Medical Record Administration, Carroll College; Certificate in Medical Record Science, Providence Hospital, Seattle; A.H.I.M.A. registration. At COCC from 1980 to 2002.

ARTHUR N. BENEFIEL
Professor of Forest Technology/Program Director, GIS
A.S. in Forestry, Mt. Hood Community College; B.S. in Forest Resources (Forest Management), University of Washington; M.F.R. in Forest Resources, University of Washington. At COCC since 1988.

ROBERT BROOKOVER
Professor of Business Equipment Service Technology
B.A. in Industrial Arts, San Francisco State University; M.Ed. in Vocational Education, Oregon State University. At COCC from 1972 to 1997.

BILL BUCK
Professor of English
B.A. in English, California State University at Fullerton; M.A. in English, California State University at Fullerton; Ph.D. in English Literature, University of California, Riverside. At COCC from 1989 to 2004.

THOMAS M. CARROLL
Professor of Economics
B.S. in Economics, University of Idaho; M.S. in Agricultural and Resources Economics, Oregon State University. At COCC from 1980 to 2014.

FORREST M. DANIEL
Professor of Music
B.A. in Music, Adams State College; M.A. in Music, Adams State College. At COCC from 1978 to 1995.

DEBORAH S. DAVIES
Professor of Dental Assisting
A.A. in Dental Hygiene, Pueblo Community College; B.S. in Biology, University of Southern Colorado; Oregon Dental Hygiene License and certification by the National Dental Hygiene Board. At COCC from 1997 to 2018.

DANIEL EARLY
Professor of Anthropology and Sociology
A.A., San Francisco City College; B.A. in Anthropology and Sociology, University of California, Berkeley; M.A. in Anthropology and Sociology, Catholic University; Ph.D. in Anthropology, Catholic University. At COCC from 1978 to 2002.

MARK W. EBERLE
Professor of Biological Sciences
B.A. in Bacteriology, University of California, Davis; Ph.D. in Entomology, University of California, Davis. At COCC from 1988 to 2018.

J. ALLEN EHL
Associate Professor of Automotive Technology
B.Ed. in Trade and Industrial Education, Colorado State University; M.Ed. in Administration and Supervision of Vocational Education, Colorado State University; General Motors S.E.T. Certification. At COCC from 1969 to 1990.

C. WAYNE ESHELMAN
Professor of Biological Sciences
B.S. in Biology, College of Idaho; M.A. in Zoology, University of South Dakota. At COCC from 1965 to 1994.

DONALD L. GALLAGHER
Professor of Mathematics
B.S. in Secondary Education, Northern Montana; M.A.T. in Mathematics, University of Montana. At COCC from 1969 to 1994.

CHARLES R. HEIDEN
Professor of Music
B.M., Northwestern University; M.F.A., Ohio University; D.M., Northwestern University. At COCC from 1981 to 1994.

FRANZ HELFENSTEIN
Professor of Mathematics
B.S. in Mathematics, Colorado State University; M.S. in Mathematics, Oregon State University; Ph.D. in Applied Mathematics, Oregon State University. At COCC from 1990 to 2016.

JULIE F. HOOD GONSALVES
Professor of Human Biology
B.S. in Human Nutrition, Oregon State University; Licensed Dietitian, Oregon State Board of Licensed Dietitians; Registered Dietitian, American Dietetic Association; M.S. in Nutrition, Oregon State University; Ed.D., Lewis and Clark College. At COCC from 1988 to 2016.

DUANE HOUGHT
Associate Professor of Business and Accounting
B.S. in Business Administration, University of Nevada; M.S. in Business Education, Oregon State University. At COCC from 1979 to 2002.

ELLEN M. HOWE
Associate Professor of Nursing
B.S. in Nursing, Mount Marty College for Women; M.S. in Nursing, University of Portland. At COCC from 1981 to 2002.

MARJORIE HOYE
Professor of Composition and Technical Writing
B.S. in English Education, West Chester State University; M.A. in Teaching English as a Second Language, San Francisco State University; Ph.D. in Applied Linguistics, University of Texas at Austin. At COCC from 1991 to 2013.

KAREN HUCK
Professor of Speech
B.A. in Journalism, Idaho State University; M.A. in Speech/Theatre, Idaho State University; Ph.D. in Communication, University of Utah. At COCC from 1988 to 2014.

BEVERLEE R. JACKSON
Professor of Health Information Technology/Program Director
A.S. in Medical Record Technology, Central Oregon Community College; B.A. in Interpersonal Communications, Marylhurst College. At COCC from 1990 to 1994 and 2002 to 2017.

SUSAN HAYS KLEIN
Associate Professor of Health Information Technology
B.S. in Health Information Services, Seattle University; A.H.I.M.A. Registration. At COCC from 1985 to 2002.

RODNEY A. KOHLER
Professor of Mathematics
B.S. in Math and Science Education, Eastern Oregon College; M.S. in Mathematics, University of Oregon. At COCC from 1966 to 1998.

SARA L. KREMPEL
Professor of Art
B.A. in Art and Philosophy, University of Wisconsin; B.F.A. in Art, University of Wisconsin; M.F.A. in Art, University of Wisconsin. At COCC from 1990 to 2011.

JAMES L. KRESS
Professor of Business
B.B.A. in Business, University of Oregon; M.B.A. in Business Administration, Portland State University. At COCC from 1988 to 2014.

TERRY KRUEGER
Professor of English
B.A. in English, University of Montana; M.F.A. in English, University of Iowa; Ph.D. in English, University of Iowa. At COCC from 1990 to 2015.

LOWELL H. LAMBERTON
Professor of Business
B.A. in English, Walla Walla College; M.A. in English, University of Nebraska; M.B.A. in Business Management and Advanced Professional Certificate in Management, Suffolk University. At COCC from 1981 to 2011.

GREGORY T. LYONS
Professor of English
B.A. in English, Rice University; M.A. in English and American Literature, University of Washington; Ph.D. in Rhetoric and Composition, The University of Texas at Austin. At COCC from 1991 to 2011.

MILLIE MACKENZIE
Professor of Business
B.S. in Finance and Business Environment, University of Oregon; M.S. in Personnel and Industrial Management, University of Oregon; Certified Professional Secretary. At COCC from 1978 to 1999.

BRUCE W. McCLELLAND
Professor of Chemistry
B.S. in Chemistry, University of California, Berkeley; Ph.D. in Chemistry, Oregon State University. At COCC from 1974 to 2003.

JACK R. McCOWN, JR.
Professor of Mathematics
B.S. in Math Education, Eastern Oregon College; M.S. in Mathematics, Idaho State University. At COCC from 1976 to 2004.

CHARLES T. NAFFZIGER
Professor of Mathematics
B.S. in Mathematics Education, University of Oregon; M.S. in Mathematics, University of Arizona. At COCC from 1995 to 2017.

RICHARD NIEDERHOF
Professor of Forestry
B.S. in Forest Management, Clemson University; M.S. in Forestry and Industrial Management, Clemson University. At COCC from 1972 to 1999.

BRUCE NOLF
Professor of Geology
B.A. in Geology, University of Iowa; M.S. in Geology, California Institute of Technology; Ph.D. in Geology, Princeton University. At COCC from 1966 to 1993.

LORETTA NOLL
Professor of Nursing
B.S.N., Nursing, Southern Illinois University; M.S.N., Nursing, Texas Women's University. At COCC from 1978 to 1999.

STEVE O'BRIEN
Professor/Counselor
B.A. in Philosophy and Government, Boston University; M.S. in Counseling/Recreation/Community Education, University of Oregon. At COCC from 1977 to 2003.

