

## WELCOME TO COCC

For nearly 60 years, Central Oregon Community College has provided a wide range of learning opportunities for the citizens of the COCC District, a geographic area that covers more than 10,000 square miles. The College's mission is to "be a leader in regionally and globally responsive adult, lifelong, postsecondary education for Central Oregon."

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.

The College's programs include:

## Transfer/lower division education

Courses and programs paralleling the freshman and sophomore courses of colleges and universities for those who seek to transfer and then earn a baccalaureate degree.

## Professional technical education

One- and two-year professional training programs for those who seek certificates or degrees that lead to employment in business, industry, the trades or government service as technicians or skilled workers.

## Continuing and Community Education

Noncredit learning opportunities at times and places convenient to adult students, using traditional and nontraditional instructional techniques. Course topics range from computers to cooking and language instruction to business training.

## Student Services

Programs and services to support and enhance students' lives and academic success while in college.

## Options for high school students

Central Oregon high school students can earn college credit by participating in any of several COCC programs. Concurrent Enrollment allows students to take courses on the Bend or Redmond campus while some Central Oregon high schools offer college-level general education and professional technical classes in the high schools. See pages 6 and 7 for more information.

## 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 was built in 1963.

Don 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 is now 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.

## BOARD VISION AND GOALS

## Mission statement

COCC will be a leader in regionally and globally responsive adult, lifelong, postsecondary education for Central Oregon.

## Vision statement

Because of COCC, Central Oregonians will . . .

- be a districtwide community that holds and promotes lifelong postsecondary education and ongoing professional growth and personal development for adults as values;
- be able to connect actively with other communities, the state, the nation and the world in order to attain both locally strong and globally responsible perspectives;
- view education as integral to a sense of well-being, security and responsibility; and
- look to COCC to lead the region in the achievement of these ends.


## Ends statements/goals

Because of COCC, Central Oregon communities will...

- have an adult population with the proficiencies and learning skills necessary for lifelong employment at a family wage level.
- have an adult population with academic achievements and learning skills necessary to successfully pursue education at and beyond the community college level.
- work collaboratively to achieve shared purposes.
- have wide-ranging opportunities to enhance learning, wellness, quality of life, and cultural appreciation.
- support diversity; and interact effectively with state, regional, national and global communities.


## OUR CAMPUS

The College's main campus is located on the western edge of Bend, a city known for its natural beauty and its 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 22 buildings with a total of 423,982 square feet under roof.

On the 25-acre Redmond Campus, there are three buildings, including the Redmond Workforce Connection, which offers convenience to residents looking for education and training opportunities; and the Manufacturing and Applied Technology Center (MATC), housing College administration, classrooms and the manufacturing program.

## BARBER LIBRARY

COCC's three-story, 72,000-square-foot Barber Library opened in March 1998 and serves the students, faculty and staff of COCC and OSU-Cascades Campus.

The Barber Library collection contains more than 76,400 book titles and 400 periodical titles, including 16 newspapers, as well as an open-stacks collection of audio-visual materials including videos, DVDs, CDs and audiotapes. The library is a selective depository for U.S. federal documents and databases. In addition, it offers a wide array of electronic resources, all accessible through the main Library Web page at http:// campuslibrary.cocc.edu/.

COCC is a member in the Orbis Cascade Alliance, a consortium of college and university libraries in the Northwest that provides such services as the Summit union catalog, Summit Borrowing, and database licensing opportunities. There are only four other Northwest community colleges with membership in the Alliance.

Summit catalog is accessible from the main Library Web page at http://campuslibrary.cocc.edu/. Current, credit-enrolled students, faculty and staff of COCC and OSU-Cascades Campus may search and self-initiate loan requests for most of the 25 million Summit items. Once patrons identify material that they want to borrow, they simply follow the on-screen instructions. Materials are then delivered for pick up at the Library circulation desk within a few working days.


In addition to traditional research tools such as encyclopedias and other print reference sources, the Barber Library offers a variety of research tools via the Web. These include general and subject-specific periodical databases (many of which provide fulltext articles), electronic encyclopedias, statistical databases and a variety of other online tools. The Barber Library collection also includes many electronic journals and books. Students can access most of these resources off campus via the Internet.

The Barber Library is equipped to provide wireless network access to registered users including COCC and OSU-Cascades patrons as well as community patrons and campus visitors. For more information, please refer to the Wireless Network Web page at http://its.cocc.edu/services/wireless/.

Each year the Barber Library hosts art exhibitions in the Rotunda Gallery, as well as poetry readings and special events in the Reading Room and the Oregon Room.

## ACCREDITATION

Central Oregon Community College is fully accredited by the Northwest Commission on Colleges and Universities. This accreditation is an official expression of full confidence in the integrity of COCC's instructional and administrative practices. It means that the transferable credits earned are accepted at any other accredited college or university in the United States. This full accreditation was reaffirmed in 2002.

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

## OUR FACULTY

COCC has 97 full-time faculty members, 32 adjunct faculty (semi-permanent faculty on annual contracts) and approximately 200 part-time instructors. 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, a very high percentage for a community college.

## OUR STUDENTS

Nearly 7,000 students enrolled in credit classes at COCC last year. Each quarter, approximately 1,700 full-time and 2,700 part-time students enroll. While half of the students are under the age of 24 , another quarter are over 32 . About one-third of the students enroll in professional-technical programs and take career-oriented courses of study. The remainder enrolls in courses which 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

The COCC Foundation is the oldest community college foundation in Oregon and has the largest endowment. It is a nonprofit corporation, separate from the College, dedicated to assisting the College and its students through developing private resources, especially through raising funds. Many Central Oregonian residents volunteer to assist with its fund-raising programs, including the annual Meal of the Year dinner.

The Foundation's assets have grown significantly over the years, from the first gift of $\$ 500$ in 1955 to the current endowment of more than $\$ 10$ million. It is a major source of support for student scholarships and endowments for the College's special needs, such as library collections, symphony and the Nancy R. Chandler Visiting Scholar Program. In 2006-2007 the Foundation awarded 300 scholarships to COCC students, totaling more than $\$ 500,000$. For more information, call (541) 383-7225.

## COMMUNITY LEARNING

Community Learning offers a wide variety of innovative, highquality, community-driven, affordable classes and events to adults throughout the District. Classes include opportunities to stay current in one's job skills, engage in a new hobby or expand outdoor activities.

## Registration

Registration times and locations are provided on the College Web site, www.cocc.edu, and in the Community Learning class schedule, published each term. Registrations are processed as received. Students may register by phone, mail, fax, e-mail 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 classes or workshops.

## Contact information

Community Learning can be reached at (541) 383-7270, by e-mail at ceinfo@cocc.edu or by visiting the Web site at www.cocc.edu.

COCC also provides high-quality and highly interactive online class opportunities at http://ed2go.com/cocc. Every course offered has been carefully engineered to provide quick and easy access to all course materials - no matter what kind of computer or how slow an Internet connection.

## THE BUSINESS DEVELOPMENT CENTER

The Business Development Center helps build businesses by providing management assistance and resources to the business community, including:

- advising and workshops
- the expertise of area business people
- education and training opportunities
- business plan workbooks, videotape programs and other business management resources.

The Small Business Management program combines education and training (monthly workshops) with on-site business counseling to help small businesses reach their goals.

## ADULT BASIC EDUCATION (ABE)

The Adult Basic Education (ABE) program provides basic skills instruction in reading, writing, math, study skills and basic computer technology; General Education Development (GED) test preparation; and high school completion courses leading to a COCC high school diploma. English Language Learning
(ELL) classes are offered for those students who speak little or no English. Assessments are available to help students determine current skill levels and learning styles. Students may attend day or evening sessions. Students usually sign up for classes during class time. Please call the ABE office, (541) 504-2950, or see the ABE Web site at www.cocc.edu/abe for exact times and locations.

ABE curriculum is designed to lead students to college entry-level skills and knowledge in all secondary subject areas including reading, writing, math, study skills and basic computer technology. Students are frequently assigned trained volunteer tutors who assist the instructor and provide individual attention. Adults may earn high school diplomas by combining previously earned high school credits, completed coursework and documented life experiences. English language classes focus on listening and speaking skills and advance to reading and writing.

ABE Computer Labs provide access to distance learning services in La Pine, Madras, and Prineville. Students can use the computers to practice basic computer skills and improve skills in reading and math. Current schedules for the labs are available at www.cocc.edu/abe.

## REDMOND CAMPUS

COCC's Redmond Campus is located across from the Redmond airport. It lies in the center of the northern region of COCC's service district, a short commute from Prineville, Madras, Bend and Sisters. The Redmond Campus offers a variety of credit classes designed to provide general education requirements leading toward an Associate of Arts Oregon Transfer degree or related training for specialized degrees. Through instructional excellence, innovative programs and responsive services, the campus also provides classes in manufacturing technology, composites manufacturing, structural fire science, wildland fire science, business, personal enrichment, basic skills development, English Language Learning, computer and job training, as well as small business development services.

Student services available at the Redmond Campus include admissions information, placement testing, financial aid assistance and Foundation scholarship information, cashiering and academic advising.

For more information about programs, services and computer lab hours at COCC's Redmond Campus call (541) 504-2900 or visit our Web site at http://redmondcampus.cocc.edu/.

## OREGON STATE UNIVERSITY-CASCADES CAMPUS

OSU-Cascades Campus is currently the fastest growing university in Oregon. In collaboration with COCC and University of Oregon, OSU-Cascades offers more than 20 in-demand
bachelor's and master's degree options on one campus in Bend. Students admitted to OSU-Cascades take lower division classes from COCC, then, when ready for upper division classes, transition into the university offering the degree and academic program of their choice. The partnership between OSU-Cascades and COCC makes a four-year degree seamless and more affordable for students. Students can develop their academic potential while earning a degree from a school which is "Centered in Oregon, Centered on Students, Centered on Excellence." Students will find a personal approach to academics, including high-quality advising, small classes and creative course delivery that includes one-on-one learning with a world-class faculty.

Undergraduate degree options include:

- Art (BA/BS, Minors in Art History or Visual Arts)
- Business Administration (BS or Minor)
- English (Minor)
- General Science (BS, Minors in Biology, Chemistry, or Geology)
- General Social Science (BA/BS)
- History (Minor)
- Human Development \& Family Sciences (BS or Minor) options in Early Childhood Development and Education, Gerontology, Human Services
- Liberal Studies (BA/BS) Option in Pre-Education; Themes in American Studies; Community, Identity, and Place; Law and Politics
- Mathematics (BA/BS or Minor)
- Natural Resources (BS or Minor) options in Natural Resources Policy, Natural Resources Technology, Natural Resources Ecology, Natural Resources Conservation
- Outdoor Recreation Leadership \& Tourism (BS or Minor) options in Commercial Recreation Management and Tourism, Experiential Education, International Ecotourism
- Political Science (Minor)
- Psychology (BA/BS or Minor)
- Spanish (Minor)
- Speech Communication (Minor)

Graduate degree options include:

- Counseling (MS) concentrations in School Counseling, Community Counseling
- Education (MAT) authorizations in Early Childhood and Elementary.

OSU-Cascades fosters an environment that incorporates community, culture, the arts, recreation and the unmatched beauty of Central Oregon into the learning experience. It is proud to sponsor a variety of lectures, music and performance events, public forums and special events. For more information about OSUCascades, go to www.osucascades.edu or call (541) 322-3100.

## ENROLLMENT SERVICES - ADMISSIONS \& RECORDS/REGISTRATION

Central Oregon Community College is an open-door, equal-access institution. Enrollment Services is located in the Boyle Education Center. Services include: admissions, registration, student payment, financial aid, veterans' benefits, degree/ certificate evaluation, student records, grade reports and transcript requests.

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

## 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 Web site, www.cocc.edu, in the Boyle Education Center and the Redmond Campus. Note: All new students (those who have never taken credit classes at COCC) are required to submit a $\$ 25$ nonrefundable 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

Students transferring from another college or university must submit an application for admission, a $\$ 25$ application fee and all official transcripts from previous institutions.

## Students not seeking a certificate or degree

Many students take college credit classes 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 Class Schedule or College Web site for exemption criteria. Non certificate/degreeseeking students are not required to participate in advising but are welcome to do so.

## HIGH SCHOOL STUDENTS

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

## College Now/Tech Prep

The College Now/Tech Prep program is an opportunity for high school students to complete and receive COCC credit for certain COCC professional-technical courses completed in high school. COCC currently offers classes through the in-district
high schools in allied health, automotive, business, criminal justice, culinary, drafting, computer information systems, dental assisting, forestry, manufacturing and nursing. There is a fee of $\$ 20$ per course. Courses offered vary by high school. For more information, contact COCC's College Now/Tech Prep Coordinator at (541) 383-7782 or your high school counseling office.

## College Now/Transfer

COCC works with area high schools to offer college-level general education transfer courses in the high schools, taught by high school instructors exclusively for high school students. Tuition is only $\$ 15$ per credit, a savings of $\$ 207$ for a COCC four-credit course. Classes can be used to meet COCC certificate or degree requirements, as well as for transfer to community colleges and most universities across the U.S. For complete details and a listing of courses offered in your school, contact your high school counselor, call 504-2900 or visit the College Now/Transfer Web site at http://collegenow.cocc.edu. Courses are limited to high school juniors and seniors.

## Expanded options

High school students have the opportunity to take credit classes 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 your high school counselor or ASPIRE coordinator for more information on eligibility requirements.

## Concurrent enrollment

High school students who wish to take college classes while still attending high school may take up to 11 credits each term. The student is responsible for all tuition, fees, books and related expenses.

## Special admission

High school students who wish to take more than 11 credits must meet with and receive permission from the director of Admissions/Registrar prior to registering for classes. Requirements for gaining special admission status include minimum placement test scores and support of their high school counselor. Special admission is for students who demonstrate excellent preparation and unqualified readiness for college-level work.

Students who register under concurrent enrollment or special admission status 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 of the student. Although College staff can provide academic advising, it cannot interpret high school requirements or act in a supervisory role.

## STUDENTS UNDER AGE 15

Students under the age of 15 must meet with the director of Admissions/Registrar 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 concurrent enrollment form at the time of registration. See http://new.cocc.edu/High+School+Options/default.aspx for complete details.

Students under age 15 who register under concurrent enrollment or special admission status 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 of the student. Although College staff can provide academic advising, it cannot interpret high school requirements or act in a supervisory role.

## APPLICATION DATES

COCC accepts applications on a continuing basis and 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 Web site, www.cocc.edu, or the COCC credit class schedule. Note that new students will not be admitted after the first week of the term, except for the purpose of taking late-starting classes.

## PLACEMENT TESTING

Prior to registering for classes, all COCC credit students must take COCC's placement test to determine their skills in writing, reading and math. Scores from the test will serve as tools for students and advisors to use when choosing classes and planning academic schedules. The placement test is offered year-round and takes about two hours.

Students are exempt from the test if they:

- have an associate's, bachelor's or higher-level college degree and have submitted a copy of their transcript prior to advising and registration;
- have completed reading, writing and math classes with a "C" or better at another college and have submitted a copy of their transcript prior to advising and registration;
- have taken the placement test within the last two years and have submitted a copy of their testing scores prior to advising and registration; or
- are taking only studio art, foreign language, computer skills, music performance or PE activity classes.
Note: Placement test scores are recommendations only, with the exception of WR 121, MTH 105 and MTH 244.

See the COCC Web site, www.cocc.edu ("Prospective Students," "Getting Started"), for placement testing dates and reservations.

## ADVISING

Once placement testing is complete, all certificate- and degreeseeking students meet with an academic advisor. For new students, dates and times of group advising options are available on the COCC Web site. Current students should contact their advisor directly to schedule an advising appointment. Students can confirm the name of their advisor by contacting the CAP Center (located in the lower level of the Library) or by logging on to their Student Online Services account. All students who participate in group advising sessions will be mailed the name of an individual academic advisor, based on the major stated on their admissions application, shortly after the start of each term. Students can change their advisor by contacting the CAP Center, 383-7200.

Note: Current students may choose to be self-advised, meaning that the advising requirement is waived and students are responsible for choosing their classes and making sure that those classes fit their degree goal. To apply for and review the requirements for receiving self-advising status, visit the COCC Advising Web site, http://cap.cocc.edu.

## REGISTRATION

After submitting an application for admission, taking the placement test and meeting with an advisor (if applicable), students may register for classes based on the dates and times listed in the COCC class schedule. Students' registrations are complete only when courses are Web- or data-entered into COCC's computer 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 the Admissions and Records office.

## TUITION AND FEES

Tuition and fees are due by the second Friday of the term for fall, winter and spring terms, and by the second Monday for summer term. Payment may be made online with checking or savings account information, Visa 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 Enrollment Services by the tuition deadline (see inside front cover of this publication). 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, laboratory 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. For a course with unusually high costs associated in its offering, a tuition higher than the normal rate may be charged.

## TUITION PAYMENT PLAN

A tuition payment plan is available in Enrollment Services, Boyle Education Center, for students registered in six or more credits. To initiate a payment plan, students must complete a contract and pay $\$ 20$ plus one-third of tuition and fees by the tuition due date. The balance will be due by Aug. 1 for summer term, by Nov. 7 for fall term, by Feb. 27 for winter term and May 21 for spring term. A $\$ 50$ late fee is charged for payments made after the deadline.

## TUITION FOR CREDIT COURSES

For 2006-2007 (2007-2008 not yet determined)

## Fall, winter and spring

In district
Out of district
Out of state
International
Audit
(Summer term only: all students pay in-district tuition)
*CA, ID, NV \& WA residents are charged out-of-district tuition
Check the COCC credit class schedule for courses that require additional tuition and fees. There are program fees in the following areas: Art, Career/Life Planning, Culinary, Dental Assisting, Emergency Medical Services, Health and Human Performance, Massage Therapy, Nursing and all online classes.

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

ASCOCC fee (max. $\$ 21$ per term)
Technology fee (max. $\$ 20$ per term) Green Energy fee
$\$ 1.50$ per credit
$\$ 2$ per credit
25 \$ per credit
$\$ 63$ per credit hour $\$ 86$ per credit hour $\$ 176$ per credit hour* $\$ 176$ per credit hour same as for credit

Online course fee (applies to online courses only) \$10 per credit Optional Mazama user fee (per term) \$16
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 Continuing Education courses

$\begin{array}{lc}\text { Community Learning course fees } & \text { vary } \\ \text { Adult Basic Education basic skills classes } & \text { free }\end{array}$
English Language Learning classes \$15
GED prep classes
High school completion
$\$ 30$ per term $\$ 90$ per half credit

## NSF 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 (or payee) will only be allowed to pay tuition and fees with cash for one year.

## COLLECTIONS POLICY

If a student fails to pay his/her tuition by the end of the term, the balance due amount will be turned over to the Oregon Department of Revenue for collections. At that time, 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 classes and order official transcripts.

## 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.

All instructors will administratively withdraw a student from full-term classes if the student does not attend 100 percent of class meetings and associated labs during the first week of each term. Additionally, all instructors will administratively withdraw a student from part-term classes (those which do not span the entire term) if the student does not attend the first class session. Students who are unable to attend the first class meeting must contact the instructor by phone, fax, e-mail or in person prior to the first class meeting if they wish to avoid administrative withdrawal.

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 class within the given deadline to not incur tuition charges and to not receive a grade for the class.

## ADDING AND AUDITING CLASSES/WAIT LISTS

Classes may be added until 7 a.m. on the day of the first class session. After this time, an instructor's signature is required to add a course. Students may add classes via their Student Services Account or in person at Boyle Education Center or at the Redmond Campus. A late registration fee of $\$ 30$ will be assessed for any classes added after the second week of the term; $\$ 50$ will be assessed for an approved petition to add a class after the final exam rosters have been run.

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 classes

Full-term classes may be changed to/from audit through the seventh week of the term and must be done in person. Audit classes do not apply toward financial aid. Note: Different deadlines exist for short-term and summer classes; contact the Admissions and Records Office, (541) 383-7500, for details.

## Wait lists

Students who are on a wait list for a class will need to take a registration form to the first class session. If a seat is available, the instructor must sign the registration form. The student then submits the registration form in person to Enrollment Services within two days. Names will not be added to wait lists after classes have started.

## DROPPING CLASSES/COMPLETE WITHDRAWAL

Students registered in classes are considered in attendance. Students who stop attending class but do not submit a drop form will receive a grade for that class 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 classes, complete the drop section on a registration form and submit it in person to Boyle Education Center or at the Redmond Campus. Drop forms may not be mailed or faxed, but students may call the Admissions and Records Office, (541) 383-7500, and drop a class over the phone.

## Short-term courses

- For a refund or credit for courses with only one, two or three class meetings, students must submit a drop form at least seven (7) days before the first class meeting.
- For a refund or credit for courses with four or more class meetings, but which do not span the full term, students must drop the course prior to the start of the second class.



## Full-term classes

Students may drop a class during the first two weeks of the term and receive a full refund, and no grade will appear on the student transcript (for summer term, students must drop by the second Monday of the term). Between the third week and the end of the seventh week of the term, students can drop a class; no refund is available, but no grade will appear on the transcript. From the eighth week of the term through the Wednesday before finals week, a student may submit a drop form, with an instructor's signature; no refund is available and a "W" will appear on the student transcript. No withdrawals will be accepted after this time or after a class has ended. See the COCC credit class schedule for specific dates. Note that different deadlines exist for short-term and summer classes; contact Admissions and Records, (541) 383-7500, for details.

## Complete withdrawal

Students receiving federal financial aid may owe a repayment if they completely withdraw from classes. See Enrollment Services - Financial Aid (page 13) for details.

## TUITION REFUNDS FOR CREDIT CLASSES

To qualify for a refund, the student is responsible for submitting a drop form to Enrollment Services by 5 p.m. on the deadline day; see the inside front cover of this publication for drop deadlines. (Note that drop deadline dates are also posted on the student's "Detailed Class Schedule," available by logging into the student's Student Online Services account.) Any debt owed the College will be processed against the refund first, with the net balance remitted to the student within a reasonable processing period.

Please review carefully the attendance policy on page 8 of this catalog.

## Short-term class refunds

To receive a tuition refund for courses with only one, two or three class meetings, students must submit a drop form at least seven (7) days before the class begins.

For courses that have four or more class meetings, but do not span the full term, tuition is refundable up to the beginning of the second class meeting. Some specially priced classes do not follow this policy.

## Full-term class refunds

Tuition is refundable up to $5 \mathrm{p} . \mathrm{m}$. on Friday of the second week of the term (second Monday of summer term). No portion of the tuition is refundable after this date. Students who fail to drop a class by this deadline will be responsible for tuition payment, and late payment fees will be charged to their account.

Students with federal financial aid may owe a repayment if they completely withdraw from classes. See Enrollment Services - Financial Aid, page 13, for details.

## COCC TRANSCRIPTS

Transcripts must be requested by students via their secure online student account, in person in the Enrollment Services office, or in writing. Transcript requests to be held until after grades or a degree is posted must be requested in person or in writing (option not available via the Web). The transcript processing fee must be paid before transcripts are mailed. No transcripts will be processed during the first week of each term.

## Processing fees

Online request (processed next business day) $\$ 5$ per transcript
In-person, faxed or mailed request (processed 7-10 working days) first transcript \$5 each additional transcript ordered at same time \$1 Rush or faxed transcript \$5 additional


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

## 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 owns property, or if under the age of 24 , whose parent/guardian owns property, or who has maintained a permanent and continuous residence, in the district for one full year prior to the beginning of credit classes will be classified
as an in-district resident. The COCC District consists of all of Deschutes, Crook and Jefferson counties, the northern portion 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 has maintained a permanent and continuous residence in the state of Oregon but outside of the COCC district during the year prior to the beginning of credit classes, or if under the age of 24 , whose parent/guardian has maintained such residence, will be classified as an "out-of-district" resident. The student will remain as an out-of-district student for two calendar years after the term in which the student began classes; at that time, the student will convert to in-district residency.

## Out-of-state residency (WA, ID, NV, CA 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 as an out-of-state student for two calendar years after the term in which the student began classes, 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-ofdistrict) tuition.

## Verification

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

## Transferring to another Oregon Institution

In-district or in-state status at COCC does not guarantee in-state status for tuition purposes at any other Oregon college/university.

## Military personnel

Residency status will be determined using the same criteria as the Oregon University System residency policy for armed forces personnel. For details, visit the OUS Web site at http://www.ous.edu/sr/nonres/.

## Native American students

Students who are enrolled members of federally recognized tribes of Oregon or of a Native American tribe which 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 tuition regardless of their state of residence (note that residents of the Confederated Tribes of Warm Springs are automatically charged in-district tuition).

For a listing of eligible tribes, visit COCC's Web site at http:// current.cocc.edu/tuition. Note that students must provide a copy of tribal enrollment documents prior to starting classes.

## 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.

## MATRICULATION/ABILITY-TO-BENEFIT

Matriculation status is awarded to registered students who have earned a high school diploma or GED, or who demonstrate "ability to benefit" by earning the following minimum scores on the ASSET placement test: Reading, 35; Writing, 35; and Numerical Skills, 33. Students must be matriculated in order to earn a certificate or degree from COCC.

Non-matriculated students may attend classes and earn credits, but may not receive financial aid until matriculation criteria are satisfied. Contact Admissions and Records, (541) 383-7500, for further information.

## 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:

- Institutional information: name of accrediting associations, services for disabled students, cost of attendance and additional program costs, refund policy, withdrawal policy and associated financial aid implications, degree programs, GED options, campus academic facilities, faculty and staff contact information, academic warning standards, study abroad financial aid opportunities, deferment options for Peace Corp and related service organizations;
- Financial aid information: types of aid, how to apply for aid, how aid is disbursed, rights and responsibilities of students receiving aid, work study terms and conditions, loan repayment terms and schedule, academic progress criteria;
- Campus Crime Report and Alcohol/Drug Policy;
- COCC graduation and transfer rates;
- Students' rights under the Family Education Rights and Privacy Act (FERPA).

A Student Right-To-Know information packet is available upon request from Enrollment Services or on the College's Web site.

## ENROLLMENT SERVICES - 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 site at http://finaid.cocc.edu. 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) as soon after January 1 as possible to be considered for maximum eligibility. 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 noncitizens with appropriate documentation;
- have a high school diploma, a GED certificate, or meet "ability to benefit" provisions;
- be enrolled as certificate- 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 Free Application for Federal Student Aid (FAFSA) each year, be eligible according to applicable criteria, and be enrolled in and attend credit classes at COCC.


## HOW STUDENT AID IS DISTRIBUTED

Yearly awards are normally divided equally per term (fall/winter/spring). On the second Friday of each term (except summer), financial aid disbursements are credited to the student's account. Credit is applied first to tuition and fees and then bookstore charges, if authorized. The bookstore credit process allows eligible students to charge up to $\$ 400$ in books and supplies against their federal student aid account. Remaining aid for the term is refunded to the student by check. Work-study earnings are paid each month through the College's normal payroll process.

## SATISFACTORY ACADEMIC PROGRESS

COCC's Financial Aid Satisfactory Academic Progress (SAP) requirements include the Financial Aid Academic Eligibility Standard and the Institutional Academic Warning Standard. (See page 26 for the COCC Academic Warning policy.)

## FINANCIAL AID ACADEMIC ELIGIBILITY STANDARD

To maintain eligibility for financial aid, a student must comply with the following standard. Failure to meet any of the standard requirements may result in probation or denial of federal financial aid at COCC:

1. Certificate-seeking students must have a cumulative GPA of 2.0 and a cumulative completion rate of 66.67 percent of their calculated hours at the end of each term. Degreeseeking students must have a cumulative GPA of 2.0 and a cumulative completion rate of 66.67 percent of their calculated hours at the end of each academic year (evaluated annually when spring term grades are posted). The term 'calculated hours' 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. If a student fails to meet these eligibility standards, an automatic probationary status is enforced. In addition, he/she must have an academic standing consistent with the institutional requirements for graduation. Grades of A, B, C, D, P and IP only will be evidence of successful completion of coursework for purposes of calculating institutional percentage completion rates.
2. Aid eligibility is limited to 150 percent of a program's credit length (approximately 140 credits for a two-year degree and 75 credits for a one-year certificate) even if a degree is not
earned. As soon as it is clear that a student cannot graduate within this period, the student becomes ineligible for aid. Change of major or program may not be sufficient reason to extend the credit limit.

## Measurement point/times standard applied

The Academic Eligibility Standard, the Financial Aid Completion Progress Standard and the Institutional Satisfactory Progress and Academic Warning Standard will be applied at the time an aid application is received each year and at the end of each term. Eligibility for receipt of financial aid is denied at any measurement point if the standard is not met. COCC is not responsible for any actions the student has taken in anticipation of aid.

## Probationary status

When a student first fails to meet the eligibility standards for either completion rate or GPA, an automatic probationary status is enforced. A student in this status must meet both the 2.0 GPA and 66.67 percent completion rate minimums per term. If a student fails to meet the minimum standards while in the probation period, the student becomes ineligible for aid.

## Reinstatement of Aid Eligibility

Financial aid eligibility is based on successfully completing the COCC Academic Warning requirements. A student may apply for any other re-determination of eligibility through the COCC Financial Aid petition process. A student may submit a petition for reinstatement on the basis of (1) mitigating circumstances or (2) successful completion of at least 12 credit hours of COCC coursework with a 2.0 GPA or better and 66.67 percent completion in each term of enrollment of all attempted credits without financial aid funding.

## Petition procedures

1. Reinstatement of aid is never automatic. A student must apply for re-determination of aid eligibility by completing a COCC Financial Aid petition form.
2. A student may use the petition process to appeal any financial aid action that the law allows. The basis of a petition action must be for reasons that are outside the student's control.
3. Petitions are made through the Student Financial Aid office, on the official form.
4. Petitions are acted on by the Student Financial Aid director or, at the discretion of the director, referred to a petition committee.

## Transfer student requirements

1. Coursework taken at another institution that is accepted and officially transcripted as transfer credit by COCC, will count toward the 150 percent credit maximum. If the limit is exceeded, the student must submit a petition to determine aid eligibility. GPAs from other schools are not considered in COCC's financial aid satisfactory progress policy.
2. Students enrolled in Oregon State University-Cascades Campus and other programs under consortium agreements are subject to the home institution's SAP standards.

## Repeat coursework

Repeat coursework will be allowed according to institutional academic policy and procedures (see pages 25 and 26). All coursework at COCC, whether repeated or not, will count toward the maximum credit-hour eligibility.

## Developmental coursework

Students will be allowed a maximum of 45 quarter credit hours of developmental coursework in addition to the 140 credit-hour maximum. Developmental course work is defined as Writing 60 through Writing 99, Math 10 through 95, and CIS 70.

## APPEAL PROCEDURES

A student may petition a decision made by Enrollment Services - Financial Aid. All financial aid appeals will be considered within applicable regulations and College policy. The student will be notified of the petition decision within a reasonable time. Financial aid petition forms and written procedures must be used and are available in the Boyle Education Center.

## WITHDRAWAL PENALTY/REPAYMENT REQUIREMENTS

Students who receive federal financial aid and subsequently completely withdraw, are expelled or cease to attend 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 may keep and apply toward tuition and other costs. The amount of federal aid kept, under the federal aid return policy, may be less than tuition and other charges. This means that upon complete 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 affects completion rates that are required for Satisfactory Academic Progress.

At the time of withdrawal, each student can request a Title IV refund/repayment calculation from the Financial Aid Office.

## APPLICATION PROCEDURE

The Free Application for Federal Student Aid (FAFSA) may be submitted as early as January 1 for the upcoming summer, fall, winter and spring academic year. Students are encouraged to apply before March 1 because some funding is limited. The Department of Education recommends that students apply on
the Web at www.fafsa.ed.gov. A paper FAFSA is available in the Boyle Education Center and at most high schools and colleges or by calling the Department of Education at (800) 433-3243.

Enrollment Services-Financial Aid can provide additional and detailed information about various financial aid programs. For further information, students are encouraged to:

- go to the Web page, http://finaid.cocc.edu;
- send an e-mail to coccfinaid@cocc.edu;
- send a letter to COCC - Financial Aid, 2600 NW College Way, Bend, OR 97701;
- 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 their 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 description if applicable laws or regulations governing such programs change after printing of this material.

## SCHOLARSHIPS

The purpose of a scholarship program is to encourage academic excellence and to recognize achievement. The scholarship program at COCC is comprised of three gift aid programs: COCC Foundation scholarships, honor scholarships and private scholarships.

## Central Oregon Community College Foundation scholarships

The Central Oregon Community College Foundation is a group of interested and concerned private citizens from throughout the College District who donate their time and effort 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 at http://finaid.cocc.edu 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.

## Honor scholarships

Honor scholarships are awarded on the basis of academic excellence to the highest-ranking seniors graduating from indistrict high schools. This scholarship may be renewed at COCC for second-year students with at least a 3.5 cumulative gradepoint average and completion of 12 credits per term totaling 36
credits during their first year. All honor scholarship recipients must meet the College definition for full-time enrollment.

## Private scholarships

A growing number of private scholarship opportunities are available to students. For a list of available scholarships and scholarship search engines, visit: http://finaid.cocc.edu or consult Enrollment Services - Financial Aid. Entering freshmen are urged to explore scholarship opportunities with the help of their high school counselors.

## GRANTS

Most 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 federal Department of Education and the state of Oregon.

## Federal Pell Grant

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 2007-2008 range from $\$ 400$ to $\$ 4,310$ annually per student depending on financial eligibility and enrollment. Students with a prior bachelor's degree are not eligible.

## 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 are $\$ 300$ in 2007-08 depending on federal funding allocations. The FSEOG is not available for summer term.

## Oregon Opportunity Grant (00G)

The state of Oregon provides funds for this grant program. Eligibility is based on financial need as defined by the Oregon Student Assistance 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. Opportunity grants currently are set by the state of Oregon and range up to $\$ 1,470$ annually per student at COCC in 2007-2008 depending on financial eligibility and enrollment. The state opportunity grant is not available for summer term.

## LOANS

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

## FEDERAL FAMILY EDUCATION LOAN PROGRAMS (FFELP)

To be eligible for a FFELP Stafford Loan, students must be enrolled in at least six credit hours and may 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 a lender 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. The FAFSA, online loan request and Federal Stafford Loan application/promissory note are needed to apply.

Three specific types of FFELP Stafford Loans are available:

## Subsidized Federal Stafford Loan program

The subsidized loan program provides fixed interest, long-term federal loans through lending institutions in cooperation with a guarantee agency and Enrollment Services - Financial Aid. Maximum limits are based on financial need, but cannot exceed $\$ 3,500$ for freshmen and students in certificate programs and $\$ 4,500$ for sophomores for an academic year. Loans are interestfree until repayment begins. 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 of loans, with a 10 -year repayment time limit.

## Unsubsidized Federal Stafford Loan program

The unsubsidized loan program provides fixed interest, long-term federal loans through lending institutions in cooperation with a guarantee agency and Enrollment Services - Financial Aid. The unsubsidized loan is available to students who do not qualify for need-based Subsidized Federal Stafford loans or who are not eligible for the full Subsidized Federal Stafford loan amount. Awards cannot exceed $\$ 3,500$ for freshmen and students in certificate programs and \$4,500 for sophomores for an academic year. Independent students, as defined by the Department of Education, are eligible to borrow up to an additional $\$ 4,000$ in unsubsidized loans. 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 of loans, with a 10 -year repayment time limit.

## Federal PLUS (Parent Loan to Undergraduate Students) program

The PLUS is a non-need based interest-bearing loan to parents. Loans may range up to the published cost of attendance for the

institution minus other student aid. Interest accumulated during in-school time is variable, carries a cap of 9 percent, and is subject to change annually. See "The Student Guide" for details, available with other publications, at www.studentaid.ed.gov/. In addition to the PLUS application, a FAFSA is required at COCC; both are available from Enrollment Services - Financial Aid.

## WORK-STUDY AND STUDENT EMPLOYMENT

Many students help finance their education by securing parttime 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. Check their Web site for more information, www.cocc.edu/careerservices/.

## 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.

Students cannot be placed in a work-study job until they receive a financial aid award that includes work-study. Students cannot expect to 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.

## VETERANS EDUCATIONAL BENEFITS

Students who believe they may be eligible for Veterans Educational Benefits, such as a veteran or a widow or dependent of a disabled veteran, should contact the veterans coordinator 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:

To receive educational benefit payments, students must attend classes. It is the responsibility of the registered veteran to notify the veterans coordinator 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 VA educational benefits, students must be enrolled in a degree or certificate program offered by COCC and approved by the VA. Only courses applicable toward 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 transcripts forwarded to Enrollment Services - Admissions \& Records for evaluation. Failure to have transcripts evaluated will result in termination of benefits to the veteran student at the end of the second term of enrollment. Veterans may also be eligible for credit from their military training. Documentation must be provided to Enrollment Services - Admissions \& Records.

## 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.


## Satisfactory academic progress

Veteran students are considered in good academic standing with the College when they maintain a GPA of 2.0 or better (each term) and complete 66.67 percent of their graded courses. A 0.0 GPA results in immediate termination.

- All students are notified at the end of the term in which they have not made satisfactory progress. Veteran students may continue on probation for only one term, after which time unsatisfactory progress will be reported to the Veterans Administration (VA) and benefits will be terminated.
- In the event of extenuating circumstances, veteran students may submit a petition to the veterans coordinator who will forward it for review. Extenuating circumstances must be described on an official student petition form. In reviewing petitions, consideration is given to:
a. comments from instructors, advisors and counselors;
b. medical reasons;
c. any evidence of improvement over past terms;
d. degree of difficulty of courses; and
e. graduation requirements for major.
- Once certification is canceled, veterans must enroll for and complete a minimum of six credit hours in one term, at their own expense, and receive a 2.0 or better GPA to become recertified.


## Institutional responsibility

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

## STUDENT SERVICES

All prospective students are encouraged to contact Enrollment Services - Admissions and Records, (541) 383-7500, or www.cocc.edu, for information and assistance in planning their education at COCC.

## ACADEMIC SUPPORT SERVICES

Students can take advantage of COCC's academic support services in these areas:

- Academic Advising (CAP Center)
- Bookstore
- Career Services (CAP Center)
- Computer labs
- Counseling (CAP Center)
- Developmental Studies
- Disability Services
- Library
- Media Operations
- Multicultural Center
- Native American program
- Student e-mail/network account
- Study Abroad program
- Tutoring and Testing Center


## ACADEMIC ADVISING (CAP CENTER)

Academic Advising at COCC is provided by both the CAP Center (Career services, Academic advising, and Personal counseling) and by 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 been gone 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 mailed contact information. Students are encouraged to meet with their advisor to develop long-range academic and career plans and are required to do so before the next term's registration. All CDS students are required to meet with an advisor prior to registration (1) if they participated in a group advising session the previous term or (2) as determined by the advisor and at least once a year.

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 Student Online Services account. To do so,

go to www.cocc.edu and select My 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 their major changes. Students not seeking a certificate or degree are not required to meet with an advisor, but are welcome to meet with a CAP Center advisor. Contact the CAP Center, Library lower level, (541) 383-7200, for advising options.

## BOOKSTORE

The Campus Bookstore, located on the Bend campus, sells textbooks, class materials, educational and personal supplies, gift cards, convenience food and beverage items, and provides faxing services. Software is available by special order. Prepaid accounts can be established for students by contacting the Bookstore. Textbooks can be ordered 24 hours a day at www.cocc.edu/bookstore. For more information about the Bookstore, call (541) 383-7570 or visit its Web site, listed above.

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

The CAP Center offers a variety of student services to support COCC students in setting and meeting their educational goals. The CAP Center is located in the lower level of the Library. Call the CAP Center for more information about each of these services at (541) 383-7200 or visit the Web site at http://cap.cocc.edu.

## CAREER SERVICES (CAP CENTER)

COCC Career Services assists students with career planning and exploration, finding part-time student employment (including work-study job placement), developing job search skills and locating career placement resources. Local employers can use these services to locate students and graduates with the specialized knowledge and skills needed in today's workplace. Career Services is part of the CAP Center, located in the lower level of the Library and consists of personal appointments, print-based and Web-based resources, and workshops open to COCC students and alumni. Call the CAP Center at 383-7200 or visit http://cap.cocc.edu for more information.

## COMPUTER LABS

COCC offers a variety of computing resources to students registered in its credit classes, Community Learning classes or Oregon State University-Cascades Campus programs.

Three top-notch, drop-in computer labs are located on campus: one each in the Library, Pioneer Hall and Cascades Hall. In addition, there are Networking, Computer-Aided Drafting and Design, Science and Geographic Information Systems computer labs located in a number of buildings on the Bend campus and a computer lab located in Building 1 of the Redmond Campus.

All of COCC's computers use the Windows operating system and most Microsoft Office programs along with class-specific programs.