PATRICIA O'NEILL
Professor of History
B.A. in European History, University of Pennsylvania; M.A. in Asian History, State University of New York at Buffalo; Ph.D. in History, University of Washington. At COCC from 1985 to 2013.

CHRISTINE OTT-HOPKINS
Professor of Plant Biology
B.S. in Biology, Whitworth College; M.A. in Botany, Southern Illinois University; Ph.D. in Botany, Miami University. At COCC from 1993 to 2015.

MARGARET A. PETERSON
Professor of Allied Health/Health and Human Performance
B.A. in Anthropology, University of North Dakota; M.S. in Physical Education, University of North Dakota; Ed.D. in Higher Education Administration, Montana State University. At COCC from 1988 to 2015.

E. ROBERT POWELL
Professor of Physical Science and Chemistry
A.A., Central Oregon Community College; B.S. in General Science, Oregon State University; M.S. in Natural Science, New Mexico, Highlands. At COCC from 1967 to 1999.

DARLA J. QUESNELL
Professor of Psychology
B.A. in Psychology, University of California, Berkeley; Ph.D. in Psychology, University of California, Berkeley. At COCC from 1975 to 1995.

ROBERT W. REYNOLDS
Professor of Geology
B.S. in Geology, Penn State University; M.S. in Geology, University of Idaho; Ph.D. in Geology, University of Idaho. At COCC from 1994 to 2018.

MICHAEL A. SEQUEIRA
Professor of Mathematics
B.S. in Mathematics, Stanford University; M.S. in Mathematics, Northwestern University. At COCC from 1982 to 2004.

VIRGINIA M. SHRAUGER
Professor of Reading and Study Skills
B.S. in Education, University of Nebraska; M.Ed. in Reading, University of Arizona. At COCC from 1970 to 1988.

WILLIAM P. SMITH
Professor of Machine Shop
A.A., Fullerton College; A.S. in Industrial Technology, Central Oregon Community College; CMfgE. At COCC from 1984 to 2003.

GENE TAYLOR
Professor of Computer and Information Systems
B.S. in Business Administration, Portland State University; M.S.T. in Education, Portland State University. At COCC from 1984 to 2003.

TOM TEMPLE
Associate Professor of Art
B.S. in Art Education, University of Oregon; M.S. in Art Education, University of Oregon. At COCC from 1971 to 1990.

H. WARD TONSFELDT
Professor of English
B.A. in English, Portland State College; M.A. in English and Comparative Literature, Occidental College; Ph.D. in Comparative Literature, University of California, San Diego. At COCC from 1975 to 2001.

BERN WISNER
Professor of Business
B.A. in Economics, Duke University; M.B.A., California State University, Dominguez Hills. At COCC from 1982 to 2002.

JEROME J. YAHNA
Professor of Music
Ph.B. in Music, University of North Dakota; M.A. in Music, University of Northern Colorado. At COCC from 1970 to 1993.

NANCY L. ZENS
Professor of History
B.A. in American History, Washington State University; M.A. in American History, Washington State University; Ph.D. in History, Washington State University. At COCC from 1989 to 2011.

ADMINISTRATION

BRIAN ALLISON
End User Support Administrator
A.G.S., Central Oregon Community College. At COCC since 2009.

SHARLA ANDRESEN
Director of Contracts and Risk Management
B.S. in Business, Lewis and Clark College; M.B.A., Marylhurst University. At COCC since 1991.

NATASHA ANDERSON-BUTLER
Academic Advisor, CAP Services
B.S. in Psychology/Behavioral Science, Mount Mary University; M.A. in Student Personnel Administration and Professional Counseling, Concordia University, Wisconsin. At COCC Since 2016.

SEANA BARRY
Director of CAP Services
B.A. in Communication Studies, University of Kansas. At COCC since 2008.

TUCKER BAUMAN
Welding Program Coordinator, DRCI
At COCC since 2008.

MIKE BEAULIEU
Campus Services Operations Supervisor
B.S. in Outdoor Recreational Management, Utah State University. At COCC since 2013.

SHARON BELLUSCI
Student Services Technology Coordinator
B.S. in Computer Science/Mathematics, University of Puget Sound. At COCC since 2010.

LORI A. BENEFIEL
Director of Bookstore and Auxiliary Services
B.A. in Business Administration, Briar Cliff College; M.B.A., Marylhurst University. At COCC since 1997.

STEPHANIE BILBREY
Student Housing Marketing and Summer Conference Coordinator
B.S. in Business Administration, University of Louisville. At COCC since 2015.

LISA BLOYER
Director of Fiscal Services
B.S. in Business, Portland State University; M.P.A., Portland State University. At COCC since 1996.

LAURA BOEHME
Director of ITS Infrastructure
B.A. in Spanish Translation, Brigham Young University; B.A. in International Relations, Brigham Young University; Ed.M. in Adult Education, Oregon State University. At COCC since 2010.

AARON BOONE
Senior Systems Administrator-Account & Team Support Specialist
A.A.S. in Computer and Information Systems, Central Oregon Community College. At COCC since 2013.

FACULTY, ADMINISTRATION & STAFF

ZACHARY BOONE
Executive Director of COCC Foundation
B.A. in International Affairs, Lewis & Clark College; M.A. in Public Administration, Portland State University. At COCC since 2015.

MISTY BOUSE
Major Gifts Officer, COCC Foundation
B.A. in Journalism and Communication, University of Oregon. At COCC since 2017.

MICHAEL BOWLING
Senior MIS Analyst Programmer
B.S. in Computer Information Systems, Athens State College. At COCC since 2007.

LINDSAY BUCCAFURNI
Admissions Coordinator
B.A. in Liberal Studies: Pre-Elementary Education, Oregon State University. At COCC since 2013.

MICHELLE CARY
Native American Program Coordinator
B.A. in Education, Oregon State University; M.Ed., Lesley University. At COCC since 2017.

DANIEL CECCHINI
Chief Information Officer
B.A. in Computer Science and B.S. in Biology, Wayne State University; M.B.S. in Science, University of Colorado; M.B.A. in Operations Management, Regis University. At COCC since 2006.

DREW CECCHINI
Assistant Director of Admissions and Records, Recruitment and Outreach
B.A. in Industrial Organization Psychology, Point Loma Nazarene University; M.Ed. in Counseling and Guidance, Point Loma Nazarene University. At COCC since 2011.

ANDREW P. DAVIS
Director of Student and Campus Life
B.S. in Business Administration, Oregon State University; M.B.A, Eastern Oregon University. At COCC since 2016.

WADE DEBRAAL
Assistant Network Administrator
GNU/Linux OS, Cisco Systems IOS, HTML/PHP/Perl/C Language. At COCC since 2006.

DAVID DONA
Chief Financial Officer
B.S. in Business, Southern Oregon University; M.B.A., Southern Oregon University; C.P.A., State of Oregon. At COCC since 2007.

SCOTT DONNELL
Web Designer
B.A. in Business/Marketing, Oregon State University. At COCC since 2008.

WILLIAM DOUGLASS
Director of Club Sports and Intramural Coordinator
A.A. in Liberal Arts, Central Oregon Community College; B.S. in History, University of Oregon. At COCC 1975 to 1987 and since 1995.

TRACY DULA
Career Services Coordinator, CAP Services
A.A. in Liberal Arts, Ocean County College; B.A. in Special Education, Georgian Court College. At COCC since 2009.

WESLEY DYMOND
Information Security Administrator
A.S. in Electronic Engineering, ITT Technical Institute; B.S. in Automated Manufacturing, ITT Technical Institute. At COCC since 2013.

CHRISTOPHER EGERTSON
Research Analyst
B.S. in Biology and Environmental Science, Mankato State University; M.S. in Animal Ecology, Iowa State University. At COCC since 2006.