The drop-in labs are staffed by student workers who offer assistance logging on and answering general questions. COCC labs are equipped with laser printers, scanners and adaptive workstations.

All computer labs have a pay-to-print fee. Payment is by COCC/ OSU-Cascades Campus student ID card or COCC print card.

## COUNSELING (CAP CENTER)

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 Education/English Language Learning courses are eligible to receive short-term counseling at no charge. For further information visit http://cap.cocc.edu. Counseling appointments are confidential and can be made through the CAP Center (Career services, Academic advising, and Personal counseling) in the lower level of the Library or at (541) 383-7200.


## DEVELOPMENTAL STUDIES

For those who find that their basic skills need sharpening, the College maintains a Developmental Studies program designed to equip students with the basic writing, mathematics and reading skills needed to succeed at the college level. Using placement test results, advisors will recommend courses that will provide the most help; some of these courses may be pre-college level courses. These courses are nontransferable but may be extremely valuable for those who need preparation for success in retraining or re-entry into academic studies.

## DISABILITY SERVICES

The Disability Services office ensures equal access to all students with qualifying, documented disabilities at all COCC campuses and Community Learning Centers, as defined by federal legislation. Along with colleges and universities across the country, COCC is enrolling increasing numbers of students with disabilities and is committed to making physical facilities, instructional programs and campus activities accessible to all students. Awareness of students' needs and goals helps to create an atmosphere in which learning and growth can occur.

If the need for accommodation exists, it is the student's responsibility to inform the College by contacting the Disability Services office in a timely manner in order to arrange the specific accommodation(s). Contact Disability Services by calling (541) 383-7583 or visit the offices in Boyle Education Center.

## LIBRARY

The Barber Library serves the research and information needs of the College, Oregon State University-Cascades Campus and its partners, and residents of Oregon. Staff can be reached at (541) 383-7560. The Library's Web page address is http:// campuslibrary.cocc.edu/. The Library catalog and all the research databases are available from the Web page.

## Information Help Desk

A librarian or staff member is available at the reference desk to assist with reference and research questions. Help is also accessible online via e-mail or through L-Net's $24 / 7$ chat service. Please see the 'Ask a Librarian' link on the Library Web page (http://campuslibrary.cocc.edu/).

## Computer Workstations and Wireless Access

The Barber Library has 28 networked computer workstations available to students for their own research, as well as wireless accessibility for registered users including COCC and OSUCascades patrons, community patrons and campus visitors. For more information please refer to the Wireless Network Web page at: http://its.cocc.edu/services/wireless/. The Library also houses an electronic classroom and a 38 -workstation computer lab.

## Library Collection

The Barber Library collection consists of reference sources, print and electronic books, print and electronic journals, magazines, Web resources and databases supporting COCC and OSU-
Cascades academic programs.

## Books and Articles from Other Libraries

Students can submit requests for materials not available in the Barber Library. The Library is a member of the Orbis Cascade Alliance, a consortium of college and university libraries in the Northwest.

The Summit union catalog provides access to approximately 25 million books, audiovisual materials and more. It is accessible from the main Library Web page, http://campuslibrary.cocc.edu/. Current, credit-enrolled students, faculty and staff of COCC and OSU-Cascades Campus may search and self-initiate loan requests for most Summit items which arrive in two to three working days.

Other interlibrary loan services are also available to COCC students for journal articles not found in the Library or on the Library's full text database.


## Materials on Reserve for Classes

Students may also retrieve a number of reserve materials available 24/7 through the electronic reserves. Print reserves are available at the Circulation Desk at the front of the Library.

## Government Documents

The Barber Library is a selective depository library for U.S. federal documents. The Library also collects material related to the history and culture of Central Oregon.

## Library Instruction

Faculty librarians are instructors for the Information Research Skills (LIB 127) courses and work closely with faculty in all disciplines to provide research instruction in other classes when appropriate.

## Library Events

Poetry Readings and Art Exhibitions are held regularly in the Barber Library. Watch for announcements in The Broadside student newspaper and on the campus and Library Web pages.

## MEDIA SERVICES

The Media Services department, located in the lower level of the Library, offers students the following:

- audiotape/CD duplication of foreign language tapes;
- eight individual DVD/VCR video-viewing stations available on a first-come, first-served basis;
- an editing booth where students can videotape interview sessions for class presentation.
Visit http://media.cocc.edu/ or call (541) 383-7744 for more information.


## MULTICULTURAL CENTER

The Multicultural Center is located in Room 108, Grandview Hall. The Center fosters cross-cultural understanding and communication by providing a welcoming setting for learning, sharing and connection. It is open to the public, staffed daily, and offers activities and information during the academic year. The Center provides a fridge, microwave, coffee makers, snacks, a TV/VCR and computer and printer for student use. For more information, contact the Center at (541) 318-3787 or 383-7412.

## NATIVE AMERICAN PROGRAM

The Native American Program provides individualized help to Native Americans seeking to further their educational goals. The program is involved in a variety of campus and community cultural events during the year, such as the annual Native American Spring Festival, Campus Mosaic and College 101. For more information, contact the Native American Program advisor, (541) 318-3787. The Native American Program operates September through June and maintains a Web site at http:// nativeamerican.cocc.edu.

## STUDENT E-MAIL ACCOUNT

All students receive a free COCC e-mail account when they apply for admission. This account can be used to contact instructors, receive monthly newsletters about COCC events and deadlines, and keep in touch with instructors and friends. When logged into a COCC computer lab computer you are also logged into your COCC e-mail account.

For off-campus account login, visit the COCC homepage at www.cocc.edu and click the "My Login" button then click "Login Now" next to Web Email. For information on user names and passwords, see "Help Information" on the "My Login" page.

## STUDENT 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 have a personal "My Documents" folder located on the desktop with 150 MB of space. Students also use this account when accessing a wired or wireless connection with their personal computer.

The network account uses the same user name and password as the COCC e-mail account.

## STUDY ABROAD

The College seeks to provide opportunities for students to study abroad while earning COCC transfer credit. For specific offerings, consult the COCC schedule of credit classes and COCC's Web site (search for "study abroad"). Current programs include:

- Fall Quarter in Florence, Italy - Students experience Italian life, language and culture while living and studying in Florence, the heart of Tuscany. The program offers an unparalleled opportunity for students of art, history, literature and Italian language to explore a wealth of museums, churches and culture in this most walkable of cities.
- Spring Quarter in Paris - Students experience French language, life and culture by living and studying in the heart of the capital. A variety of courses are taught by COCC and other Oregon professors, as well as French instructors and other experts living abroad. Whether choosing to stay with a French family or to share an apartment, students bring a more global perspective to the home campus after experiencing the Paris study program.
- Summer two-week Spanish language immersion program in San Miguel de Allende - Students study the language at level $101,102,103,201,202$, or 203 (depending on placement), experience cultural programs and a home stay with a Mexican family in this charming mountain city.
- Summer two-week intensive Spanish study and two-week Field Biology course in Costa Rica - Students experience a home stay and language study near the capital San Jose, then study mountain rainforest ecology in Monteverde Cloud Forest, and finally move to Cabo Blanco, on the Pacific Coast, to study dry forest ecology and marine biology.

For questions about COCC's Study Abroad program, contact Greg Lyons, (541) 383-7526, glyons@cocc.edu.

## TUTORING \& TESTING CENTER

The Tutoring \& Testing Center is located in the lower level of the Library with hours of operation available at tutortest.cocc. edu. Math tutoring occurs when the COCC library is open, proctored testing starts a half hour after the building opens and ends a half hour before the building closes.

## Tutoring

Tutoring services are free to COCC students for the COCC courses in which they are currently enrolled. Drop-in tutoring is offered for math, sciences, foreign languages, business administration, social sciences and massage therapy, as well as professional-technical subjects. Tutoring is conducted on both an individual and a group basis. Tutor-led study groups are also an option for some key courses. Resources include videotapes for math courses through MTH 112, handouts, textbooks and graphing calculators. In addition to the drop-in tutoring lab, math and foreign language tutoring is offered in the Multicultural Center in Grandview Hall on a limited basis. Math tutoring is available at the Redmond Campus in the evenings. The Writing Lab is located adjacent to the Tutoring \& Testing Center in the lower level of the Library. Students are encouraged to bring in their writing assignments for one-on-one help with
any stage of the writing process. Tutoring sessions for computer science, anatomy and physiology, forestry, and automotive technology are held in those subject-specific labs.

## 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 (www. testing-ncta.org) and a certified Virtual University Enterprise (www.pearsonvue.com) and Computer Assisted Testing Service (www.silvercats.net) test site, the Testing Center's mission is to provide opportunities for Central Oregonians to obtain academic, professional and standardized testing locally. For a current list of tests offered, visit the COCC Testing and Tutoring Center's Web site listed below. For more information about tutoring and testing services, contact the Tutoring \& Testing Center at (541) 383-7538 or visit http://tutortest.cocc.edu.

## STUDENT SUPPORT SERVICES

## OFFICE OF 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 Student Life Office in Grandview Hall, (541) 383-7590 or visit http:// studentlife.cocc.edu.

## ASSOCIATED STUDENTS OF COCC (ASCOCC)

The 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 six paid positions each year.

Contact ASCOCC, (541) 383-7595 or visit the web site, http:// ascocc.cocc.edu, to find out about current happenings and how to get more involved with the student council.

## THE BROADSIDE STUDENT NEWSPAPER

The Broadside is a student-generated newspaper serving COCC, OSU-Cascades and the larger community. The staff publishes a minimum of 12 issues each year and provides insight into college news, local features and student opinions.

The Broadside offers many students opportunities in reporting, writing, editing, design and paginating, as well as experience in photography and journalism leadership. All students are wel-
come to apply for the paid positions. For more information, call the Broadside Advisor, (541) 383-7252, or e-mail the editor at broadsidemail@cocc.edu.

## 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, cycling, disc golf, golf, martial arts, nordic ski club, snowboarding, soccer (indoor and outdoor) swimming, volleyball and running.

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, disc golf tournaments, flag football, golf tournaments, soccer (outdoor), softball (coed), swimming, table tennis, tennis, ultimate frisbee 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. Passes for local recreation facilities are available to students at no cost (swimming and bowling). Call (541) 383-7794 or visit online at http://sports.cocc.edu for more information.

## CLUBS

ASCOCC offers many opportunities for students to participate in campus clubs. The Latino Club, Campus Crusade for Christ, Native American Club, Culinary Club, Criminal Justice Club and a variety of club sports have been active in recent years at COCC.

Clubs must involve at least four current students, have a faculty advisor, create a meaningful mission statement and submit an annual budget to the ASCOCC (during the winter term). Contact the Student Life Office at (541) 383-7590 for more information.

## FOOD SERVICE

Quality food service is available at three campus locations. Food outlets in Grandview Student Center and Boyle Education Center provide daily specials that include a salad bar, deli sandwich selections, and assorted luncheon and dinner entrees at affordable prices. The mid-campus coffee cart, "The Java Jam,"
located in the Quad Area between Modoc and Jefferson, features "grab and go" items, juices, soups and sandwiches, as well as a full espresso bar. All facilities are open to the public.

Nonresident food plans are a great alternative to carrying cash. The plans, as well as food cards, are sold through the Food Services office in Grandview Student Center. Call (541) 383-1945 for information about costs of food plans and food cards.

## STUDENT HEALTH INSURANCE

Students are not covered by College health insurance while on campus or involved in classes and activities. 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 charge in the local community.

## STUDENT HOUSING - ON CAMPUS

Juniper Hall houses 103 male and female students each year. Located near the Grandview Hall student center and cafeteria, the residence hall offers shared rooms, cable and Internet access, laundry and recreational facilities and a full meal plan. Contact College Housing Northwest at, (541) 383-7593, or visit their Web site at http://www.chnw.org for more information.

Space in Juniper Hall is limited. Therefore, students seeking accommodations must submit a nonrefundable $\$ 25$ application fee in order to be placed on the residence hall wait list. As space becomes available, contracts will be sent based on a student's placement on the wait list. Upon signing a contract, students must be prepared to pay a confirmation deposit to guarantee a space in the hall. The room and board rate for the 2006-2007 academic year (fall, winter, spring) was $\$ 6,798$ for double occupancy. For more information regarding student on-campus housing at COCC, contact the CHNW office in Juniper Hall, (541) 383-7593, or the Office of Student Life, (541) 383-7590.

Room and Board Package for Juniper Hall
(2007-2008 costs not yet determined)

| 2006-2007 | Fall | Winter | Spring | Total |
| :--- | :---: | :---: | :---: | :---: |
| double <br> occupancy | $\$ 2,806$ | $\$ 2,467$ | $\$ 1,525$ | $\$ 6,798$ |

Note: Students living in Juniper Hall for spring term only will be assessed an additional $\$ 150$ for spring term.

## STUDENT HOUSING - OFF CAMPUS

The Student Life Office publishes an off-campus housing list. For information, call the Student Life Office, (541) 383-7590, or visit http://studentlife.cocc.edu/Resources/Housing/.


## SHUTTLE BUS

A free campus shuttle service runs around campus during fall, winter and spring terms. Shuttle maps with pick-up and drop-off times are available in the Boyle Education Center. The 15-person bus features a bike rack and automatic chains.

## TRANSPORTATION

In addition to the free campus shuttle bus, the City of Bend offers local transit service for the general public in the form of Bend Area Transit (BAT). For more information, visit the Web site http://www.bendareatransit.com

## CAMPUS SERVICES (vehicle parking/evening campus escort service)

Campus Services is available to help with a number of services, including evening campus escort services (phone 385-5100). The office also monitors vehicle parking.

All students who park on campus must register their vehicles and display registration decals. There is no charge for this service. Certain parking areas on campus are reserved for guests, staff and vehicles displaying valid disabled parking decals.

## 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.

## GLOSSARY OF ACADEMIC TERMS

The academic year consists of three terms (or "quarters") of approximately 11 weeks each. Students may enter at the beginning of any term, but it may be advantageous to enter in the fall due to course sequence requirements. Summer is considered a separate, "stand-alone" term.

Credit load is the number of credits taken each term. Students may not take more than 19 credit hours per term without permission from Enrollment Services - Admissions and Records.

A course is an instructional program in which students study a subdivision of a subject such as U.S. History or English Literature, etc.

A credit usually represents three hours of the student's time each week (approximately one hour in class, two hours of outside preparation) for one term. This time may be assigned to work in a classroom or laboratory or to do outside preparation. The number of lectures, recitations, laboratory, studio, or other periods per week for any course is listed in the course descriptions in the catalog or in the COCC credit class schedule. The typical amount of scheduled time for a non-laboratory academic class is 50 minutes per week for each credit hour. Laboratory and activity courses usually require more than one hour of class time per week for each hour of credit.

Curriculum is an organized program of courses and study arranged to provide definitive cultural or professional preparation.

An enrolled student is one who has satisfied all of the institutional requirements for attendance at the institution, a concurrent student, special admission student, or any other student participating in credit or noncredit programs, and who is registered for the current term.

A full-time student is defined as one enrolled in 12 or more credits for federal financial aid, veterans and social security purposes. Half-time enrollment is designated as 6-8 credits; three-quarter time, 9-11 credits.

The COCC credit class schedule is the annual publication listing the coming term's classes, times and locations, as well as registration instructions. The schedule is also available online at www. cocc.edu. The online version is updated regularly and is a more accurate source of information.

A subject is a designated field of knowledge (example: history or English).

Lower-division courses are freshman- and sophomore-level courses numbered 100-299.

Upper-division courses are junior- and senior-level courses offered through four-year colleges and universities. Generally they are numbered 300-499.


## COURSE NUMBERING

Courses with subject names (e.g. Math 111) and numbered 100299 are designed to meet Associate of Arts and Associate of Science degree requirements and for transfer toward a bachelor's degree.

Courses that are numbered between $\mathbf{0 . 5 0 1}$ and $\mathbf{0 . 9 9 9}$ or are alpha numbered below $\mathbf{1 0 0}$ do not normally transfer to four-year institutions.

Some Professional Technical courses follow the digit-decimal system of numbering courses from $\mathbf{1 . 0 0 0}$ to 8.499. Normally these courses do not transfer, but there are some exceptions.

Courses in the $\mathbf{9 . 0 0 0}$ series are intended to provide specific training needed to improve job skills beyond basic occupational needs. They are usually noncredit and are nontransferable.
Adult Continuing Education courses are nontransferable and are numbered through the digit-decimal system according to their type and purpose. A schedule of these courses, available through Continuing Education, is published prior to each term. This schedule gives city and site locations for Continuing Education classes throughout the College District.

## ACADEMIC INFORMATION AND POLICIES

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 online student account only and will not be mailed.

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 |
| F | 0 | not passing <br> pass: not computed in GPA, applies toward |
| P |  | percentage of credits completed, may be awarded <br> only in authorized classes |
| no pass: not computed in GPA, may be awarded |  |  |

## 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 drop courses between the eighth week of the term through the Wednesday before finals week will receive a "W" on their transcripts. Note: Permission of the instructor is required to drop 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. Additionally, if an instructor does not submit a grade, the Enrollment Services - Admissions and Records office will assign an "IP" grade.

## 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.

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). Please see the "Incomplete Grade Contract" on COCC's web site 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 figured 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.


## GRADE CHANGES

The responsibility of assigning grades at COCC is entirely the instructor's. A student who disputes the final grade ( $\mathrm{A}-\mathrm{F}$, $\mathrm{P}, \mathrm{NP}$ ) 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 reflects discrimination in some form, the student has recourse through the College's grade appeal procedure.

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

## 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 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 a letter at his/her mailing 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.

## 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:

$$
\begin{array}{ll}
3.60-3.74 & \text { honors } \\
3.75-3.89 & \text { high honors } \\
3.90-4.00 & \text { highest honors }
\end{array}
$$

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

## REPEAT GRADE POLICY

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.

Students may choose to repeat other courses. The original course and grade will remain on the transcript, with an " R " indicating it is later repeated. The original course grade will not be counted in that term's GPA or the cumulative GPA. A student may repeat a course as many times as s/he wishes; 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. 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. Please see the COCC Web site for an illustration of the Repeat Grade policy.

Note: This option became available fall 2006. A student must be a student under a catalog in which this policy was in place in order to take advantage of the repeat grade policy (e.g., a former student cannot ask to have a grade change unless s/he enrolls in the repeated course fall 2006 or later).

## ACADEMIC WARNING POLICY

Students are considered to be in good academic standing if they earn a minimum of 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 mailed a letter specific to their situation the day after grades are processed; it is the responsibility of the students 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 Enrollment Services no later than 5 p.m., on Monday of the second week of the term. If students are preregistered and fail to complete these steps, their registrations will be voided and a full tuition 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 Enrollment Services no later than 5 p.m., on Monday of the second week of the 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, they may be voided from classes and their petition is considered "denied."
- Approve the petition with revisions: If students fail to follow the revised academic plan or requirements, they may be voided from classes 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 refunded.) They 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).

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 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 passes, students may re-enroll and start their academic record as if no academic warnings existed. The students' transcripts, however, will remain the same.

## Notes

1. Students who do not have an assigned advisor may request one through the CAP Center or Enrollment Services - Admissions and Records.
2. Students may appeal their suspension, in writing, to COCC's vice president of instruction, as outlined in the College's Concerns Procedure (see page 31), omitting step 1 of the procedure.
3. Students on academic warning may not be self-advised, and students who were self-advised must meet with an advisor.
4. Students may not change advisors while on academic warning.

## CHALLENGE COURSES

Students who feel they have knowledge and experience similar to a particular course and who cannot gain credit by one of the methods listed under Advanced Standing (see below) may challenge a course and receive credit for that course. However, in some cases, students may wish to discuss course requirement waivers with program faculty. There is no limit on the number of credits which may be earned by challenge with the following exceptions:

- 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 students have 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 degree.

In order to assess whether or not the student has a reasonable chance of doing well on the exam, 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, available from Enrollment Services - Admissions and Records. This must be completed by the end of the sixth week of the term. The challenge paper or final must be complete prior to the end of the term.

Challenged courses are charged the regular tuition rate payable at the time the completed petition is processed in Enrollment Services - Admissions and Records. It is the student's responsibility to schedule challenge examinations with the instructor. The exam may only be rescheduled, 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 re-challenge a course if they do not pass the first attempt. See the "Academic Procedures" page on COCC's Web site for complete details.

## ADVANCED STANDING AND TRANSFER CREDIT

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.

Students may receive credit for prior certification if they 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 Admissions and Records Office, along with a "Credit for Prior Certification" request form. Admissions and Records will then forward the documentation to the appropriate department for review and notify the student of any outcomes. If credit can be awarded, the student must pay a $\$ 40 /$ course fee prior to having credits transcribed.

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 evaluate the transcript toward the certificate or degree listed on the student's admission application. The evaluation will be placed in the student's permanent file for use when a degree audit is requested, and a copy will be mailed to the student.

Limits on college credit transfer are:

- Only lower division (freshman or sophomore level) credit may be accepted toward an associate degree.
- 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 transferable 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 basic skills requirements and for some programs (see individual program requirements).
- Students working toward a COCC certificate or degree must complete a minimum of 24 COCC credits. Challenge, Advanced Placement (AP), College Level Examination Program (CLEP) and Credit for Prior Certification (CPC) credits do not meet this requirement.

Because of federal financial aid requirements, COCC will enter the total number of credits transferred toward the degree listed on the student's application for admission. This number will appear in the "transfer credits" total on the transcript. Actual courses, however, will not be posted; see the Enrollment Services - Admissions and Records office for a copy of actual courses transferred.

## Credit for Prior Certification (CPC)

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's benefits or scholarships. A maximum of 12 credits for prior certification will be awarded. Credit for Prior Certification does not apply toward the minimum 24 COCC credits required to complete a COCC certificate or degree.

## Noncollegiate and nonaccredited institutions

COCC will also evaluate records from noncollegiate and nonaccredited institutions (such as business and trade schools) under the following guidelines:

- 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.


## Military credit

Military credit will be evaluated as follows:

- The ACE guidelines will be used with discretion when considering military credit 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.


## Advanced Placement (AP), the College Level Examination Program (CLEP) and International Baccalaureate

Advanced Placement (AP), the College Level Examination Program (CLEP) and International Baccalaureate results will be evaluated as follows:

- 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. AP and CLEP test scores are accepted as follows:


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

| AP Language \& Composition, score 3 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . WR 121 |  |
| :---: | :---: |
| AP Language \& Composition, score 4 or | 121, 122 |
| AP Lit \& Comp, score 3 or $4 \ldots .4$ credits in one of: ENG 104, 105, 106, 107, 108, 109 |  |
| AP Lit \& Comp, score 5 . . . . . 8 credits in either ENG 104, 105, 106, or 107, 108, 109 |  |
| (No writing credits earned with Literature \& Comp tests) |  |
| French Language, s | 02, 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 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 |
| P Biology, score 3 | Il 101 |
| AP Biology, score 4 or 5 | BI 101, 102, and 103 |
| AP Chemistry, score 3 | CH 221 |
| AP Chemistry, score 4 | CH 221, 222 |
| AP Chemistry, score 5 | CH 221, 222, 223 |
| AP Physics B, score 4 | PH 201, 202 |
| AP Physics C, score 5 | H 201, 202, 203 |
| AP Physics C, Mechanics, score 4 | . . . . . . .PH 211 |
| AP Physics C, Elect, score 4 or 5 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .PH 212 |  |
| AP Math Calculus AB, score 3 | MTH 251 |
| AP Math Calculus BC, score 3 or 4 | MTH 251, 252 |
| AP Math Calculus BC, score 5 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . MTH 251, 252, 253, |  |
| AP Comp Science A, score 4 or 5 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CIS 161 |  |
| AP Comp Science AB, score 3 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CIS 161 |  |
|  |  |
| AP US Government, score 3-5 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . PS 201, 202 |  |
| AP US History, score 4 or 5 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . HST 201, 202 |  |
| AP European History, score 4 or 5 . . . . . . . . . . . . . . . . . . . . . . . . . . . . HST 101, 102, 103 |  |
| AP Psych, score 4 or 5 . . . . . . . . . . . . . . . . . 4 credits, psychology prefix, distribution list |  |
| AP Microeconomics, score 3-5 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . EC 201 |  |
| AP Macroeconomics, score 3-5 | EC 202 |

## College Exam Program (CLEP) will be evaluated at COCC as listed below.

CLEP English Comp,
No credit, prefer challenge CLEP Humanities, min score $50 \ldots . \ldots$. . . . . . . . . . 9 credits of distribution list Humanities CLEP Am Lit, min score 50 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CLEP Eng Lit, min score 50 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .ENG 101, 102, 103

CLEP Foreign Language, (no more than 12 credits per language)

| French: score 50 | .FR 101, 102, 103 |
| :---: | :---: |
| French: score 60. | .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 Math | No credit |
| CLEP College Algebra, score 50. | .MTH 111 |
| CLEP Calculus with Elem. Function, score 50 | MTH 251 |
| CLEP Calculus with Elem. Function, score 60+ | MTH 251, 252 |
| CLEP Biology, min score 50 | . BI 101, 102, 103 |
| CLEP Chemistry, min score 50 | CH 221, 222, 223 |
| CLEP General Exam in Natural Sciences, minim |  |

score of 50 . . . . . . . . . . 9 non-lab science credits for "additional courses" or electives
CLEP Princ of Mgmt. min score $70 \ldots$. . equivalent course credit as elective in business CLEP Accounting, min score 70. . . CLEP Intro Business Law, min score 70 equivalent course credit as elective in business CLEP Princ of Marketing, min score 70 . . equivalent course credit as elective in business
CLEP US History I min score 50 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 201
CLEP US History II min score 50. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 202
CLEP Western Civ I min score 50.
.HST 101
CLEP Microeconomics, score 50 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 201

CLEP Macroeconomics, score 50 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 202
Students may arrange to take the CLEP tests at the COCC
Tutoring Center, (541) 383-7539.

## 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 basic skills requirements and for some programs (see individual program descriptions, pages 47-125). 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 any costs associated with international transcript evaluations.


## TRANSFERRING CREDITS TO A FOUR-YEAR UNIVERSITY

As a general rule, four-year institutions of the Oregon University System will accept up to 124 lower-division hours of transferable 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 counselors and faculty advisors.

Grades of A, B or C earned in transfer courses (numbered 100299) 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 professional technical courses.

Students seeking a Bachelor of Arts or a Bachelor of Science degree should be aware of foreign language and other degree or major-specific requirements. See pages 32 and 33 for a listing of degree requirements between COCC and various universities.

## STUDENT EDUCATIONAL RECORDS AND DIRECTORY INFORMATION

Enrollment Services - Records maintains all official academic records of enrolled students including 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. Enrollment Services - 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 should submit to the registrar written requests that identify the record(s) 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, 600 Independence Ave. SW, Washington, DC 20202-4605.

## 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 will release it upon request:

- dates of attendance
- major field of study
- full- or half-time enrollment status
- degrees and awards received
- address and telephone number
- e-mail address
- participation in officially recognized activities and sports
- most recent previous school attendance
- 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 Enrollment Services 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 the College Web site, www.cocc.edu.

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, in writing, to Enrollments Services-Admissions and Records in the Boyle Education Center. The release is valid until June 30 of each year and must be re-filed annually.

## 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 most recently was 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 of the Oregon Department of Community Colleges and Workforce Development:
"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."

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 the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon, the State Department of Community Colleges and Workforce Development and the Oregon Community College Association. OCCURS gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research, and develop programs. This information helps the colleges to support the progress of students and their success in the workplace and other education programs.

OCCURS 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.

- The American College Testing Service, if a student takes the ASSET placement test, for educational research purposes. State and federal law protects the privacy of student records. The social security number will be used only for the purposes listed above.


## CONCERNS PROCEDURE

COCC has a college concerns procedure designed to provide employees, students and citizens a way to appeal decisions made within the College. Contact Enrollment Services - Admissions and Records, (541) 383-7500 or welcome@cocc.edu for a copy of the procedure, or view it online at http://hr.cocc.edu/Jobs/ Equal+Opportunity/Complaints/.

## 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 Central Oregon Community College. 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. The Student Rights and Responsibilities Handbook is available online at http://studentlife.cocc.edu/Resources/Policies/Rights/.

## 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.

Complete information, including Oregon state laws, where employees and students can find assistance, health risks associated with the use of illicit drugs and the abuse of alcohol, and warning signals, is available in a flier entitled "Making Choices for Life." The flier is available at the offices of Admissions and Records and Student Life.

## NONDISCRIMINATION POLICY

It is the policy of the Central Oregon Community College Board of Directors that there will be no discrimination or harassment on the basis of age, disability, gender, marital status, national origin, color, race, religion, sexual orientation or veteran status in any educational programs, activities or employment. Persons having questions about equal opportunity and nondiscrimination should contact the Equal Employment Officer, c/o COCC's Human Resources office, (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 who, because of a physical or learning disability, need special accommodation should contact ADA Coordinator Gene Zinkgraf, (541) 383-7776, in advance of their need for accommodation. Further inquiries may be directed to the Affirmative Action Officer, clo COCC's Human Resources office, (541) 383-7216.

## PATHWAYS TO SUCCESS: OVERVIEW OF COCC DEGREE OPTIONS

Central Oregon Community College offers a variety of transfer and professional technical certificate and degree options, allowing students to choose their program based on their educational goals.

## TRANSFER/BACHELOR DEGREE PREPARATION

COCC offers transfer students four primary options: Oregon Transfer Module (OTM), Associate of Arts Oregon Transfer (AAOT), Associate of Science - Direct Transfer to Oregon State University (AS-DT), Associate of Science (AS), and various articulation agreements with our two- and four-year partners.

## THE OREGON TRANSFER MODULE (OTM)

(see page 36 for checklist of courses)

- Designed for students who plan to transfer to an Oregon community college or public university.
- 45 credits including courses in writing, math, speech, social sciences, sciences, humanities and electives; similar to many freshman year requirements.
- Guarantees that another Oregon community college or public university will accept all credits toward their institution's general education requirements.


## THE ASSOCIATE OF ARTS - OREGON TRANSFER (AAOT)

(see pages 37 and 38 for checklist of courses)

- Designed for students who plan to transfer to Oregon or some Washington public universities, as well as some private universities in both states. See the AAOT checklist, pages 3738 , for other universities that also accept this degree.
- Representative of a transfer student's typical freshman and sophomore coursework, including courses in writing, math, speech, computers, health, social sciences, sciences, humanities and electives. Because courses are required in a variety of areas, it is also a good option for "undecided" students.
- Guarantees that students who complete the AAOT will meet all lower-division general education courses at any Oregon public university; with the right planning, most lower-division major requirements may also be met.
- Guarantees that a student can transfer to an Oregon public university with junior standing for registration purposes.

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.

## ASSOCIATE OF SCIENCE (AS)

(see pages 39 and 40 for checklist of courses)

- Designed for students who want to transfer to a specific fouryear college or university in a specific major.
- 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, degree can be designed to do so.
- Works well for students in more technical majors such as biological or physical science, pre-engineering and computer science, but can be designed for almost all majors.


## ASSOCIATE OF SCIENCE - DIRECT TRANSFER TO OREGON STATE UNIVERSITY-CASCADES CAMPUS (AS-DT) (pending approval)

(see individual program descriptions for course requirements)

- Designed for students who plan to transfer to and receive a degree from Oregon State University-Cascades Campus.
- Guarantees that students meet all lower-division general education and major-specific requirements for all OSUCascades programs.
- Guarantees that students will transfer with junior standing for registration purposes.
- Available for the following majors:

Bachelor of Arts or Science in Art, option in Fine Arts Bachelor of Arts or Science in Business Administration Bachelor of Science in Human Development and Family Studies, options in Early Childhood Education, Gerontology or Human Services Bachelor of Arts or Science in Liberal Studies
Bachelor of Science in Outdoor Recreation Leadership and Tourism, options in Tourism and Commercial Recreation Management, International Ecotourism, or Outdoor and Experential Education

## ARTICULATION AGREEMENTS

COCC partners with several colleges and universities to offer students a seamless transfer among institutions for certain majors. Current articulation agreements are as follows, and some degree requirements can be found on pages $47-125$ in the catalog. Contact the COCC Adminissions and Records office for requirements not listed on these pages.

## Eastern Oregon University

Note that all of these degree options, except for English/Writing, are available via Distance Education and on the EOU Campus. Interested students should contact Barb DeKalb, EOU Distance

Education coordinator, at 385-1137, or Boyle Education Center, Room 161.

- Business Administration
- Business Economics
- English/Writing
- Physical Activity and Health
- Philosophy, Politics and Economics
- Psychology
- Liberal Studies: Small City Rural County Management, Environmental Studies, Business and Health Promotion, Business Psychology


## Humboldt State University

- COCC's Associate of Applied Science in Forestry Resources Technology is articulated directly with HSU's bachelor's degree in forestry.


## Oregon Institute of Technology

- COCC's Associate of Applied Science in Manufacturing is articulated with OIT's Manufacturing Engineering Technology bachelor's degree program.
- Specific COCC coursework is aligned with requirements for OIT's Medical Imaging Technology program.


## Oregon State University-Cascades Campus

(See Associate of Science - Direct Transfer degree option, page 32.)

## PROFESSIONAL-TECHNICAL CERTIFICATES AND DEGREES

## Certificates of completion

- 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, drafting and medical transcription). 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.
- Range from one to six terms, noting that many of the allied health technical courses start fall or winter terms only (general education coursework can be done prior to, during, or after completing technical courses).
Some certificate requirements include limited general education coursework (including coursework in computation, human relations and communication).


## Associate of Applied Science degrees (AAS)

- Provide hands-on training in a variety of career-related technical areas, with the goal of giving students the advanced technical skills needed for various technical jobs.
- Requires at least 93 credits or two years of full-time study, including a minimum of 21 credits of general education courses.
- See page 41 for degree checklist.



## GENERAL STUDIES DEGREE

## Associate of General Studies (AGS)

- Designed for students who are not pursuing specific transfer or professional technical programs and awarded for completion of 93 credits of college-level coursework in basic skills, general education and elective areas.

It is important to note that 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, degree may be designed to do so.

- See pages 42 and 43 for degree checklist.


## DEVELOPMENTAL STUDIES

## Pre-college level developmental coursework

For students whose skills are just below college level, COCC offers developmental or preparatory coursework in reading, writing, math and computer skills. Placement testing scores help determine which level is appropriate for students. Students should work with their advisors on course selections.


## English language learning (ELL)

ELL classes are for those who need to learn to speak, read or write in English or need to take classes to earn U.S. citizenship. Classes are offered at convenient times and locations throughout Central Oregon. Contact the Adult Basic Education office, (541) 504-2950, for details.

## Family Learning Center

For parents and guardians with children under 8 years of age, COCC's Family Learning Centers provide preschool services so adults can study English, reading, writing and math. Time is set aside for snacks, parent and child activities, and discussion of family-interest topics.

## GED completion

The General Education Development (GED) certificate indicates that those completing it have the same abilities as high school graduates. It is accepted by colleges, training schools and employers nationwide. At COCC, students are prepared for and gain the necessary skills to pass the GED test. Tuition is affordable and books are available to help with studies.

The GED test covers five areas: language arts reading, language arts writing, social studies, science and math. Each must be passed with a minimum score of 410 and an average of 450 for all testing areas. A short essay is also required. The test is offered throughout the state and two specific locations in Central Oregon. Contact the Adult Basic Education office, (541) 504-2950, for details.

## Adult high school diploma

This program is for those who did not graduate from high school but are only a few credits short of doing so. Credits may be earned by taking high school courses through COCC's ABE program, COCC credit classes, or by combining life experiences with independent study classes. Tuition is required for each half credit plus book expenses, as well as a transcript evaluation fee.

## Credit recovery

Those needing high school credit and who enjoy studying independently using the Internet can participate in COCC's credit recovery program. Public and private high school students can use these courses to maintain their status during absences, regain failed credits or graduate early. Students are generally referred to this program by their high school counselor or teacher.

## Basic skills classes

COCC's basic skills classes prepare students to read, write and spell better, as well as improve math skills and learn to fill out employment applications. Classes are offered at convenient times and locations throughout Central Oregon.

## CERTIFICATE AND ASSOCIATE DEGREE GENERAL REQUIREMENTS

## Degree/certificate completion

Unless otherwise specified, the degrees listed in this catalog are intended to be offered for completion within the next two years. Unusual budget constraints or other changes in resources might necessitate discontinuing particular courses, programs or degrees. As far as resources allow, the College makes every effort to enable students to complete their degree programs in a timely manner. Students should work closely with advisors to obtain accurate information about their progress toward degrees and certificates. Students planning to transfer to another college are responsible for receiving and evaluating information from the destination institution.

A certificate or degree is awarded when it meets the appropriate course requirements listed in this catalog and at least one of the following criteria:

1. When a student meets degree requirements listed in any catalog in effect during the student's most recent continuous (unbroken except for summer terms) attendance.
2. The student transfers back to COCC other college credit earned within the term immediately following the last term attended at COCC, excluding summer, and meets degree requirements listed in any catalog in effect during the most recent continuous (unbroken) attendance.
3. The student left COCC prior to completing degree requirements but through subsequent transfer credit meets degree requirements currently in effect at the time of final degree evaluation and award.

The degree or certificate is posted in the term in which all degree requirements are completed.

## 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.

## Computer competency requirement

All COCC associate's degrees (AAOT, AS and AAS) require that students demonstrate basic computer skills prior to graduation. To meet this requirement, students must: successfully complete CIS 120, Computer Concepts, or CIS 131, Software Applications or pass two of three IC3 Exams of their choice (exam areas are Computer Fundamentals, Key Applications and Living Online).

The IC3 exams may be taken at the COCC Testing and Tutoring 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 Library. A \$30 fee is charged for each test; one free retake is included in the $\$ 30$ fee. If a student needs to retake the exam a third time, another $\$ 30$ fee is charged. Passing two of three exams does not provide students with course credit; instead, a notation is placed on the student's account so that the testing may be used to meet degree requirements. Students who have proof that they previously received the IC3 Certification will also receive a notation that the competency requirement has been met (documentation must be submitted to the Admissions and Records office).

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.

## Graduation/Commencement Ceremony

Students who wish to earn a certificate or associate's degree from COCC must submit a degree application to the Admissions and

"She Who Watches"
Campus sculpture by Lillian Pitt

Records office at least two terms prior to the intended term of completion. After evaluation, students receive a copy of their degree evaluation confirming the completed courses that apply toward the certificate or degree program and indicating any remaining requirements. COCC provides advising toward its certificates and degrees, however, all students are responsible for being informed about degree requirements and for selecting appropriate classes.

A commencement ceremony for certificate and associate degree graduates is held once each year in June, following the end of spring term. All graduates who have completed their degrees in the previous academic year - beginning summer term - may participate. Those students who complete their required coursework in the summer term immediately following the commencement ceremony may also participate. Commencement information is mailed in April to all students who applied for a degree or certificate. Students wishing to participate in the commencement ceremony must submit a participation card to the Admissions and Records office and attend the commencement rehearsal.

## OREGON TRANSFER MODULE (all courses must be completed with a " C " or better)

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, humanities 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 their institution's general education requirements and depending on courses chosen, may meet some lower-division major requirements. Additionally, 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.

## FOUNDATION/Basic Skills

## English Composition

Two college-level English Composition courses
$\qquad$

- SP 111


## Math

MTH 105 or higher (if using Elementary Math, must complete MTH 211, 212, 213 to meet this requirement) $\qquad$
$\qquad$

Advisor notes
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

TOTAL MODULE CREDITS (Foundation skills + Disciplines + Electives), 45 minimum:

## ASSOCIATE OF ARTS - OREGON TRANSFER DEGREE - DEGREE CHECKLIST

## About This Degree Option

Most students who intend to transfer will find that the Associate of Arts Oregon Transfer (AAOT) degree best suits their needs. Students who earn an AAOT degree meet the lower-division general education requirements for all Oregon public universities and some private colleges. The AAOT allows students to transfer with junior standing. Students who know what they want to major in should refer to the program descriptions listed on pages 47-125. These descriptions list any courses recommended for specific majors. Students are encouraged to work closely with an advisor and to thoroughly research transfer institution major requirements as they may vary from university to university.

## Advantages

The AAOT is easily transferable and is well suited for a variety of majors and many "undecided" students. Colleges which accept the COCC AAOT degree besides Oregon's public universities include Evergreen State College (WA), Pacific Lutheran University (WA), Washington State University (WA), Concordia College (OR), George Fox College (OR), Linfield College (OR), Pacific University (OR), Marylhurst College (OR), University of Portland (OR), Warner Pacific College (OR) and Willamette University (OR).

## Considerations

No formal agreements exist for this degree to meet basic skills and general education requirements at out-of-state colleges, although courses for COCC's AAOT degree parallel many of them.