SHAWNA ELSBERRY
Director of Student Retention
B.S. in Psychology, Eastern Oregon University; M.Ed. in Adult Education, Colorado State University. At COCC since 2004.

DANIELLE FEGLEY
Director of Human Resources
B.B.A in Management, University of Alaska, Anchorage; M.B.A in Business Administration, Temple University. At COCC since 2016.

JEFFREY FLOYD
Senior Network Administrator
Attended Central Washington University. At COCC since 2010.

JENNIFER FORBESS
Writing Tutor Center Coordinator
B.S. in Liberal Studies, Oregon State University; M.A. in General English, Northern Arizona University. At COCC since 2014.

JARED FORELL
Assistant Director of Admissions and Records, Curriculum & Technology
B.S. in Elementary Education, Linfield College. At COCC since 2015.

STEPHANIE GOETSCH
Program Manager, Continuing Education
B.S. in Social Science, University of Oregon; M.Ed. in Adult Education, Oregon State University. At COCC since 2005.

CAREN GRAHAM
Marketing Manager, Continuing Education
B.S. in Society, Health and Aging, The City University of New York; M.A. in Public Administration, The City University of New York. At COCC since 2013.

JEREMY GREEN
Campus Administrator, Madras
B.A. in History and Political Science, Vanguard University of Southern California; M.A. in Youth Development, Michigan State University. At COCC since 2015.

CHRISTA GUNNELL
Human Resources Employment and Benefits Supervisor
B.S. in Business Management, Marylhurst University. At COCC since 2011.

BRIAN GUTIERREZ
Project Coordinator, Title III SIP Grant
B.A. in English Literature, California State University, Sacramento; M.A. in English Literature/Composition and Rhetoric, California State University, Sacramento; Ph.D. in English Literature, University of Washington. At COCC since 2016.

DEBORAH HAGAN
Director of Secondary Programs
B.A. in Journalism, University of Oregon; B.A. in English, Eastern Oregon University; M.A.T., University of Phoenix. At COCC since 1989.

KENNETH HARMON
ITS Engineering Systems Administrator
A.A. Business Administration-Information Technology, Central Oregon Community College. At COCC since 1993.

KRISSA HARRIS
Program Manager, Continuing Education
A.A.O.T., Central Oregon Community College; B.S. in Business Administration, Oregon State University; M.B.A., Arizona State University. At COCC since 2011.

TYLER HAYES
Assistant Director of Housing and Residence Life
A.A., North Idaho College; B.S. in Mathematics, San Diego Christian College; M.S. in Academic Advising, Kansas State University,. At COCC since 2010.

MALISSA HICE
Financial Aid Advisor
B.S. in Psychology, United States International University; M.S. in Mental Health Counseling, Oregon State University. At COCC since 2011.

TINA HOVEKAMP
Director of Library Services
B.A. in English, Aristotelian University, Greece; M.L.S. in Library Science, Kent State University; Ph.D. in Library Science, University of North Carolina, Chapel Hill. At COCC since 1997.

SHELLEY HUCKINS
Payroll Supervisor
A.A.S. in Accounting Technology, Oregon Institute of Technology; B.S. in Management, Accounting Option, Oregon Institute of Technology. At COCC since 2004.

KEVIN HUGHES
Custodial Supervisor
At COCC Since 2010.

JULIA HUNI
College Now High School Liaison
B.S. in Computer Science, University of Portland; M.A. in National Security Studies, California State University, San Bernardino. At COCC since 2009.

CYNTHIA JEFFREYS
Systems Integrator
A.A.S. in Business Administration Management Information Systems, Central Oregon Community College. At COCC since 1999.

BONNIE JORDAN
Academic Advisor, CAP Services
B.A. in Communication, Southern Oregon University. At COCC since 2011.

NANCY E. JUMPER
Program Manager, Continuing Education
B.S. in Communications, Southern Oregon State College. At COCC since 1997.

DIANA KALANQUIN
Academic Advisor – Allied Health, CAP Services
A.A., Central Oregon Community College; B.S. in Psychology, University of Oregon. At COCC since 2009.

KAREN KJEMHUS-SPAHR
Accountant, COCC Foundation
B.S. in Business Administration, Oregon State University. At COCC from 2005 to 2007 and since 2014.

RACHEL KNOX
Program Manager, Continuing Education
B.A. in English/British Literature, Oakland University. At COCC since 2003.

GINGER KORN
Business Systems Programmer
A.A. in Computer and Information Systems, Umpqua Community College; B.A in Business Administration, Northwest Christian College. At COCC since 2014.

SUZANNE KRISTENSEN
Campus Administrator, Prineville
B.A. in Psychology, Pacific University; M.A. in Communication and Leadership, Gonzaga University. At COCC since 2011.

SEAN LADD
Buildings Maintenance Supervisor
B.A in Construction Management, California State University, Sacramento. At COCC since 2017.

GLENDA L. LANTIS
Director of Continuing Education
B.S. in Home Economics Education, Oregon State University; M.S. in Family Studies, Oregon State University. At COCC since 2003.

TAMARA MARNELL
Integrated Library Systems (ILS) & Discovery Services Librarian
B.S. in Biology, Indiana University, M.L.S., Indiana University. At COCC since 2016.

JESSIE MATSUMURA
Senior MIS Analyst Programmer
A.A. in General Education, Monterey Peninsula College; B.S. in Business Administration, California Polytechnic State University. At COCC since 2005.

DARREN McCREA
Technology Project Manager
A.A. in Business, Orange Coast Community College; B.A. in English, California State University. At COCC since 2011.

MELISSA MERRYMAN
Residence Life Coordinator
B.A in Anthropology, Southern Oregon University; M.A. in Education, Portland State University. At COCC since 2017.

AIMEE METCALF
Assistant Director of College Relations
B.A. in Political Science, Pacific University. At COCC since 1999.

CHRISTINA MILLS
Student Module Manager/Analyst
A.A.S. in Computer and Information Systems, Central Oregon Community College. At COCC since 2004.

KIRSTEN MOLAN
Program Coordinator, Continuing Education
B.A. in Tourism and Outdoor Leadership, Oregon State University – Cascades. At COCC since 2017.

KEVIN MULTOP
Director of Student Financial Aid
B.S. in Humanities, Western Baptist College; M.C.S. in Theology, Regent College, Vancouver, BC. At COCC since 2001.

MICHAEL MURPHY
Director of eLearning and Academic Technology
B.S. in Business Administration and Organizational Development, Eastern Mennonite University; M.A. in Secondary Language, Marshall University; Ed.S. in Curriculum and Instruction, Marshall University; Ed.D. in Education (Instructional Technology), Marshall University. At COCC since 2017.

JANET NARUM
Director of Corrections Education at Deer Ridge Correctional Institution
B.A. in English, Washington State University; M.S. in Administration of Justice and Security, University of Phoenix. At COCC since 2013.

STEPHEN NEWCOMBE
Operations Manager, Continuing Education
B.S. in Business Management, Oregon State University. At COCC since 2009.

BRITTANY NICHOLS
Development Officer, COCC Foundation
B.S. in Business Administration, University of Oregon. At COCC since 2012.

JUAN OLMEDA-CHAVEZ
Senior Systems Administrator, Account and Team Support Specialist
A.S. in Accounting, North Idaho College; A.A. in Business Administration, North Idaho College; A.A.S. in Computer and Information Systems, Central Oregon Community College. At COCC since 2011.

RONALD S. PARADIS
Executive Director of College Relations
B.S. in Journalism, University of Oregon; M.B.A., Plymouth State College. At COCC since 1991.