## Entry requirements

Students are required to take COCC's placement test prior to registration. As part of this degree, students should begin with the appropriate level of courses based on their placement test results. Students with credits from other institutions should send copies of their transcripts to COCC's Admissions and Records office prior to registering for classes; depending on courses taken, the placement test may be waived and credits may apply toward this degree.

## Graduation requirements

Complete all requirements listed below:
$\square$ Complete all AAOT degree requirements, as listed below. Students may also use AAOT requirements as listed in one of the previous five years' catalogs;
Earn a minimum 2.0 cumulative COCC grade-point average; Complete at least 24 COCC degree-applicable credits;
Submit a degree application to the Admissions and Records office; Owe no debt to the College; and
$\square$ Have a high school diploma or GED, or demonstrate ability to benefit through the COCC placement test (see page 11 for ability-to-benefit details).

## ASSOCIATE OF ARTS - OREGON TRANSFER DEGREE COURSE REQUIREMENTS

GENERAL EDUCATION: Basic Skills (all Basic Skills courses must be completed with a "C" grade or better)

## English Composition

-WR 121

- WR 122
- WR 123, 214, 227


## Speech

$\square$ SP 111 or 219

## Math

$\square$ MTH 105 or higher (if using Fund. of Math, must complete MTH 211, 212, 213 to meet this requirement)

## Health

$\square$ HHP 295, 266, 258, 242 or 231
and one HHP activity/health module
or

- HHP252a


## Computer skills

$\square$ Pass Computer Competency Test or take CIS 120 or CIS 131

## Total Basic Skills credits

(continued on next page)

## ASSOCIATE OF ARTS - OREGON TRANSFER DEGREE REQUIREMENTS (continued)

## GENERAL EDUCATION: Distribution Requirements

## Humanities

A minimum of 11 credits from the humanities distribution list (see page 44), with:

- at least two different prefixes, and
- at least two courses with the same prefix

Note that this may require four classes depending on courses chosen.


A minimum of 15 credits from the science/math/ computer science list (see pages 44 and 45):

- with at least two different prefixes, and
- three biological or physical science courses with labs, two of which must have the same prefix

$\qquad$
$\qquad$
$\qquad$
$\qquad$
Total Science/Math/Computer Science credits $\qquad$


## Social Science

A minimum of 15 credits from the social science distribution list (see page 45), with:

- at least two different prefixes, and
- at least two courses with the same prefix
$\square$ $\qquad$
$\qquad$
$\qquad$
$\square$
Total Social Science credits


## ELECTIVE REQUIREMENTS, 27-32 credits:

Choose enough elective credits to reach a minimum total of 93 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, professional technical courses ( 12 credits max., see page 45 for list) or CWE/HHP/performance classes ( 15 credits max.). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

General electives
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\square$ $\qquad$
$\square$
$\qquad$
$\square$ $\qquad$
$\qquad$

Professional Technical electives (maximum of 12 credits); see page 45 for professional technical course prefixes.
$\square$
$\qquad$
$\qquad$
$\square$ $\qquad$
$\qquad$
$\qquad$
CWE, HHP activity or Music Performance electives
(maximum of 15 credits)


## ASSOCIATE OF SCIENCE DEGREE - DEGREE CHECKLIST

The Associate of Science (AS) degree is designed as a transfer degree for students who want to transfer to a specific four-year college or university in a specific major. With this, 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, pre-engineering), but can also be designed for other majors.

## Considerations

Based on the courses chosen between the student and advisor, the AS degree is narrowly focused toward a specific transfer college or university's lower-division requirements. Therefore, the 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.

## Entry requirements

Students are required to take COCC's placement test prior to registration. As part of this degree, students should begin with the appropriate level of courses based on their placement test results. Students with credits from other institutions should send copies of their transcripts to COCC's Admissions and Records office prior to registering for classes; depending on courses taken, the placement test may be waived and credits may apply toward this degree.

## Graduation requirements

Complete all requirements listed below:
$\square$ Complete all AS degree requirements, as listed below.
Students may also use AS requirements as listed in one of the previous two years' catalogs;
$\square$ Earn a minimum 2.0 cumulative COCC grade-point average;
Complete at least 24 COCC degree-applicable credits;
Submit a degree application to the Admissions and Records office;
Owe no debt to the College; and
Have a high school diploma or GED, or demonstrate ability to benefit through the COCC placement test (see page 11 for ability-to-benefit details).

## ASSOCIATE OF SCIENCE DEGREE COURSE REQUIREMENTS

GENERAL EDUCATION: Basic skills requirements (19-24 credits)

## English Composition

- WR 121
- WR 122
$\square$ Third approved writing course


## Speech

SP 111, 218, or 219 $\qquad$
$\qquad$

## Math

MTH 105 or higher (if using Fund. of Math, must complete MTH 211, 212, 213 to meet this requirement) $\qquad$

## Health

$\square$ HHP 295, 266, 258, 242 or 231 $\qquad$ $\longrightarrow$ and one HHP activity/health modu $\qquad$ or

## HHP252a

## Computer skills

$\square$ Pass Computer Competency Test or take CIS 120 or CIS 131

## Total Basic Skills credits

[^0]
## ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS (continued)

GENERAL EDUCATION: Distribution requirements (24-32 credits)
The following courses should be chosen with assistance of an advisor and in consideration of transfer institution general education and major requirements. When 1 through 3 below are complete, students will have courses from the areas of humanities, science/math/computer science, and social sciences.

1. Choose three courses from one area of the Distribution List (pages 44 and 45) with at least two different prefixes and at least two courses with the same prefix. 9-12 credits.
$\square$
$\square$ $\qquad$
$\square$ $\qquad$
$\qquad$
2. Choose three courses from an area of the Distribution List (pages 44 and 45) different than used in 1 above with at least two different prefixes and at least two courses with the same prefix; 9-12 credits.
$\square$ $\qquad$
$\qquad$
$\square$ $\qquad$
$\qquad$
$\square$ $\qquad$
$\qquad$
3. Choose two courses from the Distribution List (pages 44 and 45) from a different area than used in 1 or 2 above; 6-8 credits.
$\square$ $\qquad$
$\qquad$
$\square$ $\qquad$
$\qquad$

## Total Distribution credits (26-32)

AS PROGRAM REQUIREMENTS (24 credits)
Courses must be 100 -level and above, and should be chosen with the assistance of an advisor and in consideration of transfer institution major requirements.


## ELECTIVE REQUIREMENTS (17-34 credits)

Choose enough elective credits to reach a minimum total of 93 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, professional technical courses ( 12 credits max., see page 45 for list) or CWE/HHP/performance classes ( 15 credits max.). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

## General electives

$\qquad$
Professional Technical electives (maximum of 12 credits).
See page 45 for professional technical course prefixes.


## ASSOCIATE OF APPLIED SCIENCE CHECKLIST

## About this degree option

The Associate of Applied Science degree trains students in specific technical areas to prepare for immediate employment upon graduation. The checklist below provides an outline of the degree; however, specific requirements for each of the professional technical areas are provided on pages 45.

## Advantages

The Associate of Applied Science degree provides students with the hands-on technical skills needed for employment or certification/ licensure in a variety of career areas. Students should note that while the AAS degree is generally a two-year degree option for full-time students, COCC provides certificates of completion in many other professional technical areas which require only one to six terms to complete; see individual program descriptions for options.

## Considerations

The degree is not intended to transfer, though most general education and some professional technical courses are eligible for transfer.

GENERAL EDUCATION: Basic skills (16-20 credits with "C" or better)
Writing and Communications (minimum 6 credits)
$\square 3$ credits in a writing course as specified by program
$\square 3$ credits in a writing or speech course as specified by program
$\overline{\text { (See program descriptions for more required writing/speech } \overline{\text { courses }})}$

## Math

$\square$ See program descriptions for required math course or competency.

## Health

$\square$ Check your specific program for the required Health course. If no specified course listed, select from two choices below:
HHP 295, 266, 258, 242, or 231 and one activity or health module ( 4 credits) -OR-HHP 252A (3 credits)

## Human Relations

$\square$ A human relations course or component is required for all AAS degrees. Check program requirements for the recommended course (such as BA 285, PSY 207, or SP 218).

## Computer basic skills

Check program description for course requirement. If no course is specified, student must pass computer basic skills competency test or take CIS 120 or CIS 131 (see page 35).

## Total Basic Skills credits

## Entry requirements

Students are required to take COCC's placement test prior to registration. As part of this degree, students should begin with the appropriate level of courses based on their placement test results. Students with credits from other institutions should send copies of their transcripts to COCC's Admissions and Records office prior to registering for classes; depending on courses taken, the placement test may be waived and credits may apply toward this degree.
Graduation requirements (Complete all requirements listed below) $\square$ Complete all AAS degree requirements, as listed on pages 47-125. Students may also use AAS requirements listed in the previous two years' catalogs;
$\square$ Earn a minimum 2.0 cumulative COCC grade-point average;
Complete at least 24 COCC degree-applicable credits;
Submit a degree application to the Admissions \& Records Office;
Owe no debt to the College; and
$\square$ Have a high school diploma or GED, or demonstrate ability to benefit through the COCC placement test (see page 11).

## GENERAL EDUCATION: Distribution requirements (9 credits)

Complete minimum nine credits of distribution courses, pages 44 and 45 . The courses must be outside of the AAS program area and each must have a different prefix.


Total Distribution credits
PROGRAM REQUIREMENTS AND ELECTIVES (approximately 73 credits)


## Total Elective credits

TOTAL DEGREE CREDITS (Basic Skills + Distribution + Program Requirements/Electives), 93 minimum:

## ASSOCIATE OF GENERAL STUDIES DEGREE

For students who are not pursuing specific transfer or professional technical programs, the Associate of General Studies (AGS) degree provides an alternative to pursue a broad general education background 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.

## 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 degree is not transferable as a whole and does not meet certification requirements for any professional technical area.

## Entry requirements

Students are required to take COCC's placement test prior to registration. As part of this degree, students should begin with the appropriate level of courses based on their placement test results. Students with credits from other institutions should send copies of their transcripts to COCC's Admissions and Records office prior to registering for classes; depending on courses taken, the placement test may be waived and credits may apply toward this degree.

## Graduation requirements

Complete all requirements listed below:
Complete all AGS degree requirements, as listed below.
Students may also use AGS requirements as listed in one of the previous two years' catalogs;
$\square$ Earn a minimum 2.0 cumulative COCC grade-point average;
Complete at least 24 COCC degree-applicable credits;
Submit a degree application to the Admissions and Records office;
Owe no debt to the College; and
Have a high school diploma or GED, or demonstrate ability to benefit through the COCC placement test (see page 11 for ability-to-benefit details).

## ASSOCIATE OF GENERAL STUDIES DEGREE REQUIREMENTS

GENERAL EDUCATION: Basic Skills requirements (22-23 credits)
English Composition
Choose 6 credits from WR 121, 122, 123, 214, 227
$\qquad$

## Speech

Choose 3 credits from any SP 100+ class

## Math

M MTH 105 or higher (if using Fund. of Math, must complete MTH 211, 212, 213 to meet this requirement) $\qquad$

## Health

$\square$ HHP 295, 266, 258, 242 or 231 $\qquad$ and $\square$ one HHP activity/health module___
or

- HHP252a


## Computer skills

$\square$ CIS 120 or 131

## Research/information

- LIB 127

Total Basic Skills credits
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
(continued on next page)

## ASSOCIATE OF GENERAL STUDIES DEGREE REQUIREMENTS (continued)

## GENERAL EDUCATION: Distribution requirements

(19 credits minimum)

## Humanities

Choose 3 credits from the Humanities Distribution List, page 44.
$\square$ $\qquad$
$\qquad$

## Physical/biological lab science

Choose 4 credits from the Sciences Distribution List, pages 44 and 45 , with a BI, CH, G, GS or PH prefix
$\square$ $\qquad$
$\qquad$

## Social Science

Choose 3-4 credits from the Social Science Distribution List, page 45.
$\qquad$
$\qquad$

## Additional Distribution course

Three additional credits from any area on the Distribution List, pages 44 and 45
$\square$ $\qquad$
$\qquad$

## Business Administration

Choose any 3-4 credit class with a BA prefix
$\square$ $\qquad$
$\qquad$

## Professional Technical

Three credits from a Professional Technical area, as listed on page 45
$\qquad$
$\qquad$

Total Distribution credits $\qquad$

ELECTIVE REQUIREMENTS (50-53 credits)
Choose enough elective credits to reach a minimum total of 93 overall degree credits. Cannot include reading, writing or math classes below the 100-level.
$\qquad$

## Total Elective credits

$\qquad$

## DISTRIBUTION COURSES

The following COCC courses have been approved by the College's Curriculum Committee for use as General Education
Distribution courses for the AAOT, AS, AAS and AGS degrees.

## Humanities Distribution course options

ARH 201, 202, 203 Intro Art History I, II, III (4 credits each)
ARH 206 Modern Art History (4 credits)
ARH 207 Native American Art (4 credits)
ART 101 Intro to Visual Arts (4 credits)
ART 115, 116, 117 Basic Design I, II, III (3 credits each)
ART 131, 132, 133 Drawing I, II, III (3 credits each)
ENG 104 Introduction to Lit: Fiction (4 credits)
ENG 105 Introduction to Lit: Drama (4 credits)
ENG 106 Introduction to Lit: Poetry (4 credits)
ENG 107, 108, 109 Survey of Western World Literature (4 credits each)
ENG 140 Shakespeare Review in Ashland (3 credits)
ENG 201, 202 Shakespeare (4 credits each)
ENG 204, 205 Survey of British Literature I, II (4 credits each)
ENG 221 Intro to Children's Literature (4 credits)
ENG 253, 254 Survey of American Literature I, II (4 credits each)
FA 101 Introduction to Motion Pictures (3 credits)
FA 257 Understanding Movies: Literature into Film (4 credits)
FR 201, 202, 203 Second Year French (4 credits each)
FR 211, 212, 213 French Conversation \& Culture (3 credits each)
GER 201, 202, 203 Second Year German (4 credits each)
GER 211, 212, 213 German Conversation \& Culture (3 credits each)
HUM 210 Culture \& Literature of Asia (4 credits)
HUM 211 Culture \& Literature of Africa (4 credits)
HUM 212 Culture \& Literature of the Americas (4 credits)
HUM 213 Culture \& 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 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: Film Noir (4 credits)
HUM 266 Popular Culture: Travel Literature (4 credits)
IT 201, 202, 203 Second Year Italian (4 credits)
MUS 101 Music Fundamentals ( 3 credits)
MUS 111, 112, 113 Music Theory IA, IB, IC (3 credits each)
MUS 211, 212, 213 Music Theory IIA, IIB, IIC (3 credits each)
MUS 201, 202, 203 Understanding Music (3 credits each)
MUS 205 Introduction to Jazz History (3 credits)
PHL 170 Philosophy of Love and Sex (3 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)
PHL 205 Medical Ethics (3 credits)
SPAN 201, 202, 203 Second Year Spanish (4 credits each)
SPAN 211, 212, 213 Spanish Conversation \& Culture (3 credits each)
SP 111 Fundamentals Public Speaking (3 credits)
SP 115 Introduction to Intercultural Communication (3 credits)
SP 218 Interpersonal Communication (3 credits)
SP 219 Small Group Communication (3 credits)
SP 220 Gender Communication (3 credits)
SP 241 Media, Communication, Society (3 credits)
SP 270 Communicating Love (3 credits)
TA 141, 142, 143 Acting I, II, III (4 credits each)
TA 144 Improvisational Theater (3 credits)
TA 200 Intro 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)

## Science/Math/Computer Science Distribution course options

*BI 101, 102, 103 General Biology I, II, III (4 credits each)
*BI 211 Principles of Biology (5 credits)
*BI 212 Biology of Plants (5 credits)
*BI 213 Biology of Animals (5 credits)
*BI 231, 232, 233 Human Anatomy and Physiology I, II, III (4 credits each)
*BI 234 Microbiology (4 credits)
*BOT 203 Plant Identification (4 credits)
*CH 104, 105, 106 Intro to Chemistry I, II, III (4 credits each)
*CH 221, 222, 223 General Chemistry I, II, III (4 credits each)
*CH 241, 242, 243 Organic Chemistry I, II, III (5 credits each)
CIS 160 Computer Orientation (4 credits)
CIS 161, 162 Computer Science I, II (4 credits each)
ENGR 201 Electrical Fundamentals (3 credits)
FE 210A Map, Compass and GPS (3 credits)
FN 225 Human Nutrition (4 credits)
FOR 240A Forest Ecology (3 credits)
FOR 240B Wildlife Ecology (3 credits)
FOR 241A Dendrology I (3 credits)
FOR 251 Recreation Resource Management (3 credits)
FOR 260 Conservation of Natural Resources (3 credits)
FW 251 Wildlife Conservation (3 credits)
*G 201, 202, 203 Geology I, II, III (4 credits each)
G 240 Limnology (4 credits)
*G 291 Rocks \& Minerals (3 credits)
*GS 104 Physics (4 credits)
*GS 105 Chemistry (4 credits)
*GS 106 Geology (4 credits)
*GS 107 Astronomy (4 credits)
*GS 108 Oceanography (4 credits)
*G 162 Regional Geology (3 credits)
*G 232 Coastal Oceanography (5 credits)
GEOG 265 Geographic Information Systems (4 credits) HHP 220 Introduction to Epidemiology (3 credits)
HHP 242 Stress Management (3 credits)
HHP 259 Care \& Prevention of Sport Injuries (3 credits)
HHP 260 Introduction to Human Movement (3 credits)
HHP 261 Basic Exercise Physiology (3 credits)
HHP 262 Training Theory \& Application (3 credits)
MTH 105 Introduction to Contemporary Math (3 credits)
MTH 111 College Algebra (4 credits)
MTH 112 Trigonometry (4 credits)
MTH 113 Topics in Precalculus (4 credits)
MTH 211W, 212W, 213W Fundamentals Elementary Math I, II, III (4 credits each)
MTH 231, 232 Discrete Mathematics I, II (4 credits each)
MTH 241 Calculus for Management/Social Science (4 credits)
MTH 243 Math for Management/Life/Social Science (4 credits)
MTH 244 Introduction to Methods of Probability/Statistics (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)
*PH 201, 202, 203 General Physics I, II, III (5 credits each)
*PH 211, 212, 213 General Physics I, II, III (5 credits each)
(*Counts as a lab science course)

## Distribution Courses (continued)

## Social Sciences Distribution course options

ANTH 102 Archaeology (4 credits)
ANTH 103 Cultural Anthropology ( 4 credits)
ANTH 226 Peoples and Cultures of Latin America (4 credits)
ANTH 230 Physical Anthropology ( 4 credits)
ANTH 231, 232, 233 American Indian Studies (4 credits)
ANTH 254 Magic, Witchcraft and Religion ( 4 credits)
ANTH 283 Medical Anthropology (4 credits)
ANTH 295 Gender \& Sexuality from an Anthropological Perspective (4 credits)
CJ 100 Survey of Criminal Justice System (3 credits)
CJ 101 Introduction to Criminology ( 4 credits)
CJ 110 Law Enforcement (3 credits)
CJ 120 Judicial Process ( 3 credits)
C) 132 Parole and Probation (3 credits)
C) 200 Police-Community Relations ( 3 credits)

CJ 201 Introduction to Juvenile Justice ( 3 credits)
C) 207 Seminar in Criminal Justice ( 3 credits)

CJ 210 Criminal Investigation I ( 3 credits)
C) 211 Criminal Investigation II (3 credits)

CJ 213 Interviewing and Interrogation (3 credits)
C) 220 Introduction to Substantive Law ( 3 credits)

CJ 222 Search and Seizure (3 credits)
CJ 230 Juvenile Corrections ( 3 credits)
CJ 232 Corrections Casework (3 credits)
C) 243 Drugs and Crime In Society (3 credits)

CJ 253 Corrections ( 3 credits)
EC 201 Microeconomics (4 credits)
EC 202 Macroeconomics (4 credits)
EC 215 US Economic History (4 credits)
GEOG 105 Physical Geography ( 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)

[^1]
## PROFESSIONAL/TECHNICAL COURSES (as applied to AAOT electives)

Students may use up to 12 credits of Professional/Technical courses to meet elective credit requirements for the Associate of Arts Oregon Transfer (AAOT) and Associate of Science (AS) degree. Professional Technical courses are either digit-decimal numbered from 1.000 to 8.499 , or 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 Intro to Health Occupations
AH 111 Medical Terminology I
AH 112 Medical Terminology II
AUT All courses
AV All courses
CCI All courses
CIS 121 Computer Concepts II
CIS 122 Computer Concepts III
CIS 125A1 AutoCAD I
CIS 125A2 AutoCAD II
CIS 125A3 AutoCAD III
CIS 125D Intermediate Database
CIS 125EP AutoCAD Examination Preparation
CIS 125G Introduction to Web Graphics
CIS 125S Intermediate Spreadsheets
CIS 125WD Intermediate Word Processing
CIS 135A1 CAD for Architectural Drafting I
CIS 135A2 CAD for Architectural Drafting II

CIS 135CA Customizing AutoCAD
CIS 135CD CAD for Civil Drafting
CIS 135CP CAD for Presentation
CIS 135MD CAD for Mechanical Drafting
CIS 145 Micro Computer Service
CIS 279AD Windows 2000 Active Directory Services
CIS 279NI Windows 2000 Network Infra-
structure Administration
CIS 279P Windows 2000 Professional
CIS 279S Windows 2000 Server
DA All courses
DM All courses
DSL All courses
EMT All courses
FOR 130 Chainsaw Use / Maintenance
FOR 132 Directional Timber Falling

GEOG 211 Computer Cartography GEOG 265 Geographic Information Systems GEOG 266 ARC GIS
GEOG 267 Geodatabase Design
GEOG 273 Spatial Data Collection
GEOG 280 GIS Practicum
GEOG 282 Adv. ARC/INFO
GEOG 284 GIS Customization
GEOG 285 Data Conversion/Documentation
GEOG 286 Remote Sensing
GEOG 287 Analysis of Spatial Data
GEOG 289 Image Processing
HIT All courses
LMT All courses
MFG All courses
MA All courses
NUR All courses
OA All courses

## COLLEGE TRANSFER AND PROFESSIONAL TECHNICAL PROGRAMS

Here is a quick-reference listing of the college transfer and professional technical programs (certificates and Associate of Applied Science degrees) and courses available at Central Oregon Community College. Additional information on these programs and their requirements can be found on pages 47-125.