LESLIE PARISI
Academic Advisor – Pre-Nursing, CAP Services
B.A. in English, California State University; M.A. in English, California State University; M.Ed. in Higher Education Administration, Northeastern University. At COCC since 2011.

FRANK PAYNE
Assistant Director of the Bookstore
Certificate of Industrial Video Production, Portland Community College. At COCC since 2013.

BRYNN E. PIERCE
Director of Institutional Effectiveness
B.S. in Biology, Oregon State University; M.P.H., The George Washington University School of Public Health and Health Services. At COCC since 2001.

KERI PODELL
Academic Advisor, CAP Services
A.A. in General Studies, Central Oregon Community College; B.S. in Management, Linfield College. At COCC since 2011.

FACULTY, ADMINISTRATION & STAFF

GORDON PRCE
Coordinator of Student Activities
A.A. in General Studies, Truckee Meadows Community College; B.A. in Interdisplinary Services, Western Oregon University; M.A. in Higher Education and Student Affairs, Indiana State University. At COCC from 2004 to 2015 and since 2017.

TINA REDD
Campus Director, Redmond
B.S. in Communications/Drama, University of Missouri; M.A. in English Literature and Composition, Southern Illinois University; Ph.D. in Theatre History and Criticism, University of Washington. At COCC since 2008.

BARRY ROGERS
Senior Web Developer
AIX System Administrator Certified and IBM TCP/IP Networking Certified. At COCC since 2012.

KRISTINE ROSHAU
Instructional Technical Systems Specialist/Trainer
B.A. in English, Concordia University; M.A. in Library and Information Science, University of Washington. At COCC since 2013.

DIANE ROSS
Assistant Director of Human Resources and EEO/AA/Title IX Officer
B.S. in Psychology, Northern Arizona University; M.A. in Human Resources Management, University of Phoenix. At COCC since 2015.

JAMIE ROUGEUX
Coordinator of Services for Students with Disabilities
B.A. in Communication, Bridgewater State University; M.A. in Education, Johnson State College. At COCC since 2016.

NANNETTE (LYNN) ROY
Lead Business Systems Programmer
Coursework in Computer Science, West Valley Junior College. At COCC since 2011.

KARA RUTHERFORD
Assistant Director of Admissions and Records
B.A. in General Social Science, University of Oregon; M.S. in Organizational Performance and Workplace Learning, Boise State University. At COCC since 2018.

EVELIA SANDOVAL
Latino Student Program Coordinator
B.S. in Biology, Washington State University; M.Ed. in Higher Education Administration, University of Kansas. At COCC since 2010.

JENNIFER (JJ) SHEW
HRIS Business Module Manager
B.A. in Business Management, Western Washington University. At COCC since 2014.

KELLIE L. SMITH
Director of Tutoring and Testing Center
B.S. in Political Science, Oregon State University; M.A. in History, Northern Arizona University. At COCC since 1997.

LAYLA SOLAR
Financial Aid Technical Analyst
A.G.S., Central Oregon Community College; B.S. in Human Development and Family Sciences, Oregon State University. At COCC since 2010.

BREANA SYLWESTER
Assistant Director of Financial Aid
A.A. in General Studies, Central Oregon Community College; B.S. in Psychology, University of Oregon; M.B.A., Concordia University. At COCC from 2000 to 2003 and since 2008.

ADRIAN SYRELL
Accountant
B.A. in Accounting, Alaska Pacific University. At COCC Since 2014.

SILAS TOWNE
Supervisor of Science Lab Technicians and Tutors
B.S. in Chemistry, George Fox University; M.S. in Chemistry, University of Oregon; M.E. in Secondary Education, Grand Canyon University. At COCC since 2012.

VICKERY VILES
Director of Curriculum and Assessment
B.A in Art History, Mt. Holyoke College; Ed.M. in Adult Education, Oregon State University. At COCC since 1989.

JOSEPH VIOLA
Director of Campus Services
B.S. in Business, University of Connecticut. At COCC since 2008.

CHRISTINE WALKER
Latino College Preparation Program Coordinator
B.S. in Tourism and Outdoor Leadership, Oregon State University. At COCC since 2015.

COURTNEY WHETSTINE
Director of Admissions and Registrar
B.A. in Psychology, Humboldt State University; M.S. in Educational Counseling, National University. At COCC since 2012.

JAMES W. WILCOX
Business Development Center, Counselor
A.A., West Shore Community College; B.S. in Business Administration, Portland State University; M.B.A., Portland State University. At COCC since 1998.

BETH WRIGHT
Placement Coordinator, CAP Services
A.A.O.T., Central Oregon Community College. At COCC since 2008.

ADMINISTRATOR EMERITUS

DAVID D. BILYEU
College Librarian
B.A. in Philosophy, University of California, Santa Cruz; M.L.S. in Library Science, Syracuse University. At COCC from 1993 to 2013.

ERIC BUCKLES
Director of Human Resources
A.A., Danville Area Community College; B.S. Liberal Arts and Sciences, Psychology, University of Illinois. At COCC from 1998 to 2013.

HELEN PRUITT
Registrar
A.A. in Liberal Studies, Mt. San Antonio College; B.A. in Liberal Studies, Oregon State University. At COCC from 1982 to 2003.

SARA PAULSON
Director of Information Technology
B.S. in Mathematics, University of Northern Iowa. At COCC from 1983 to 2004.

MICHAEL SMITH
Director of Student Life
B.A. in Recreation Administration, Chico State College. At COCC from 1982 to 2007 and 2012 to 2013.

GENE R. ZINKGRAF
Director of Campus Services
B.A. in Business, Western State College. At COCC from 1987 to 2012.

ADMINISTRATOR OF THE YEAR

Central Oregon Community College recognizes one Administrative employee each year for outstanding service to COCC and its students. Those who have been honored are:

2014 Vickery Viles, Director of CAP Services
2015 Seana Barry, Assistant Director of Admissions and Records
2016 Sharla Andresen, Director of Contracts and Risk Management
2017 Christina Mills, Student Module Manager/Analyst
2018 Kevin Multop, Director of Student Financial Aid

CONFIDENTIAL/SUPERVISORY STAFF

Jennifer Peters, Administrative Assistant II
Vice President for Administration

Julie Smith, Executive Secretary
President's Office and COCC Board of Directors

Eric Weller, Administrative Assistant
Vice President of Instruction

CLASSIFIED STAFF

Lindsey Aavang, Admissions and Records
Alma Aguiar, Library
Linda Andrus, Business Administration
Brad Barnett, Campus Services
Otis Bass, Library
Barbara Bellinger, Foundation
Jennifer Beltis, Admissions and Records
Linnea Berg, Science
Sarah Bjornson, Financial Aid
Nancy Blair-Madison, Services for Students with Disabilities
Terri Botts, Office of Dean of Students
Daura Bowman, Nursing
Renee Brazeau-Asher, Mathematics
Cheryl Britton, DRCI
Albert Brooks, Jr., Campus Services
William Bryan, Campus Services
Scott Burge, Information Technology Services
Roxanne Burger-Wilson, Bookstore
Laura Cain, Natural & Industrial Resources
Lisa Camp, Culinary
William Campbell, Campus Services
Erika Carman, Instruction
Lisa Chitwood, Bookstore
Dana Christensen, Instructional Deans
Katharine Condon, Small Business Development
Deena Cook, Cascade Culinary Institute
Tracy Crockett, Redmond Campus
Stephen Craig, Campus Public Safety
Morgan Cyrus, Information Technology Services
Ken Davis, Maintenance
Alexander Dean, Public Safety
Felipe Delatorre, Admissions and Records
Kate Donahue, Residence Hall
David Donovan, Public Safety
Julia Dumas, Bookstore
Kristi Dunlap, Social Science
Sara Evans, World Languages and Cultures
Andrew Fegette, Testing and Tutoring
Jo Fief, College Relations
Angela Filler, Health and Human Performance
Anne Fineran, Fiscal Services
Janis Fisher, Fiscal Services
Kristina Fisher, DRCI
Emily Fitch, Student Life
Brian Flener, Campus Services
Jeffery Fortenberry, Campus Services
Susan Galecki, Institutional Effectiveness
Caitlyn Gardner, Campus Services
Patricia Givens, Library
Judith Gonzalez, Adult Basic Skills
Ryan Goold, Science
Miu Green, Redmond Campus
Matthew Greenleaf, Health and Human Performance
Mary Beth Hamilton, Library
Derwyn Hanney, Campus Services
Colette Hansen, Fine Arts
Denise Hatch, Admissions and Records
Karl Heeren, Campus Services
Eugen Helmbrecht, Information Technology Services

Sean Hoxie, Campus Services
Steven Huddleston, Print/Mail Services
Yasuko Jackson, Academic Computing Support
Lisa Jaschek, Admissions and Records
Jessica Johnson, Admissions and Records
Mark Johnson, College Relations
Lloyd Johnston, Campus Services
Steven Johnston, Campus Services
Jennifer Jordan, Computer and Information Systems
Steven Julian, Campus Services
Laurel Kent, Information Technology Services
Julie Kohl, Financial Aid
Cady-Mae Koon, Information Technology Services
Justin Koon, Information Technology Services
Dianne Kristiansen, Humanities
Melinda Kruse, Fiscal Services
Krista Leaders, Instructional Deans Office
Deborah Lehto, Financial Aid
Tina Leslie, Tutoring and Testing
Samantha Loza, CAP Services
John Lutje, Campus Services
Stella Mackey, Admissions and Records
Lisa MacLellan, Science
Sonya Madrid-Sotelo, Campus Services
Marcie Masood, College Relations
Jenna Mattox, Admissions and Records
Christopher March, Campus Public Safety
Samantha McGraugh, Bookstore
Trina McLaughlin, Science
Annalysia Mewes, Madras Campus
Raquel Meyers, Allied Health
Galit Miller, Aviation
Kevin Miller, Natural and Industrial Resources
Melissa Monette, Admissions and Records
Brian Nelson, Redmond Campus
Courtney Nolta, Admissions and Records
William Orchard, Campus Services
Rebecca Oprish, Human Resources
Tracy Panter, Student Life
Mindalay Perez, Admissions and Records
Kayla Pierce, Campus Services
Susan Pierce, Financial Aid
Cheryl Pitkin, Health and Human Performance
Michael Perry, MATC
Kevin Quick, Campus Services
Marla Railey, Prineville Campus
Tom Reed, Campus Services
Vallard Reed, Campus Services
Leon Renfro, Campus Services
Darrin Reynolds, Campus Services
Linda Robson, Continuing Education
Vigil (Joe) Romero, Campus Services
J.C. Root, Information Technology Services
Michelle Ruebush, Natural & Industrial Resources
Christin Sands, Campus Services
JoAnn Seeley, Copy Center and Mail Services
Linda Skladal, Library
Arin Starnes, Campus Services
Craig Starnes, Campus Services
Cristi Steiert, Continuing Education
Leilani (Lani) Sykes, Redmond Campus
Lora Szaraniec, College Relations
Gail Tague, Bookstore
Ramiro Terrazas, Campus Services
Tracy Thille, Redmond Campus
Bruce Thompson, Information Technology Services
Roger Thorsvold Jr., Public Safety
Jennifer Timm, Fiscal Services
Christopher Tippets, Campus Services
Erin Trimble, Services for Students with Disabilities
George Ullrich-Berry, Campus Services
Moises Viramontes, Campus Services
Elizabeth Voigt, Financial Aid

Erica Waldbillig, Office of the CFO
Heidi Weaver, Human Resources
Kirsteen Wolf, Campus Services
Susan Wood, Continuing Education

CLASSIFIED EMPLOYEE OF THE YEAR

Central Oregon Community College recognizes one Classified Association employee each year for outstanding service to COCC and its students. Those who have been honored are:

2006 DeAnna Metcalf, Enrollment Services
2007 Jan Fisher, Fiscal Services
2008 Sallie Wetherbee, Social Sciences
2009 Michele DeSilva, Library
2010 Bonnie Steiner, Campus Services
2011 Renee Brazeau-Asher, Math/Computer Science
2012 Dianne Reingold, Enrollment Services
2013 Clifford Reid, Campus Services
2014 Marcia McCullough, Information Technology Services
2015 Ken Harmon, Information Technology Services
2016 Elaine Simay-Barton, Administrative Assistant for Science
2017 Lydia Hernandez, Administrative Assistant, Health and Human Performance
2018 Derwyn Hanney, Campus Services