# ADDICTIONS STUDIES <br> Certificate of Completion <br> Associate of General Studies with Addictions Studies Certificate <br> Associate of Arts Oregon Transfer 

## Certificate of Completion <br> (59-63 credits; four quarters to complete if attending full time)

The Addictions Studies program trains individuals in the knowledge, attitudes and skills needed for employment in the drug- and alcohol-treatment field as entry-level counselors working under supervision in treatment centers. It is designed to prepare the student to take the Oregon Certified Alcohol and Drug Counselor (CADC) I exam upon completion of the coursework and 1,000 hours of supervised practicum. The program also provides coursework in the addictions field to other human service and criminal justice workers who help addicted persons and their families.

Individuals seeking enrollment in the Addictions Studies certificate program must take the ASSET or COMPASS placement test. Students benefit greatly if they earn the minimum scores to place into WR 121 and MTH 60, or complete the equivalent coursework with a C or above prior to starting Addictions Studies coursework.

The Addictions Studies certificate is a 59- to 63-credit program designed for enrollment during any term. For students who intend to complete the program in one year, entrance during fall term is essential. The program can be completed in four terms if the student starts in the fall, has the minimum skills upon entrance and is able to successfully complete 16 to 18 credits per term. However, many students choose to build basic skills and/or enroll on a part-time basis, taking one or two courses per quarter. There are at least three Addictions Studies courses offered each quarter that require only the minimum basic skills to get started. All students need to work closely with an advisor to develop an effective course plan.

Addictions Studies courses are available on a first-come, firstserved basis. Enrollment in practicum credits ${ }^{1}$ is by program director or practicum supervisor approval only. Students who have a history of addiction are expected to maintain sobriety throughout the program, and a student may be required to provide corroboration of sobriety.

An interview with the program director is recommended before starting the program. Call (541) 383-7251 for additional information.

After obtaining the CADC I credential, students looking for more advanced opportunities in the field should complete the Associate of Arts or the Associate of General Studies degrees and acquire further work experience. The student could then sit for the CADC II exam. For even greater opportunities in this field, the student would complete bachelor's and master's degrees, after which they could sit for the CADC III exam (or the master's in addiction counseling credential).

## Fall term

HD 162 Effective Helping Skills 3
HD 161 Ethics for Human Services* 3
HD 200 Addictive Behavior 3
HD 206 Groups and Addictions Treatment 3
HD $180 \quad$ HIV/AIDS and Addictions 2
HD 291 Practicum ${ }^{1}$ *
WR 121 English Composition 3

## Winter term

HD 201 Families and Addictions 3
HD 223 Drugs and Addictions 3
HD 262 Effective Helping Skills II 3
HD 205 Youth and Addictions 3
HD 291 Practicum *
Spring
HD 208 Multicultural Issues 3
HD 260 Counseling Theories 3
HD 210 Dual Diagnosis 4
HD 263 Counseling the Chemically Dependent Client 3
HD 266 Case Management 4
HD 291 Practicum *

## Summer

HD 291 Practicum *
MTH 60 Algebra I 4
Pass computer competency test 0
or CIS 120 Computer Concepts 14
or CIS 131 Software Applications
${ }^{1}$ COCC recommends that students start their practicum during winter term; however, practicum opportunities are available every term. A total of nine practicum credits is required for the certificate of completion in addiction studies.

## Advising information

Students who are not yet in WR 121 may take HD 162 and HD 206 during fall term.

## ADDICTIONS STUDIES (continued)

Certificate of Completion
Associate of General Studies with Addictions Studies Certificate
Associate of Arts Oregon Transfer

> Associate of General Studies with Addictions Studies Certificate (96 credits)

The Associate of General Studies (AGS), with an emphasis on Addictions Studies, is designed for students who wish to sit for the Certified Alcohol and Drug Counselor (CADC) II exam, but aren't pursuing a specific bachelor's degree option. Students who fulfill the requirements of the one-year Certificate of Completion in Addictions Studies can earn the AGS degree by finishing 35 additional credits (Certificate of Completion requirements can be met by earning the AGS degree).

## General education/basic skills

| WR 121 | English Composition ${ }^{2}$ | 3 |
| :---: | :---: | :---: |
| WR 122 | English Composition | 3 |
| or WR 123 | English Composition |  |
| or WR 22 | Technical Writing |  |
| SP 111 | Fundamentals of Public Speaking | 3 |
| or SP 218 | Interpersonal Communication |  |
| MTH 111 | College Algebra | 4 |
| HHP 252a | Fit/First Aid | 3 |
| Computer | petency ${ }^{1}$ | 0-4 |
| LIB 127 | Information Research Skills | 2 |
| General education/distribution |  |  |
| One course from |  | 4 |
| HUM 212 | Culture and Literature of the Ame |  |
|  | or HUM 240 Native American Literature and Culture |  |
| One course from |  | 4 |
| BI --- |  |  |
| or CH --- |  |  |
| or GS --- |  |  |


| Two courses from |  |  |
| :--- | :--- | :--- |
| PSY 201 | Mind and Brain |  |
| or PSY 202 | Mind and Society |  |
| or PSY 215 | Developmental Psychology |  |
| or PSY 219 | Abnormal Psychology |  |
|  |  | 8 |
| One course from |  |  |
| BA 165 | Management Decision Making |  |
| or BA 218 | Personal Finance |  |
| or BA 224 | Human Resources Management |  |
| or BA 285 | Business Human Relations |  |

[^2]

## Electives

HD $180 \quad$ HIV/AIDS and Addictions ${ }^{2} \quad 2$
HD 161 Ethics for Human Services ${ }^{2 *} 3$
HD 162 Effective Helping Skills ${ }^{2}$ 3
HD 206 Groups and Addictions Treatment ${ }^{2}$ 3
HD $200 \quad$ Addictive Behavior ${ }^{2}$ 3
HD 201 Families and Addictions ${ }^{2}$ 3
HD $262 \quad 3$
HD 223 Drugs and Addictions ${ }^{2}$ 3
HD 205 Youth and Addictions ${ }^{2}$ 3
HD 208 Multicultural Issues ${ }^{2}$ 3
HD 210 Dual Diagnosis ${ }^{2}$ 4
HD 260 Counseling Theories ${ }^{2}$ 3
$\begin{array}{ll}\text { HD } 263 & \text { Counseling the Chemically Dependent } \\ \text { Client }^{2}\end{array}$
HD 266 Case Management ${ }^{2}$ 4
HD 291 Practicum ${ }^{2}$ 9
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{2}$ Required for the certificate of completion in Addictions Studies.

# ADDICTIONS STUDIES (continued) 

Certificate of Completion

Associate of General Studies with Addictions Studies Certificate
Associate of Arts Oregon Transfer

## Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 addictions studies (electives required for the addictions studies certificate are marked with footnote ${ }^{2}$ on page 48). This degree will complete the educational requirements for the student who wants to sit for the Oregon Certified Alcohol and Drug Counselor II (CADC II) exam and will allow students to transfer with junior standing to Oregon's public universities.

## General education/basic skills

English Composition

| WR 121 $^{\text {WR }}$ | English Composition |  |
| :---: | :--- | :---: |
| WR 122 | English Composition | 3 |
| WR 123 | English Composition | 3 |
| or WR 227 | Technical Writing | 3 |

Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
$\rightarrow$

Math
MTH 111 College Algebra4

Health
HHP 252a Fit/First Aid 3
Computer competency ${ }^{1} \quad 0-4$

## General education/distribution

Humanities
SP 218 Interpersonal Communication 3
HUM $240 \quad$ Native American Literature \& Culture 4
HUM 256 Intro to African-American Literature 4


## Science/Math/ComputerScience

FN 225 Foods and Nutrition 4
GS 105 Chemistry 4
Two courses from 8
GS 104 Physics
or GS 106 Geology
or GS 107 Astronomy
or GS 108 Oceanography
Social Sciences
CJ 101 Introduction to Criminology 4
CJ 132 Parole and Probation 3
PSY 201 Mind and Brain 4
PSY 202 Mind and Society 4

## Electives

32 credits from the addictions studies certificate ${ }^{2}$ will be applied toward elective credits. No additional elective classes are needed to earn the AAOT.
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{2}$ Required for the Addictions Studies certificate.

## ANTHROPOLOGY

Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 anthropology.

## General education/basic skills

English composition
WR $121 \quad 3$

WR 122 English Composition 3
WR 123 English Composition 3
Speech
$\begin{array}{cll}\text { SP 111 } & \text { Fundamentals of Public Speaking } & 3 \\ \text { or SP 219 } & \text { Small Group Communication } & \end{array}$
MTH $111 \quad 4$

Health ${ }^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities: a minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix. Second-year foreign language recommended to meet part of this requirement.

Science
15 (minimum)
Choose one of the following science sequences based on your interest area (e.g. archaeology students should focus on geology). Students must also take one additional class from the science/ math/computer science distribution list with a prefix different than the sequence courses.

| BI 101 | General Biology I | 4 |
| :--- | :--- | :--- |
| BI 102 | General Biology II | 4 |
| BI 103 | General Biology III | 4 |
| or |  |  |
| BI 211 | Principles of Biology I |  |
| BI 212 | Biology of Plants II |  |
| BI 213 | Biology of Animals III |  |

BI $102 \quad$ General Biology II 4
BI 103 General Biology III 4
BI 211 Principles of Biology I
BI 213 Biology of Animals III

or
BI 231 Human Anatomy \& Physiology I
BI 232 Human Anatomy \& Physiology II
BI 233 Human Anatomy \& Physiology III
or
G 201 Geology I
G 202 Geology II
G 203 Geology III
Social Science
ANTH 102 Archaeology 4
ANTH 103 Cultural Anthropology 4
ANTH 230 Physical Anthropology 4
plus one class from the social science
distribution list, other than an ANTH prefix 4

## Electives

LIB 127 Information Research Skills 2
General Electives 4-8
Foreign Language, first year 12
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR— HHP 252A.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## APPRENTICESHIP/INDUSTRIAL TECHNOLOGY

Associate of Applied Science
(101-106 credits; eight to 12 quarters to complete if attending full time)
There may be changes in this program. Meet with your program advisor to discuss most current details.

Apprenticeship is a structured training program based on a written agreement between the apprentice and the Joint Apprenticeship \& Training Committee. It combines on-the-job training and classroom coursework.

COCC offers classroom coursework to apprentices in the following trades: boiler/turbine operator, industrial maintenance millwright, manufacturing plant electrician, limited maintenance electrician, and sheet metal. This training supplements the on-the-job training that apprentices receive from their employer and is required for apprentices to become journey persons in their trade. Generally that involves taking one class in the evening two or three terms during the school year.

Registered apprentice training is offered in accordance with Oregon Law and Plan of Apprenticeship and Training, U.S. Department of Labor and Oregon State Apprenticeship Council.

## Associate of Applied Science degree requirements

COCC also offers an Associate of Applied Science degree in Apprenticeship/Industrial Technology to the following trade journey persons: boiler/turbine operator, industrial maintenance millwright, electrician/manufacturing plant and sheet metal. In addition to the credit received from COCC for the related training during their apprenticeship, a journey person may receive up to 40 credits for on-the-job experience of at least 7,200 hours. The 40 credits are recognized only upon completion of all other requirements for the degree.

In order to earn an Associate of Applied Science degree, students must also complete the following coursework with a grade of "C" or better:

| BA 285 | Business Human Relations | 3 |
| :---: | :---: | :---: |
| or PSY 207 | Applied Psychology |  |
| or SP 218 | Interpersonal Communication |  |
| WR 75 | Basic Writing I (or higher) | 3 |
| SP 111 | Fundamentals of Public Speaking | 3 |
| or SP 218 | Interpersonal Communication |  |
| MTH 85 | Technical Mathematics I | 4 |
| Health ${ }^{1}$ |  | 3-4 |
| Computer com | petency ${ }^{2}$ | 0-4 |

Distribution list courses; each must have a
different prefix (e.g., HHP, MUS, SOC).
${ }^{1}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.

${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

Journeypersons who have completed their related training in a registered Oregon apprenticeship program outside of COCC and have at least 7,200 hours of OJT may earn an Associate of Applied Science degree in Apprenticeship/Industrial Technology after completing the general education requirements above and verifying their journeyperson status.

## Other information

For information about Apprenticeship Programs and jobs, phone the Bureau of Labor and Industries/Apprenticeship \& Training at (541) 322-2435 or visit their Web site at www.boli.state. or.us. For information regarding an Apprenticeship/Industrial Technology degree please call Enrollment Services - Admissions at (541) 383-7500 or call the COCC Apprenticeship office at (541) 504-2930.

COCC's Visual Art program includes courses in art history, basic design, painting, ceramics, jewelry and metalwork, drawing, photography, figurative sculpture, and watercolor. COCC's main art facility, Pence Hall, houses art studios equipped with drawing tables, easels, potter's wheels and metalwork equipment, for student use. Students and faculty members develop art exhibits each year.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 art.

## General education/basic skills

## English composition

| WR 121 | English Composition | 3 |
| :--- | :--- | :--- |
| WR 122 | English Composition | 3 |
| WR 123 | English Composition | 3 |
| or WR 214 | Business Communications |  |
| or WR 227 | Technical Writing |  |

Speech ${ }^{1}$
SP $111 \quad$ Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
MTH $111 \quad 4$
Health $^{2}$ 3-4

Computer competency ${ }^{3} \quad 0-4$

## General education/distribution

Humanities
ARH 201 Art History I 4
ARH 202 Art History II 4
plus one additional course from COCC's distribution list, other than an ARH prefix.

Science: a minimum of 15 credits from the science/math/ computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

Social Science: a minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

ARH 203 Art History III 4
ART 115 Basic Design I 3
ART 116 Basic Design II 3
ART 117 Basic Design III 3
ART 131 Drawing I 3
plus enough additional electives to reach the minimum of 93 credits for the AAOT. Art majors should take additional studio art classes in consultation with their advisor.
${ }^{1}$ Students planning to transfer to Oregon State University (Corvallis or Cascades Campus) must take SP 111.
${ }^{2}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR-HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{3}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Transfer information

Note that at the time of this publication, coursework was being approved toward an Associate of Science - Direct Transfer to Oregon State University-Cascades Campus degree. This degree will allow students to meet all lower-division baccalaureate and major requirements for a Bachelor of Arts or Science in art, option in fine arts and transfer with junior standing to OSUCascades Campus. Contact the Admissions \& Records Office for a listing of course and degree requirements.

The University of Oregon has a bachelor of fine arts degree in several art media areas.

Successful transfer to an upper division arts school or program is usually based not only on transcripts but 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

Certificates of Completion

Associate of Applied Science

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 both technical skills, such as computer applications, as well as hands-on skills using a self-paced model for most of the classes. Communication skills are also highly emphasized throughout each 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. Men and women who are changing jobs or careers, students who want to explore the possibility of a technician career, or those who simply want to know more about vehicles may enter the program each term.

Entry into the program at the beginning of each term is possible by meeting course prerequisites or receiving the instructor's permission. The automotive technology program is certified by the National Automotive Technicians Education Foundation Inc. (NATEF). The program is approved for veterans' training. Occupational supplementary courses with college credit may be offered in the evening. These classes are designed to meet community needs and will vary from one term to the next.

Students are expected to supply their own hand tools. A list is available from program instructors. The College provides any needed specialized tools and equipment for use in courses.

Prior to taking automotive specialty courses, students must take the following automotive basic skills classes ( 9 credits):

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

> Automotive Electrical Technician (Basic) Short-term Certificate ( 13 credits) Two quarters to complete if attending full time

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 ASE certification in (A6) Electrical/Electronic Systems.

AUT 102 Automotive Electric I

# Automotive Drive-Train Technician Short-term Certificate ( 16 credits) Two quarters to complete if attending full time 

From drivelines to transaxles, clutches to differentials, COCC's Transmission Tech program trains 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 and (A3) Automotive Manual Drive Trains and Axles.
Automotive basic skills ..... 9
AUT 202 Manual Drive Trains I ..... 3
AUT 251 Automatic Transmissions I ..... 3
AUT 252 Automatic Transmissions II ..... 1
Automotive Engines TechnicianShort-term Certificate ( 15 credits)Two quarters to complete if attending full time

Learn to rebuild an engine, or start building one from scratch, by taking courses toward COCC's Automotive Engine Technician Certificate; coursework applies toward ASE certification in (A1) Automotive Engine Repair.
Automotive basic skills ..... 9
AUT 105 Diesel Performance I ..... 2
AUT 201 Automotive Engines ..... 4
Under-Car Technician Short-term Certificate ( 15 credits)

    Two quarters to complete if attending full time
    This hands-on, short-term training 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 and (A4) Automotive Steering and Suspension.

Automotive basic skills 9
AUT 204 Steering and Suspension 3
AUT 208 Automotive Brakes 3

## AUTOMOTIVE TECHNOLOGY (continued)

Certificates of Completion
Associate of Applied Science


> Automotive Heating and Air Conditioning Technician Short-term Certificate
> (21 credits; three quarters to complete if attending full time)

COCC's Automotive Heating and Air Conditioning classes give students a "hands-on" opportunity to learn about automotive air conditioning and heating systems, EPA Recovery Requirements for R-12, R-134a systems, and general diagnosis and service. Courses in this option apply toward ASE certification in (A7) Automotive Heating and Air Conditioning and (A6) Electrical/ Electronic Systems.

Automotive basic skills 9
AUT 102 Automotive Electric I 4
AUT 111 Computerized Engine Controls 5
AUT 253 Automotive Air Conditioning 3

## Automotive Electrical Technician (Advanced) <br> Short-term Certificate <br> ( 17 credits; three quarters to complete if attending full time)

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 ASE certification in (A6) Electrical/Electronic Systems and (A8) Engine Performance.

Automotive basic skills
AUT 102 Automotive Electric I 4
AUT 103 Automotive Electric II 2
AUT 104 Automotive Electric III 2

$$
\begin{gathered}
\text { Engine Performance Technician } \\
\text { Short-term Certificate } \\
\text { (26 credits; three quarters to complete if attending full time) }
\end{gathered}
$$

This program trains students to be the key troubleshooter in figuring out a vehicle's driveability 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. COCC's engine performance technician program applies toward ASE certification in (A6) Automotive Electrical/ Electronic Systems and (A8) Automotive Engine Performance.