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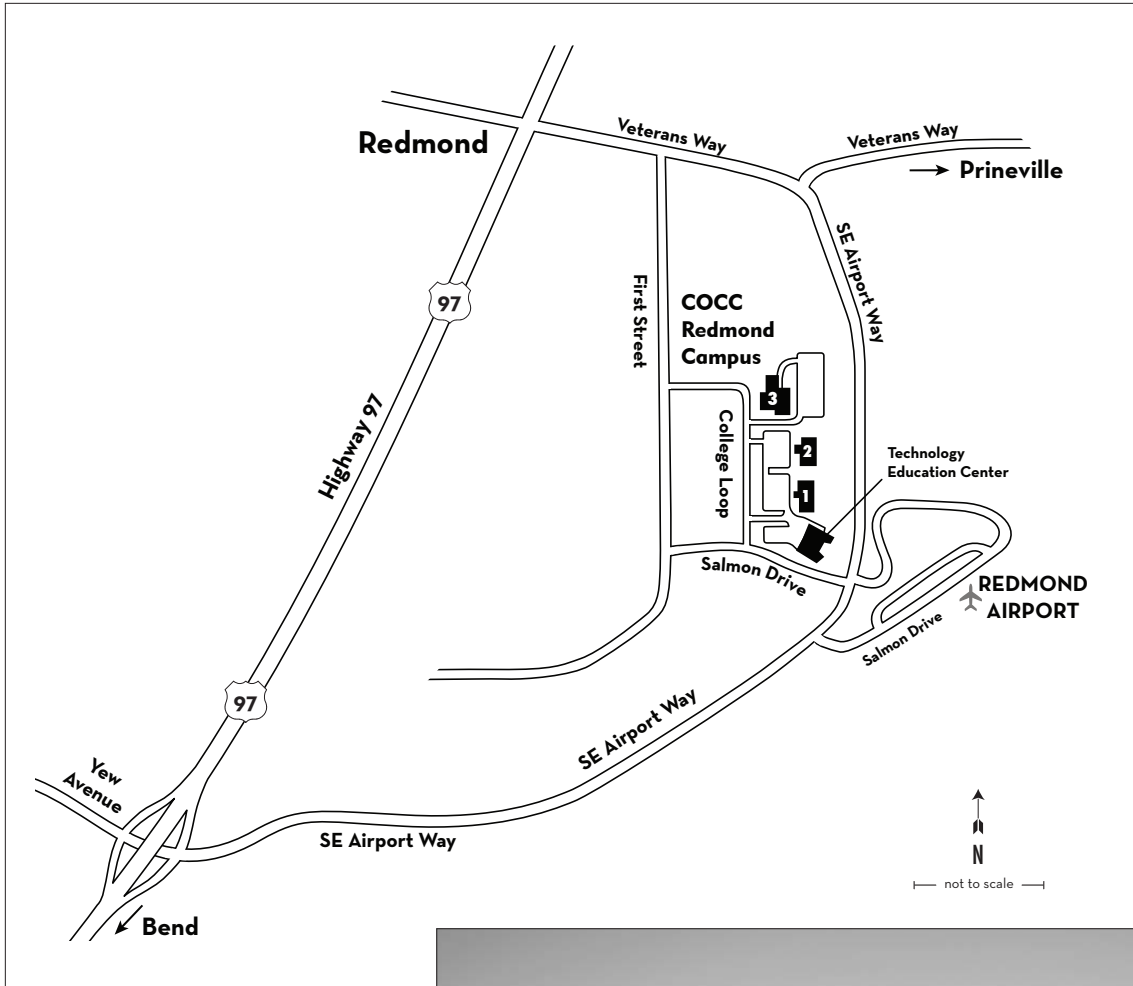Withdrawal Penalty 11
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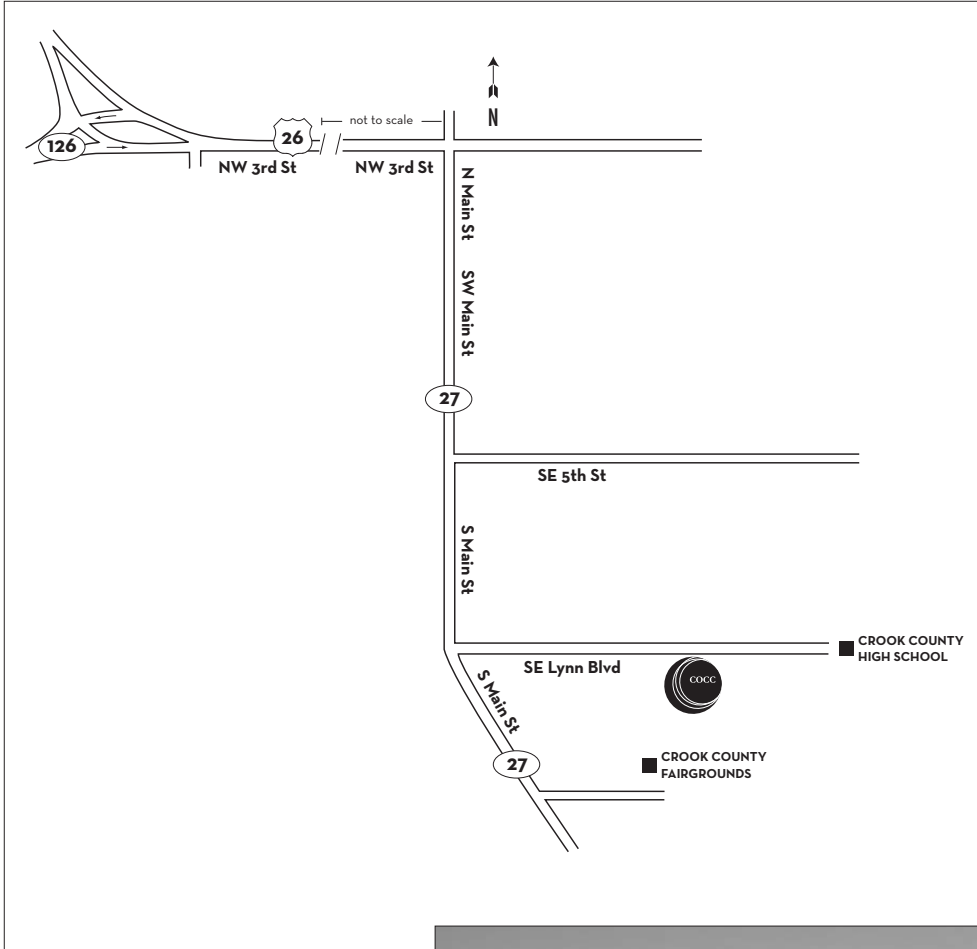
Y
Youth Programs/Youth Camp 4

REDMOND CAMPUS
2030 SE College Loop
Redmond, Oregon 97756
cocc.edu/redmond

CROOK COUNTY OPEN CAMPUS

510 SE Lynn Blvd

Prineville, Oregon 97754

cocc.edu/prineville

126

26   not to scale

NW 3rd St   NW 3rd St

N

N Main St

SW Main St

27

SE 5th St

S Main St

S Main St

27

SE Lynn Blvd   COCC

CROOK COUNTY HIGH SCHOOL

CROOK COUNTY FAIRGROUNDS

MADRAS CAMPUS
1170 E Ashwood Road
Madras, Oregon 97741
cocc.edu/madras
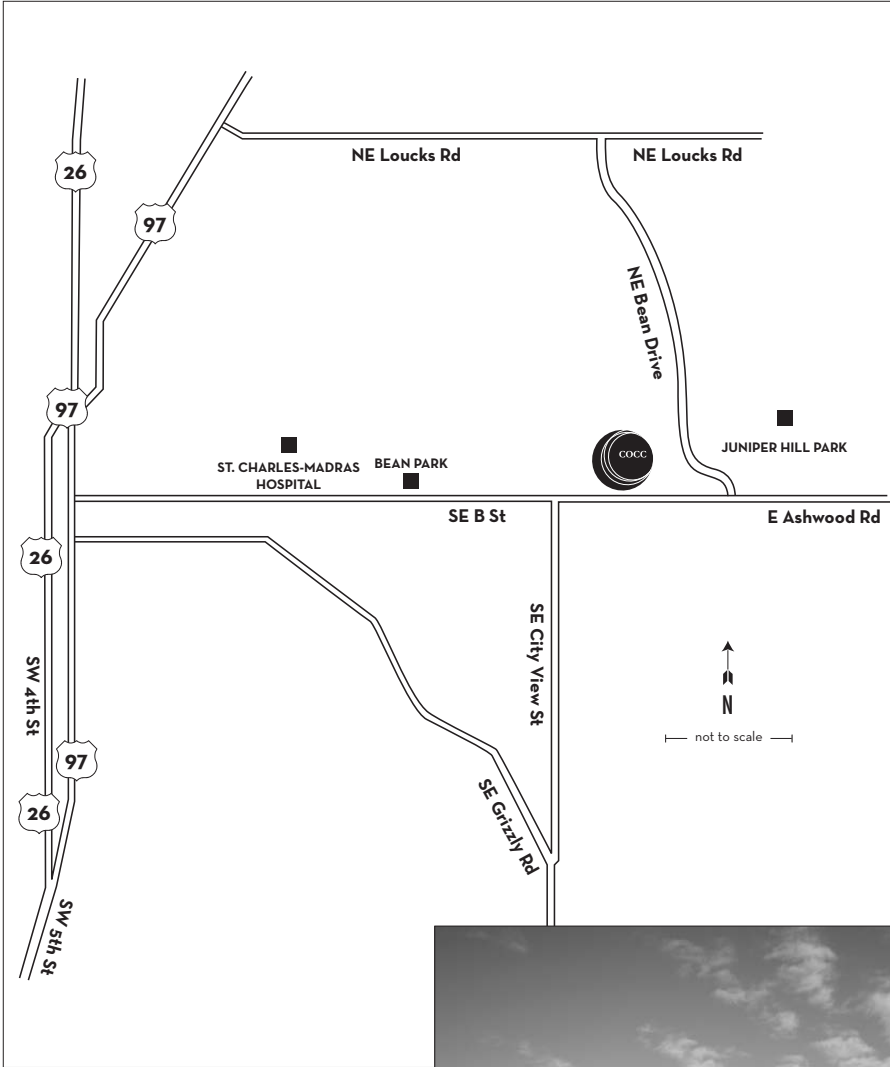
BEND CAMPUS BUILDING DIRECTORY