Automotive basic skills 9
AUT 102 Automotive Electric I 4
AUT 103 Automotive Electric II 2
AUT 105 Diesel Performance I 2
AUT 111 Computerized Engine Controls 5
AUT 205 Engine Performance I 2
AUT 206 Engine Performance II 2

## Master Automotive Technician <br> Certificate of Completion

( 66 credits; four-five quarters to complete if attending full time)
Automotive basic skills 9
AUT 102 Automotive Electric I 4
AUT 103 Automotive Electric II 2
AUT 104 Automotive Electric III 2
AUT 105 Diesel Performance I 2
AUT 111 Computerized Engine Controls 5
AUT 201 Automotive Engines 4
AUT 202 Manual Drive Trains I 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 216 Co-op Work Experience-Auto 8
AUT 251 Automatic Transmissions I 3
AUT 253 Automotive Air Conditioning 3
BA 285 Business Human Relations 3
MTH 20 Pre Algebra 4
WR $60 \quad$ Rhetoric/Critical Thinking I 4

# AUTOMOTIVE TECHNOLOGY (continued) 

Certificates of Completion<br>Associate of Applied Science



Automotive Management
Associate of Applied Science
(96-100 credits; seven quarters to complete if attending full time)

## YEAR ONE

Fall term
AUT $101 \quad$ Basic Electricity for Automotive 2
AUT 106 Automotive Program Orientation 1
AUT 107 Mechanical Systems I 3
AUT $110 \quad$ Small Gas Engines 3
AUT 204 Steering \& Suspension 3
AUT 208 Automotive Brakes 3
Winter term
AUT $102 \quad 4$
AUT 103 Automotive Electric II 2
AUT 105 Diesel Performance 2
AUT 205 Engine Performance I 2
HHP 252A Fitness/First Aid 4
WR 121 English Composition 3
Spring term
AUT 104 Automotive Electric III 2
AUT 111 Computerized Engine Controls 5
AUT 206 Engine Performance II 2
AUT 253 Automotive Air Conditioning 3
Computer competency ${ }^{1} \quad 0-4$
Summer term
AUT 216
Co-op Work Experience-Auto4

## YEAR TWO

## Fall term

BA 101 Intro to Business 4
BA 111 Applied Accounting I 3
BA 206 Management Fundamentals I 4
MTH 60 Algebra I 4
or MTH 85 Technical Mathematics I
General education distribution courses ${ }^{2}$ 3
Winter term
BA 178 Customer Service 3
BA 285 Business Human Relations 3
$\begin{array}{lll}\text { or SP } 218 & \text { Interpersonal Communication } & \\ \text { WR 214 } & \text { Business Communication } & 3\end{array}$
General education distribution courses ${ }^{2}$ 6

## Spring term

BA 207 Management Fundamentals II 4
BA 223 Marketing Principles I 4
BA 280 Co-op Work Experience 3
BA 286 Managing Business Processes 4
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details), or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{2}$ Choose nine credits from COCC's distribution list (pages 44 and 45); each course must have a different prefix.

## AVIATION

Associate of Applied Science
Associate of Science

## Aviation - Airplane <br> Associate of Applied Science <br> ( 94 credits; six quarters to complete if attending full time)

The aviation field is a growing industry in Central Oregon and the United States. COCC's Aviation program provides the skills needed for a successful career in the aviation industry. From private and commercial certification to certified flight instructor rating, the courses are designed for those interested in learning more about aviation, who want to earn pilot's licenses, and specifically for those who want to become professional pilots.

The program is designed for the person who wants to become a professional pilot, but it is open to anyone wishing to learn to fly or add an additional rating. Graduates of this program receive the following certificates and ratings: Private Pilot, Commercial Pilot, and Certified Flight Instructor certificates; and Instrument and Multiengine ratings. Most COCC graduates become flight instructors, airline pilots or corporate pilots. Others use the degree to advance into management positions within their own companies or earn positions as airport managers, sales specialists and meteorologists with some of the world's foremost aviation companies.

Faculty members are aviation professionals. The program includes flight training in some of the newest and most modern aircraft available, as well as hands-on training in CAT IV Modular Flight Deck advanced training flight simulators.

The aviation program faculty work closely with each student to ensure achievement of academic goals. Some courses require a specific number of hours on the flight simulator and appropriate fees are included with each applicable course. If required, those hours are noted next to the course.

The Associate of Applied Science degree - Airplane and -Helicopter option is designed for students who do not initially plan to transfer on for a four-year degree. Since a large percentage of pilot/aviation jobs require a bachelor's degree, there is an Associate of Science degree in Aviation for Airplane and Helicopter that is tied to an articulation agreement with Oregon Institute of Technology for its bachelor's degree program in Operations Management. The curriculum for the AS degree is not listed here. Please contact the program coordinator, 318-3736, for more information.

Financial assistance, scholarships and loan programs may be available for students interested in pursuing this degree program. For further information, contact program coordinator at (541) 318-3736 or http://aviation.cocc.edu.

## YEAR ONE

## Fall term

| AV 101 | Introduction to Aviation | 3 |
| :--- | :--- | :--- |
| AV 110 | Private Pilot (5 hours) | 5 |
| CIS 120 | Computer Concepts I | 4 |
| or CIS 131 | Software Application (or higher) |  |
| WR 121 | English Composition | 3 |

## Winter term

AV 104 Introduction to Aircraft Systems 4
AV 108 Meteorology I 4
MTH 85 Technical Mathematics I 4
or MTH 111 College Algebra (or higher)
General education distribution course ${ }^{2}$

## Spring term

AV 208 Meteorology II 4
AV 210A Instrument-Airplane $(10 \text { hours })^{1} \quad 5$
MTH 86 Technical Mathematics II 4
or MTH 111 College Algebra (or higher)
General education distribution course ${ }^{2} \quad 3$

## YEAR TWO

## Fall term

AV $150 \quad$ Aerodynamics 4
AV 220 Commercial Pilot ( 10 hours $)^{1} 4$
General education distribution course ${ }^{2} \quad 3$
Elective ${ }^{2} \quad 3$

## Winter term

AV 204 Advanced Aircraft Systems 4

AV $230 \quad$ Multi Engine Pilot (5 hours) ${ }^{1}$ ..... 2
AV 246 Aviation Safety ..... 3
BA 101 Introduction to Business ..... 4
HHP 252A Fitness/First Aid ${ }^{3}$ ..... 3
Elective ${ }^{2}$ ..... 3
Spring term
AV 235 Human Factors* ..... 4
AV 256 Cert Flight Instructor Ground (5 hours) ${ }^{1}$ ..... 5
SP 111 Fundamentals of Public Speaking ..... 3
Elective ${ }^{2}$ ..... 3
${ }^{1}$ Required simulator hours
${ }^{2}$ See advisor for options.
${ }^{3} \mathrm{HHP} 252 \mathrm{~A}$ is recommended to meet this requirement, but students can also choose between HHP 231, 242, 258, 266 or 295 and one activity or health module.

## AVIATION

Associate of Applied Science Associate of Science

## Aviation - Helicopter <br> Associate of Applied Science <br> ( 94 credits; six quarters to complete if attending full time)

COCC offers an optional helicopter degree track. This is also designed for the professional pilot, but courses are open to anyone who wants to get a new license.

Most of the courses are the same for both the airplane and the helicopter pilot, with a few very distinctive courses dedicated to the helicopter career field. Both the Associate of Science degree and the Associate of Applied Science degrees are available to the helicopter student, as is the transfer agreement with Oregon Institute of Technology. Graduates of the helicopter program receive the Private Pilot, Commercial, and Certified Flight Instructor certificates, and the Instrument rating.

Flight training is conducted in Robinson R-22, R-44 and Bell Jet Ranger helicopters. An advanced helicopter simulator is available for enhanced training and to reduce the cost of flight training for our students. Some courses require a specific number of hours on the flight simulator. If required, those hours are noted next to the course. Note that there is a fee required for using the simulator.

Financial assistance, scholarships and loan programs may be available for students interested in pursuing this degree program. For further information, contact program coordinator at (541) 318-3736 or http://aviation.cocc.edu.

## YEAR ONE <br> Fall term

AV 101 Introduction to Aviation 3
AV $115 \quad$ Private Pilot-Helicopter $(5 \text { hours })^{1} \quad 8$
CIS $120 \quad$ Computer Concepts I 4
or CIS 131 Software Application
WR 121 English Composition 3

## Winter term

| AV 104 | Introduction to Aircraft Systems | 4 |
| :--- | :--- | :--- |
| AV 108 | Meteorology I | 4 |
| MTH 85 | Technical Mathematics I | 4 |
| or MTH 111 | College Algebra (or higher) |  |
| General education distribution course |  |  |



## YEAR TWO

## Fall term

AV 150 Aerodynamics ..... 4
AV 225 Commercial Helicopter (10 hours) ${ }^{1}$ ..... 4
General education distribution course ${ }^{2}$ ..... 3
Elective ${ }^{2}$ ..... 3
Winter term
AV 246 Aviation Safety ..... 3
BA 101 Introduction to Business ..... 4
HHP 252A Fitness/First Aid ${ }^{3}$ ..... 3
Elective ${ }^{2}$ ..... 3
Spring term

| AV 235 | Human Factors* | 4 |
| :--- | :--- | :--- |
| AV 255 | Cert Flight Instructor-Helicopter (5 hours) ${ }^{1}$ | 5 |
| SP 111 | Fundamentals of Public Speaking | 3 |
| Elective $^{2}$ |  | 3 |

AV 255 Cert Flight Instructor-Helicopter (5 hours) ${ }^{1} 5$
SP 111 Fundamentals of Public Speaking 3
Elective $^{2} 3$
${ }^{1}$ Required simulator hours
${ }^{2}$ See advisor for options.
${ }^{3}$ HHP 252 A is recommended to meet this requirement, but students can also choose between HHP 231, 242, 258, 266 or 295 and one activity or health module.

## BIOLOGY

Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer degree, with an emphasis 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, 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.
Students are expected to make and maintain communication with their choice of transfer institution while pursuing coursework at the community college level, as some have specific requirements.

The Associate of Arts Oregon Transfer 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 biology.

## General education/basic skills

## English Composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 227 Technical Writing 3
Speech
SP 111 Fundamentals of Public Speaking 3
Mathematics
MTH $111 \quad 4$
Health ${ }^{1} \quad$ 3-4
Computer competency ${ }^{2}$ 0-4

## General education/distribution

Humanities: a minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.
Science/Math/Computer Science
BI $211 \quad$ Principles of Biology I 5
BI 212 Biology of Plants II 5
BI 213 Biology of Animals III 5 plus one additional course from the science/math/computer science distribution list with a different prefix.
Social Science: a minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

Take enough elective courses to meet the minimum 93 credits required for the degree and lower-division major requirements.
LIB 127 Information Research Skills 3
CH 221 General Chemistry I ${ }^{3}$ 4
CH 222 General Chemistry II $^{3} \quad 4$
CH 223 General Chemistry III $^{3} 4$
or
CH 104 Introduction to Chemistry I ${ }^{4} \quad 4$
CH 105 Introduction to Chemistry $\mathrm{II}^{4} 4$
CH 106 Introduction to Chemistry III $^{4} 4$
CH 241 Organic Chemistry I 5
CH 242 Organic Chemistry II 5
CH 243 Organic Chemistry III 5
FN 225 Human Nutrition 4
MTH 251 Calculus I 4
MTH 252 Calculus II 4
MTH 253 Calculus III 4
PH 201 General Physics I 5
PH 202 General Physics II 5
PH 203 General Physics III 5
Recommended for those entering health-related fields
BI 231 Human Anatomy \& Physiology I 4
BI 232 Human Anatomy \& Physiology II 4
BI 233 Human Anatomy \& Physiology III 4
BI 234 Microbiology 4
For a field identification course in the native flora
BOT 203 General Botany 5
To enhance understanding of scientific terminology
BI 205 Scientific Terminology 3
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR-HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{3}$ Recommended for students interested in medical, dental and veterinary schools.
${ }^{4}$ Recommended for students who have not recently taken Algebra II and chemistry in high school.

## Transfer and/or articulation information

Oregon universities with a biology major include: Eastern Oregon University; Oregon State University; Oregon Health Sciences University; Southern Oregon University; University of Oregon.

## BUSINESS ADMINISTRATION

Certificate of Completion
Associate of Applied Science Options
Associate of Science Oregon Transfer • Associate of Arts Oregon Transfer

Retail Management<br>Certificate of Completion<br>( 45 credits; three quarters to complete if attending full time)

COCC's 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.

## Degree/course requirements

The following is the recommended schedule for students able to attend full time; 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 or math. Students must complete each required course for the Retail Management certificate with a "C" grade or better.

## Fall

BA 111 Applied Accounting ${ }^{1} 3$
BA XXX Business Electives ${ }^{2}$ 4
(recommend BA 101, Intro to Business)
CIS 131 Software Applications 4
WR 1213

## Winter

| BA 104 | Business Math $^{*}$ | 3 |
| :--- | :--- | :--- |
| BA 206 | Management Fundamentals I $^{1}$ | 4 |
| BA 223 | Marketing I | 4 |
| BA XXX | Business Elective $^{2}$ <br> (recommend BA 178, Customer Service) | 3 |
| BA 249 | Retailing $^{1}$ | 4 |
| Spring |  |  |
| WR 214 | Business Communication | 3 |
| BA 224 | Human Resource Management ${ }^{1}$ | 4 |
| BA 285 | Business Human Relations | 3 |
| SP 111 | Fundamentals of Public Speaking | 3 |
| or SP 218 Interpersonal Communication |  |  |
| or SP 219 | Small Group Communication |  |

${ }^{1}$ Offered only during the term listed
${ }^{2}$ Business electives split in the sample coursework between fall and winter terms

## Advising information

All credits in the Retail Management certificate may be applied toward an AAS business degree if Oral Communication course is either SP 111 or SP 218.

## Associate of Applied Science with Specializations (96-97 credits; six quarters to complete if attending full time)

The AAS coursework prepares students for immediate employment in business occupations. Business administration AAS degrees may be awarded indicating emphasis in the following areas of specialization: Accounting; Hotel, Tourism and Recreation Management; Information Systems Management; Management and Marketing; or General Business.

## Degree/Course Requirements

The following is provided to assist students in planning their schedule. Students should take as many Level I courses as possible before attempting Level II courses, Level II courses before Level III courses, etc. This will enable students to approach each class with the background necessary to succeed and enjoy the course content.

To meet graduation requirements, students must complete every BA, CIS, GEOG, HTRM, SP, and WR course with a minimum grade of $C$.

## Level I Foundation Courses

Foundation courses ensure that students have the basic skills and basic business concepts to address further skill development. Foundation courses include math, computer and writing skills.
BA $111 \quad$ Applied Accounting I 3
BA 101 Introduction to Business 4
BA 104 Business Math* 3
BA 178 Customer Service 3
CIS 131 Software Applications 4
SP 111 Fundamentals of Public Speaking 3
$\begin{array}{lll}\text { or SP 218 } & \text { Interpersonal Communication } & \\ \text { WR 121 } & \text { English Composition } & 3\end{array}$
Plus any math courses necessary to prepare for BA 105 in Level III Accounting or Marketing \& Management specializations (prerequisite MTH 65).

## Level II Core Courses

Core courses allow students to understand concepts in their specialization courses taken in Level III.
BA 206 Management Fundamentals I 4
BA 223 Marketing Principles I 4
BA 226 Business Law I 4
BA 285 Business Human Relations 3
BA 112 Applied Accounting II 3
BA 113 Applied Accounting III 3
CIS 125S Intermediate Spreadsheets 4
WR 214 Business Communication 3

# BUSINESS ADMINISTRATION (continued) 

Certificate of Completion

Associate of Applied Science Options
Associate of Science Oregon Transfer • Associate of Arts Oregon Transfer

## Level III Specialization Courses

See specialization in: Accounting; Hotel, Tourism and Recreation Management; Information Systems Management; Management and Marketing. See business specializations in the following section.

## Level IV Advanced Core and Capstone Courses

These courses should be taken after completion of Level I and II and may be taken concurrently with specialization courses (Level III) as long as prerequisites have been met.

| BA 222 | Business Finance | 3 |
| :--- | :--- | :--- |
| BA 280 | Cooperative Work Experience | 3 |
| BA 290 | Business Seminar | 3 |

## Required general education degree support courses

HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.

3-4
General education distribution electives 9

## BUSINESS SPECIALIZATIONS

AAS students must complete a minimum of 23-25 additional credits from a specialization in: Accounting; General Business; Hotel, Tourism and Recreation Management; Information Systems Management; or Management and Marketing.

## Accounting

This specialization is for those who desire to be accountants for a small- to medium-sized business. ( 25 credits)
BA 56 Cost Accounting 3
BA 177 Payroll Accounting 3
BA $211 \quad$ Financial Accounting I 3
BA $212 \quad$ Financial Accounting II 3
BA 213 Managerial Accounting 3
BA 105 Math for Business Decisions 4
BA 228 Computer Accounting 3
BA 229 QuickBooks 3

## General Business

Students interested in a general business focus, can take an additional 24 credits of coursework with a BA or HTRM prefix and earn an Associate of Applied Science in general business.

## Hotel, Tourism and Recreation Management

This specialization is for those who desire to operate or manage hotels, restaurants or recreation businesses. ( 24 credits)
GEOG 212 Tourism and Recreation
HTRM 105 Foodservice Management 4
HTRM 106 Lodging Management 3
Business Electives (BA prefixes) 14


## Information Systems Management

This specialization is for those who desire to apply software and computer technology to business applications such as accounting, human resources and manufacturing. Students also have an option to receive an Associate of Applied Science in Computer and Information Systems; see page 67 for options. (24 credits)
CIS 121 Computer Concepts II 4
CIS 125DB Database Theory/SQL 4
CIS 135DB Advanced Database 4
CIS $140 \quad$ Operating Systems 4
CIS 235 Information Technology in Business 4
Select one elective from the following:

| CIS 178 | Internet in Depth |
| :--- | :--- |
| CIS 179 | Networking Essentials |
| CIS 195 | Web Development I |
| CIS 295 | Web Development II |

## Management and Marketing

This specialization is for those who plan to be managers or marketers for small- to medium-size businesses. (24 credits) BA 105 Math for Business 4
BA 239 Marketing Principles II 4
BA 207 Management Fundamentals II 4
Business Electives (BA \& HTRM prefixes) 12

# BUSINESS ADMINISTRATION (continued) <br> Certificate of Completion <br> Associate of Applied Science Options <br> Associate of Science Oregon Transfer • Associate of Arts Oregon Transfer 

## Associate of Science Oregon Transfer-Business (90 credits)

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. It is designed to include the courses required for entrance not only into an Oregon public university but to the university's business college as well. (For those unsure of where they might transfer or unsure of their desire for a bachelor's degree in business, please see the AAOT degree with a business emphasis; those interested in transferring to Oregon State University-Cascades Campus should refer to the Associate of Science Direct Transfer business option.)

Courses marked with a footnote $\left({ }^{1}\right)$ must be completed with a grade of "C" or better.

## General requirements

| CIS 131 | Software Applications $^{1}$ | 4 |
| :--- | :--- | :--- |
| SP 111 | Fundamentals of Public Speaking $^{1}$ | 3 |
| WR 121 | English Composition $^{1}$ | 3 |
| WR 122 | English Composition $^{1}$ | 3 |
| WR 227 | Technical Writing $^{1}$ | 3 |

## Distribution requirements

Humanities
Minimum of 12 credits from COCC's humanities distribution list, chosen from at least two disciplines.

## Science

Minimum of 12 credits of laboratory science in biological or physical sciences from COCC's science/math/computer science distribution list.

Social Sciences
EC 201 Microeconomics ${ }^{1}$ 4
EC 202 Macroeconomics ${ }^{1} 4$
plus four additional credits from COCC's social sciences distribution list, chosen from at least two disciplines.

## Mathematics

Required minimum of 12 credits including
MTH 111 College Algebra ${ }^{1}$ 4
MTH 244 Intro to Methods of Probability \& Stats ${ }^{1} 4$
MTH 243 Math for Management/Life/Social Science ${ }^{1} 4$ or MTH 241 Calculus for Management/Science ${ }^{1}$


Business specific requirements

| BA 101 | Introduction to Business $^{1}$ | 4 |
| :--- | :--- | :--- |
| BA 211 | Financial Accounting I $^{1}$ | 3 |
| BA 212 | Financial Accounting II $^{1}$ | 3 |
| BA 213 | Managerial Accounting | 3 |
| BA 226 | Business Law I $^{1}$ | 4 |

${ }^{1}$ Course must be completed with a grade of "C" or better.

## Electives

Complete a sufficient number of transfer-level courses to meet total degree requirements of at least 90 credits. A maximum of 12 professional technical credits may be used toward the degree. See advisor for recommended electives as well as specific institution transfer requirements. It is recommended that students planning on transferring to OSU take HHP 295.