1. **Boyle Education Center**
   Admissions
   Cashier
   Christiansen Board Room
   COCC Foundation
   College Relations
   Enrollment Services
   Financial Aid
   Grants
   Information Office
   Institutional Effectiveness
   President's Office
   (Campus) Public Safety
   Registration/Student Records
   VP for Administration

2. **Ponderosa**
   Automotive
   CAD/GIS
   Fire Science

3. **Mazama**
   Classrooms/Faculty Offices
   Dance Studio
   Fitness Center
   Gymnasium
   Health & Human Performance

4. **Physiology Lab**

5. **Metolius**
   Adult Basic Skills Office
   Classrooms
   Fiscal Services
   Instructional Deans
   VP for Instruction

6. **Des Chutes**
   Classrooms/Faculty Offices

7. **Modoc**
   Classrooms/Faculty Offices
   Social Science
   William Robinson Room
   World Languages & Cultures

8. **Jefferson**
   Classrooms/Faculty Offices

9. **Pinckney Center**
   Art Gallery

10. **Pence**
    Classroom/Faculty Offices
    Fine and Performing Arts
    Photography Lab

11. **Juniper Hall**

12. **Grandview**
    Business Administration
    Classrooms/Faculty Offices
    Grandview Math Tutoring Lab
    Mathematics

13. **Ochoco Annex**

14. **Ochoco**
    Classrooms/Faculty Offices
    Humanities

15. **Pioneer**
    Classrooms/Faculty Offices
    Computer and
       Information Systems
    Computer Lab
    Information Technology
    Health Information Technology
    Hitchcock Auditorium

16. **Newberry**
    Bookstore
    Chief Financial Officer
    Contracts and
       Risk Management
    Copy Center
    Human Resources
    Mail Services
    Payroll

17. **Tennis Courts**

18. **Track**

19. **Physical Plant**
    Custodial Services
    Maintenance

20. **Campus Services**
    Facility Scheduling

21. **Barber Library**
    Classrooms/Faculty Offices
    Computer Lab
    eLearning
    Louis B. (Bart) Queary Room
    Max Merrill Conference Room
    Oregon Rooms
    Services for Students
       with Disabilities
    Tutoring & Testing Center

22. **Cascades Hall**
    CAP Services
    Forestry
    Paramedicine
    University Programs

23. **Coats Campus Center**
    Dean of Student &
       Enrollment Services
    Food Service
    Latino Program
    Multicultural Center
    Native American Program
    Student Government
    Student Life Office
    The Broadside, student newspaper
    Wille Hall

24. **Health Careers Center**
    Allied Health
    Classrooms/Faculty Offices
    John Overbay Conference Room
    Nursing

25. **Science Center**
    Classrooms/Faculty Offices
    Science

26. **Wickiup Residence Hall**

27. **Jungers Culinary Center**

PHONE DIRECTORY

Campus Switchboard 541.383.7700

Adult Basic Skills/GED 541.504.2950
ASCOCC Student Government 541.383.7595
Broadside Student Newspaper 541.383.7252
CAP Services
   (Career services,
   Academic advising and
   Personal counseling) 541.383.7200
Club Sports/Intramurals 541.383.7794
COCC Foundation 541.383.7225
Continuing Education 541.383.7270
Dean of Student and
   Enrollment Services Office 541.383.7211
Enrollment Services 541.383.7500
Financial Aid 541.383.7260
Fine Arts and Communication 541.383.7510
Human Resources
   (personnel/employment) 541.383.7216
Information Office 541.383.7596
Latino Student Program 541.318.3726
Library 541.383.7560
Multicultural Activities 541.383.7412
Native American Program 541.318.3782
President's Office 541.383.7201
(Campus) Public Safety 541.383.7272
Services for Students
   with Disabilities 541.383.7583
Spanish Language Phone 541.318.3723
Student Life Office 541.383.7590
Tutoring and Testing Center 541.383.7539

Central Oregon Community College

2600 NW College Way
Bend, Oregon 97703

cocc.edu

541.383.7700

NEWPORT AVE.

PORTLAND AVE.

SHEVLIN PARK RD.

distance to COCC campus not to scale

COLLEGE WAY

LOOP ROAD

LOOP ROAD

COLLEGE RECEIVING ROAD

COLLEGE WAY

NW FAWN RUN

NW REGENCY ST.

ENTRANCE FROM MT. WASHINGTON DRIVE

CAMPUS VILLAGE WAY

CAMPUS VILLAGE WAY

SCHOLARS LANE

SHEVLIN PARK RD

MT. WASHINGTON DRIVE

ENTRANCE FROM MT. WASHINGTON DRIVE

distance to COCC campus not to scale

N

BUILDINGS
SIDEWALKS
STUDENT/COLLEGE PARKING
FACULTY/STAFF PARKING
ROADS
RESIDENT PARKING
RESTRICTED AREAS

Campus map revised June 2018

2018-19 Catalog Addendum

Central Oregon Community College makes every effort to publish an accurate and comprehensive catalog. Occasionally, changes or additions need to be made to a published catalog; COCC reserves the right to make any necessary changes.

Contents

A. Additions to the course descriptions originally published on pages 131 to 215

ARH 180 - CO-OP WORK EXPERIENCE ART HISTORY
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

ART 180 - CO-OP WORK EXPERIENCE ART
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

BA 298 - INDEPENDENT STUDY: BUSINESS
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

DA 180 - CO-OP WORK EXPERIENCE DENTAL ASSISTING
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

DA 188 - SPECIAL STUDIES: DENTAL ASSISTING
Explores topics of current interest in the discipline.
Credits: 1 to 4

DA 298 - INDEPENDENT STUDY: DENTAL ASSISTING
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

EC 280 - CO-OP WORK EXPERIENCE ECONOMICS
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

ENG 180 - CO-OP WORK EXPERIENCE ENGLISH AND LITERATURE
Provides experience in which students apply previous classroom learning in an occupational setting.
Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

FA 288 - SPECIAL STUDIES: FILM ARTS
Explores topics of current interest in the discipline.
Credits: 1 to 4

FA 298 - INDEPENDENT STUDY: FILM ARTS
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special
interest to a student. Prerequisites: Instructor approval. Recommended preparation: Prior coursework in
the discipline.
Credits: 1 to 4

FA 299 - SELECTED TOPICS: FILM ARTS
This course is in development.
Credits: 1 to 4

FOR 298 - INDEPENDENT STUDY: FORESTRY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special
interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior
coursework in the discipline.
Credits: 1 to 4

HM 188 - SPECIAL STUDIES: HOSPITALITY MANAGEMENT
Explores topics of current interest in the discipline.
Credits: 1 to 4

HM 199 - SELECTED TOPICS: HOSPITALITY MANAGEMENT
This course is in development.
Credits: 1 to 4

HS 188 - SPECIAL STUDIES: HUMAN SERVICES
Explores topics of current interest in the discipline.
Credits: 1 to 4

HS 280 - CO-OP WORK EXPERIENCE HUMAN SERVICES
Provides experience in which students apply previous classroom learning in an occupational setting.
Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

HUM 280 - CO-OP WORK EXPERIENCE HUMANITIES
Provides experience in which students apply previous classroom learning in an occupational setting.
Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

HUM 298 - INDEPENDENT STUDY: HUMANITIES
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special
interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior
coursework in the discipline.
Credits: 1 to 4

LMT 298 - INDEPENDENT STUDY: MASSAGE THERAPY
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special
interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior
coursework in the discipline.
Credits: 1 to 4

MA 188 - SPECIAL STUDIES: MEDICAL ASSISTING
Explores topics of current interest in the discipline.
Credits: 1 to 4

MA 280 - CO-OP WORK EXPERIENCE MEDICAL ASSISTING
Provides experience in which students apply previous classroom learning in an occupational setting.
Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

MA 298 - INDEPENDENT STUDY: MEDICAL ASSISTING
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special
interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior
coursework in the discipline.
Credits: 1 to 4

MA 188 - SPECIAL STUDIES: MEDICAL ASSISTING
Explores topics of current interest in the discipline.
Credits: 1 to 4

MA 280 - CO-OP WORK EXPERIENCE MEDICAL ASSISTING
Provides experience in which students apply previous classroom learning in an occupational setting.
Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

MA 298 - INDEPENDENT STUDY: MEDICAL ASSISTING
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

MTH 280 - CO-OP WORK EXPERIENCE MATHEMATICS
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

MTH 298 - INDEPENDENT STUDY: MATHEMATICS
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

MUS 280 - CO-OP WORK EXPERIENCE MUSIC
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

PHM 180 - CO-OP WORK EXPERIENCE PHARMACY TECHNICIAN
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

PHM 188 - SPECIAL STUDIES: PHARMACY TECHNICIAN
Explores topics of current interest in the discipline.
Credits: 1 to 4

PHM 199 - SELECTED TOPICS: PHARMACY TECHNICIAN
This course is in development.
Credits: 1 to 4

PHM 298 - INDEPENDENT STUDY: PHARMACY TECHNICIAN
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

PSY 288 - SPECIAL STUDIES: PSYCHOLOGY
Explores topics of current interest in the discipline.
Credits: 1 to 4

SFS 280 - CO-OP WORK EXPERIENCE STRUCTURAL FIRE SCIENCE
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

SFS 298 - INDEPENDENT STUDY: STRUCTURAL FIRE SCIENCE
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

SOC 188 - SPECIAL STUDIES: SOCIOLOGY
Explores topics of current interest in the discipline.
Credits: 1 to 4

SOC 280 - CO-OP WORK EXPERIENCE SOCIOLOGY
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

TA 299 - SELECTED TOPICS: THEATER ARTS
This course is in development.
Credits: 1 to 4

VT 298 - INDEPENDENT STUDY: VETERINARY TECHNICIAN
Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Prerequisites: Instructor approval. Recommended preparation: prior coursework in the discipline.
Credits: 1 to 4

WF 280 - CO-OP WORK EXPERIENCE WILDLAND FIRE
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

WR 280 - CO-OP WORK EXPERIENCE WRITING
Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. P/NP grading. Prerequisites: Instructor approval.
Credits: 1 to 4

B.   Addition of a Special Curriculum section (addresses Non-credit Training Certificates)

Special Curriculum

Continuing Education Non-credit Training Certificate (NCTC)

A "Non-credit Training Certificate" is a form of recognition awarded by a community college comprised of a single stand-alone course or a series of courses that do not offer college credit for completion. An assessment of measurable outcomes or mastery of learning or knowledge is required. OAR 589-006-050 (36)

NCTCs provide documentation of skill attainment for specific occupational employment needs. "Attendance only" classes do not qualify for the Non-credit Training Certificate.

Continuing Education Rules Associated with NCTC

ADMISSION:

As with all non-credit Continuing Education courses and programs at COCC, there is no formal application or admission process. However, Non-credit Training Certificate programs may have specific entrance requirements and/or pre-requisites that are noted in each NCTC Program Guide. NCTC Program Guides are published at www.cocc.edu/departments/continuinged/NCTC .

REGISTRATION & REFUND POLICY

Pre-registration is required for all classes. Registration is through the Central Oregon Community College Continuing Education department. Payment or arrangement for payment is required at the time of registration. Cancellations received five days prior to the start of the class will receive a full refund. Students must cancel by contacting Continuing Education via phone 541-383-7270 or email: ceinfo@cocc.edu . Full refunds are also issued for any class cancelled by COCC. Refunds will be issued to the credit card used at time of registration or via check if paid by check or cash. Refund checks will be mailed within two weeks of the cancellation date. Failure to participate in a course or program does not result in a refund (and will affect the final grade). Exceptions to the general refund policy are noted in course descriptions on the COCC Continuing Education website and in the printed schedule of classes.

STUDENT RECORDS

Upon successful completion of a Non-credit Training Certificate, students will receive a printed certificate. Program outcome objectives will appear on the back of the original certificate. Grades will be indicated on the COCC non- credit transcript for the courses involved in the NCTC program. Transcripts may be ordered through Admissions & Records as indicated on this web page: https://www.cocc.edu/departments/admissions/grades-and-student-records/request-a-transcript.aspx.

PROGRAM STANDARDS

Students enrolled in courses that are part of a Non-credit Training Certificate Program will receive a Pass/No-Pass Grade on the official COCC non-credit transcript, based on specific course assessments stated under each program. Non-credit Training Certificate grades are transcribed on an official college non-credit transcript and are indicated as P for a passing grade, NP for a non-passing grade and In

Progress for incomplete or in progress work. Program standards for each specific Non-credit Training Certificate are listed in each NCTC Program Guide.

SCHOOL CALENDAR
COCC Continuing Education maintains a website with current and future course scheduling www.cocc.edu/departments/continuinged . Non-credit Training Certificate Programs are offered based on industry needs rather than a defined college term basis. Specific dates are identified in each NCTC Program Guide and include total number of clock hours for each NCTC.

STUDENT CODE OF CONDUCT
Students will adhere to COCC general policies on conduct and academic honesty. Non-credit Training Certificate Programs impose expectations of student conduct in support of and in alignment with the broader reaching [COCC Student Rights and Responsibilities](#).

SATISFACTORY ACADEMIC PROGRESS
The COCC Continuing Education Department will hold all NCTC students accountable for the Continuing Education Satisfactory Academic Progress standard. Instructors meet with students on a regularly scheduled basis to assess progress. NCTC Program Guides list each program's standards for SAP.

CREDIT FOR PRIOR LEARNING
Students entering a Non-credit Training Certificate program at COCC may receive Credit for Prior Certification (CPC) towards their NCTC, awarded as non-credit and applied to their non-credit record, if they have completed a course, training or other program that is taught to state, national or other officially recognized standards. Credit is not awarded for other life experiences. Students interested in receiving Credit for Prior Certification must submit official copies of prior certifications to the Continuing Education office, along with a Credit for Prior Certification Approval Form. The student will return the signed form and copy of the certification to the Continuing Education office, to be reviewed and approved or denied by the Continuing Education Director. At the time CPC is approved, the student pays a $40/certification fee prior to having certification recorded and/or transcribed.

CPC will be evaluated and awarded on a one-to-one basis. Certifications considered must be current and active. Expired certifications are not eligible for credit. Existing certifications must be the same certifications required by the NCTC program. CPC will be awarded only to students currently enrolled in a NCTC program at COCC.

DISMISSAL FROM PROGRAM
Because Non-credit Training Certificate programs are short-term and competency-based, it is imperative that students participate in classes. Absence from greater than 10% of required course hours will be grounds for a failing grade. Attendance will contribute to the overall grade in all NCTC classes. For example, a student would need to participate in a minimum of 27 hours of a 30 hour class to be eligible for a passing grade in addition to receiving satisfactory grades on projects and assessments.

If student behavior violates the COCC Student Code of Conduct, the student's case will be referred to the college's Director of Student Life for investigation and review. All NCTC student Code of Conduct review and disciplinary procedures will follow standard college policy.

READMISSION

Non-credit Training Certificate programs are short-term and are offered on an "as-needed" basis according to regional business and industry demand. Readmission into a NCTC program after dismissal is not guaranteed. Before registering for a subsequent NCTC program following a formal dismissal, the student must submit an appeal to the Continuing Education Director.