## Transfer and/or articulation information

The ASOT Business degree articulates directly to Oregon public university business school requirements. The ASOT Business degree meets the lower-division general education requirements for all Oregon public universities and business schools and some private four-year business schools. Contact COCC's Admissions and Records office for specific OSU-Cascades articulation requirements.

# BUSINESS ADMINISTRATION (continued) <br> Certificate of Completion <br> Associate of Applied Science Options <br> Associate of Science Oregon Transfer • Associate of Arts Oregon Transfer 

## Associate of Arts Oregon Transfer (93 credits) Business Emphasis

The AAOT degree with business emphasis is designed for students who have not decided on which four-year institution they plan to attend and/or their major but want preparation in business subjects. The degree is helpful for an undecided student because it guarantees completion of lower division general education requirements at Oregon public universities. However, since business majors often have a large and carefully sequenced series of lower-division coursework, this degree may provide more of an emphasis on general education than is recommended for business majors. (For those with a high level of certainty about wanting to major in business and transfer to a public university in Oregon, see the ASOT in Business; for those who plan to transfer to OSU-Cascades Campus, see the Associate of Science Direct Transfer degree.)

At the time of this publication, coursework was being approved toward an Associate of Science Direct Transfer to Oregon State University-Cascades degree (ASDT). This degree will allow students to meet all lower-division baccalaureate and major requirements for a bachelor of arts or science in business administration. Articulation agreements for Eastern Oregon University's distance education programs in business administration, business economics and liberal studies are also pending approval. Contact COCC's Admissions and Records office for up-to-date course requirements.

## General education/basic skills

English Composition
WR 121 English Composition 3
WR $122 \quad 3$
WR 214 Business Communication (recommended) 3
or WR 123 English Composition
Speech
SP 111 Fundamentals of Public Speaking 3
Mathematics
MTH 111 College Algebra 4
Health $^{1}$ 3-4
CIS 131 Software Applications 4

## General education/distribution

Humanities: a minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

MTH 241 Calculus for Management/Social Science 4 plus three biological or physical science courses with labs 12 from the science/math/computer science distribution list, two of which must have the same prefix.

Social Science
EC 201 Microeconomics 4
EC 202 Macroeconomics 4
plus 7 additional credits from the social sciences distribution list

## Electives

BA 101 Introduction to Business 4
BA $211 \quad$ Financial Accounting I 3
BA $212 \quad$ Financial Accounting II 3
BA 213 Managerial Accounting 3
BA 226 Business Law I 4
MTH 243 Math for Management/Life/Social Science 4
MTH 244 Intro to Methods of Probability \& Stats 4 plus enough additional credits to reach the minimum 93 credits required for the Associate of Arts Oregon Transfer degree.
${ }^{1} \mathrm{HHP} 252 \mathrm{~A}$ is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.

## Advising information

Business-related courses that are necessary for the student to apply to a business administration department at most baccalaureate institutions are built into standard AAOT requirements. BA 101, Introduction to Business, is required at most baccalaureate institutions.

Students planning on attending Oregon State University should take HHP 295.

Students should check with their advisor for assistance in selecting distribution courses, pages 44 and 45 .

## Transfer and/or articulation information

This degree completes the requirements specified under the Associate of Arts Oregon Transfer degree requirements and meets the lower-division general education requirements in Oregon.

# BUSINESS ADMINISTRATION (continued) <br> Certificate of Completion <br> Associate of Applied Science Options <br> Associate of Science Oregon Transfer • Associate of Arts Oregon Transfer 

Associate of Arts Oregon Transfer (94 credits)<br>Hospitality, Tourism, Recreation Management Emphasis

Travel and tourism is the second largest industry in Oregon. To maximize employment opportunities and become a successful manager in this exciting field, students should pursue a bachelor's degree.

An Associate of Arts degree with a focus in Hospitality, Tourism and Recreation Management (HTRM) allows student to easily transfer to an Oregon university and provides the necessary freshman and sophomore general education requirements. For those students desiring immediate employment, an Associate of Applied Science in Business with a specialization in Hospitality, Tourism and Recreation Management will provide specific skills toward immediate employment. See page 60 for more information regarding this option.

## General education/basic skills

## English compostion

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
or WR 214 Business Communications

Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
MTH 111
College Algebra4

Health ${ }^{1}$ 3-4
CIS 131 Software Applications 4

## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

MTH 243 Math for Management/Life/Social Science 4 plus three biological or physical science courses with labs 12 from the science distribution list, two courses of which must have the same prefix and one course with a different prefix.

Social Science
EC 201 Microeconomics 4
EC 202 Macroeconomics 4
plus two additional classes from the social science 7 distribution list with a prefix other than EC.

## Electives

BA 178 Customer Service 3
BA $211 \quad$ Financial Accounting I 3
BA $212 \quad$ Financial Accounting II 3
BA 213 Managerial Accounting 3
GEOG 212 Travel and Tourism 3
HTRM 105 Foodservice Management 4
HTRM 106 Lodging Management 3
MTH 244 Intro to Methods of Probability \& Stats 4
Other electives 4
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module --OR-HHP 252A.

## Advising information

Business-related courses that are necessary for the student to apply to a business administration department at most baccalaureate institutions are built into the above AAOT requirements. BA 101, Introduction to Business, is required at most baccalaureate institutions and can be used as an elective course within the AAOT.

Students should check with their advisor for assistance in selecting distribution requirements from the distribution lists on pages 44 and 45.

## CHEMISTRY

## Associate of Arts Oregon Transfer (93 credits)

Associate of Science (93 credits)

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, 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.

The AAOT 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 chemistry.

## General education/basic skills

## English Composition

WR 121 English Composition ..... 3
WR 122 English Composition ..... 3
WR 227 Technical Writing ..... 3
Speech
SP 111 Fundamentals of Public Speaking ..... 3
Mathematics
MTH 111 College Algebra ..... 4
Health ${ }^{1}$ ..... 3-4
Computer competency ${ }^{2}$ ..... 0-4

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

Science/Math/Computer Science
CH 221 General Chemistry I 4
CH 222 General Chemistry II 4
CH 223 General Chemistry III 4
PH 201 General Physics I 5


Social Science
A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

| PH 202 | General Physics II | 5 |
| :---: | :---: | :---: |
| PH 203 | General Physics III | 5 |
| or PH 211 | General Physics I | 5 |
| PH 212 | General Physics II | 5 |
| PH 213 | General Physics III | 5 |
| MTH 251 | Calculus I | 4 |
| MTH 252 | Calculus II | 4 |
| MTH 253 | Calculus III | 4 |
| CH 241 | Organic Chemistry I | 5 |
| CH 242 | Organic Chemistry II | 5 |
| CH 243 | Organic Chemistry III | 5 |
| ${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR- HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class. |  |  |
| ${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications. |  |  |

## Transfer information

Oregon universities with a chemistry major include: University of Oregon; Oregon State University; Western Oregon University; Southern Oregon University; Eastern Oregon University.

## COMPOSITES MANUFACTURING TECHNOLOGY (CMT)

Short-term Certificate<br>Certificate of Completion

Composites technology is a rapidly growing materials technology area. Composites are used for a wide variety of products such as airplanes, wind energy, sporting goods (skis, snowboards, fishing rods, etc.), fiberglass boats, rock climbing walls and many other industrial and transportation uses. Industry experts are forecasting significant growth in the composites industry over the next few decades. This continued growth has created a need for workers skilled in the design and manufacturing of composite products.

The Composites Manufacturing Technology (CMT) program at COCC will prepare students to enter the composites job market with the specialized manufacturing skills needed to excel in this field. The CMT program is currently offering two options to gain certification in composites manufacturing:

- Short-term certificate in Basic Composites
- Certificate of Completion in Composites Manufacturing

Both options consist of a blend of classroom and hands-on learning that will give the student the needed skills to understand the fundamental nature of composite materials and build composites products. The hands-on skills will be obtained in actual composites companies in the Central Oregon area.
Basic CompositesShort-term Certificate( 14 credits; one quarter to complete if attending full time)
Fall term
CMT 101 Intro to Composites 4
CMT 110 Composites Occup Topics ..... 4
MFG 101 Blueprint Reading ..... 2
MTH $20 \quad$ Pre-Algebra (or higher) ..... 4


$$
\begin{gathered}
\text { Composites Manufacturing } \\
\text { Certificate of Completion } \\
\text { (36 credits; three quarters to complete if attending full time) }
\end{gathered}
$$

## Fall term

CMT 101 Intro to Composites ..... 4
CMT 110 Composites Occup Topics ..... 4
MFG 101 Blueprint Reading ..... 2
MTH $20 \quad$ Pre-Algebra (or higher) ..... 4
Winter term
CMT 102 Composite Materials/Process ..... 4
CMT 120 Composites Fabrication ..... 4
SP 219 Small Group Communication ..... 3
or BA 285 Business Human Relations
Spring term
CMT 103 Applied Composites Technology ..... 4
CMT 130 Composites Practicum I ..... 7

## COMPUTER AND INFORMATION SYSTEMS

Certificates of Completion
Associate of Applied Science
For information about the Geographic Information Systems (GIS) program, see pages 88 and 89 .

The Computer Information Systems degree program is designed around a core curriculum and three distinct options. The program's core provides an introduction to computer concepts, software applications, operating systems, networking, microcomputer servicing, Internet, math, human relations and writing. To gain practical work-related experience, students complete 99 hours of cooperative work experience in a related setting. Students must complete all CIS courses with a grade of C or better.

To earn an Associate of Applied Science in computer information systems, a student must complete 67 core credits and an additional 27-28 credits of CIS electives. By careful selection of their CIS elective courses, students may elect to complete an option in one or more of three emphasis areas: Networking, Computer Aided Drafting (CAD), and Computer Support Services. Students can also earn a general AAS in CIS by choosing 27-28 credits from any CIS prefix. If a student selects specific CIS electives to complete the requirements for one of the three options, the AAS degree awarded also specifies the emphasis area successfully completed. To earn the Computer Information Systems one-year certificate, the student completes 46 credits ( 36 credits in CIS).

The Computer Aided Drafting option prepares students for entry-level employment in the drafting field. Students prepare for advanced applications through an introductory set of CAD-based curriculum. They gain experience using dedicated architectural, mechanical, civil and rendering software. Upon completion, the student is prepared to take a national skill-based certification exam.

The Computer 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 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.

The Networking option prepares students for entry-level positions in network administration. Network specialists have the abilities to design, create, manage and maintain computer networks for small businesses. Courses cover both hardware and software and closely follow major industry certification requirements.

Students also have the option to earn a one-year certificate in computer aided drafting. Short-term training is available in AutoCAD Fundamentals, AutoCAD Applications or CAD Maintenance. The one-year and short-term trainings
are designed to give students a basic working knowledge of CAD systems and prepare them for entry-level CAD operator positions. Completion of the CAD certificate may include a competency-based AutoCAD assessment exam. All credits apply toward the Associate of Applied Science degree in CIS/CAD. All courses must be completed with a C grade or better.

CIS courses required for the AAS degree, options and certificates are listed below. Please see the course description area of this catalog for additional information about these classes and other CIS elective courses not listed below.

The design of many of the advanced-level applications, networking and CAD courses in the CIS department prepare students for industry certification. Students are able to test for certification and assess their competence in their given emphasis. See advisor for complete details.

## Computer Aided Drafting (CAD) <br> Short-term Training (12-15 credits)

## AutoCAD Fundamentals

CIS 125A1 AutoCAD I (fall) 3
CIS 125A2 AutoCAD II (winter) 3
CIS 125A3 AutoCAD III (spring) 3
CIS $120 \quad$ Computer Concepts I (any term) 4

## AutoCAD Applications

| CIS 135MD | CAD for Mech. Drafting (fall) | 3 |
| :--- | :--- | :--- |
| CIS 135A1 | CAD for Arch Drafting (winter) | 3 |
| CIS 135CD | CAD for Civil Drafting (winter) | 3 |
| CIS 135A2 | CAD for Arch Drafting II (spring) | 3 |

## CAD Maintenance

CIS 135CA Customizing AutoCAD (spring) 3
CIS $140 \quad$ Operating Systems (winter) 4
CIS 145 Micro Computer Service (fall) 4
CIS $179 \quad$ Networking Essentials (winter or summer) 4
Computer Aided Drafting (CAD)
Certificate of Completion
$(45$ credits; three quarters to complete if attending full time)

BA 285 Business Human Relations 3
$\begin{array}{ll}\text { or SP 111 } & \text { Fundamentals of Public Speaking } \\ \text { or SP } 218 & \text { Interpersonal Communication }\end{array}$
or SP 219 Small Group Communication
CIS $120 \quad 4$
or CIS 131 Software Applications (preferred)
CIS 125A1 AutoCAD I 3
CIS 125A2 AutoCAD II 3

# COMPUTER AND INFORMATION SYSTEMS (continued) 

Certificates of Completion<br>Associate of Applied Science

| CIS 125A3 | AutoCAD III | 3 |
| :--- | :--- | :--- |
| CIS 135CA | Customizing AutoCAD | 3 |
| CIS 135MD | CAD for Mechanical Drafting | 3 |
| CIS 135A1 | CAD for Arch Drafting 1 | 3 |
| CIS 135A2 | CAD for Arch Drafting II | 3 |
| CIS 135CD | CAD for Civil Drafting | 3 |
| CIS 135CP | CAD for Presentation | 3 |
| CIS 140 | Operating Systems | 4 |
| MTH 85 | Technical Math | 4 |
| WR 121 | English Composition | 3 |

Computer and Information Systems (CIS)
Certificate of Completion
(46 credits; three quarters to complete if attending full time)

| BA 285 | Business Human Relations | 3 |
| :---: | :--- | :--- |
| or SP 111 | Fundamentals of Public Speaking |  |
| or SP 218 | Interpersonal Communication |  |
| or SP 219 | Small Group Communication | 4 |
| CIS 120 | Computer Concepts I |  |
| or CIS 131 | Software Applications (preferred) | 4 |
| CIS 121 | Computer Concepts II | 4 |
| CIS 122 | Computer Concepts III | 4 |
| CIS 140 | Operating Systems | 4 |
| CIS 145 | Micro Computer Service | 4 |
| CIS 178 | Internet in Depth | 4 |
| CIS 179 | Networking Essentials | 4 |
| CIS 195 | Web Development I | 4 |
| CIS 125DB | Database Theory/SQL | 4 |
| MTH 85 | Technical Math I |  |
| or BA 105 | Math for Business Decisions* | 3 |
| WR 121 | English Composition |  |

Computer and Information Systems (CIS) Associate of Applied Science
( $94-96$ credits; six quarters to complete if attending full time)
Required core courses (67 credits)
BA 285 Business Human Relations ..... 3
CIS 120 Computer Concepts I ..... 4
or CIS 131 Software Applications (preferred)
CIS 121 Computer Concepts II ..... 4
CIS 122 Computer Concepts III ..... 4
CIS 140 Operating Systems ..... 4
CIS 145 Micro Computer Service ..... 4
CIS 178 Internet in Depth ..... 4
CIS 179 Networking Essentials ..... 4
CIS 125DB Database Theory/SQL ..... 4
CIS XXX CIS elective (in addition to option courses) ..... 4
CIS 280 Co-op Work Experience ..... 3
General Education Distribution Courses ${ }^{3}$

MTH 85 Technical Math I 4
or BA 105 Math for Business Decisions ${ }^{1 *}$
SP 111 Fundamentals of Public Speaking 3
or SP 218 Interpersonal Communication
or SP 219 Small Group Communication
WR 121 English Composition 3
Health ${ }^{2}$ 3-4
WR 214 Business Communications 3
or WR 227 Technical Writing
CIS electives (27-28 credits with CIS prefix or choose one of the following CIS options)
Networking option (28 credits)
CIS 279XP Windows XP Professional 4
CIS 279NE Managing a Windows 2003 Server Network Environment 4
$\begin{array}{ll}\text { CIS 279NI } & \begin{array}{l}\text { Windows } 2003 \text { Network Infrastructure } \\ \\ \text { Administration }\end{array}\end{array}$
CIS 279AD Windows 2003 Active Directory 4
CIS 151C Internetworking 4
CIS 152C Router Configuration 4
CIS 154C VLAN / WAN Technologies 4
Computer Support option (27 credits)
BA 217 Accounting Fundamentals 3
CIS 125S Intermediate Spreadsheets 4
CIS 135DB Intermediate Database 4
CIS 125WD Intermediate Word Processing 4
CIS 195 Web Development I 4
CIS 125G Introduction to Web Graphics 4
CIS 295 Web Development II 4
or CIS 279XPWindows XP Professional 4
CAD option (29 credits)
CIS 125A1 AutoCAD I 3
CIS 125A2 AutoCAD II 3
CIS 125A3 AutoCAD III 3
CIS 135A1 CAD for Architectural Drafting I 3
CIS 135A2 CAD for Architectural Drafting II 3
CIS 135MD CAD for Mechanical Drafting 3
CIS 135CP CAD for Presentation 3
CIS 135CD CAD for Civil Drafting 3
CIS 135CA Customizing AutoCAD 3
${ }^{1}$ BA 105 is required for the Computer Support option
${ }^{2}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module --OR- HHP 252A.
${ }^{3}$ Choose courses from distribution list, pages 44 and 45. Each course must have a different prefix and cannot have a CIS prefix.

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 Associate of Applied Science in criminal justice program prepares students to begin a criminal justice career upon graduation.

COCC offers students four options within the criminal justice program:

- Proficiency Areas: New to the criminal justice program, these five proficiency areas offer students a way to focus their electives. Upon completion of the electives in the different areas, the student will receive a signed training document from the department detailing the classes completed in each specific area.
- Certificate of Completion: The statewide one-year certificate program with 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.
- Associate of Applied Science degree: This degree is designed for those students who wish to pursue a career in law enforcement or corrections. Most city and state law enforcement and correctional facilities require a high school diploma or GED. In Oregon, the competition for these jobs is intense. A college education is almost always a minimum requirement for the application process.
- The Associate of Arts Oregon Transfer 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 lowerdivision major requirements may also be met. Students should work closely with an advisor to select the best degree option and review specific transfer requirements.
Students are encouraged to work closely with their advisors to decide which option is most appropriate based on long-term career goals.


## Criminal Justice <br> Proficiency Areas (13-15 credits)

## Law Enforcement (15 credits)

| CJ 110 | Law Enforcement | 3 |
| :--- | :--- | :--- |
| CJ 220 | Substantive Law | 3 |
| CJ 222 | Search and Seizure | 3 |
| CJ 243 | Drugs and Crime | 3 |
| PSY 219 | Abnormal Psychology | 3 |

CJ $220 \quad$ Substantive Law 3
CJ 222 Search and Seizure 3
CJ 243 Drugs and Crime 3
PSY 219 Abnormal Psychology 3

Corrections (13 credits)
CJ 230 Juvenile Corrections 3
HD 200 Addictive Behavior 3
PSY 216 Social Psychology 3
SOC 211 Social Deviance 4
Juvenile Justice (13 credits)
CJ $230 \quad 3$
PSY 215 Developmental Psychology 4
PSY 216 Social Psychology 3
HD 205 Youth and Addictions 3
Parole and Probation (14 credits)
PSY 233 Violence and Aggression 4
SOC 211 Social Deviance 4
PSY 219 Abnormal Psychology 3
HD 200 Addictive Behavior 3
Criminal Investigations ( 13 credits)
CJ $210 \quad$ Investigation I 3
CJ 211 Investigation II 3
ART 161 Photography I 3
or ART 162 Photography II
or ART 163 Photography III
SP 218 Interpersonal Communications 3
SP 250 Listening 1

## Juvenile Corrections

Certificate of Completion
(49-54 credits; four quarters if attending full time)

## General education/basic skills

Computer competency ${ }^{1}$ 0-4
HD 205 Youth and Addictions 3
MTH 65 Algebra II 4
WR 121 English Composition 3
Required support courses
PSY 201 Mind and Brain ..... 4
PSY 202 Mind and Society ..... 4
PSY 215 Developmental Psych ..... 4
PSY 219 Abnormal Psychology ..... 4
PSY 233 Violence \& Aggression ..... 4
SOC 201 Intro to Sociology* ..... 4
CJ courses
CJ 100 Survey Criminal Justice ..... 3
CJ 101 Intro Criminology ..... 4
CJ 201 Intro to Juvenile Justice ..... 3
CJ 230 Juvenile Corrections ..... 3
CJ 280 Co-op Work Experience ..... 2

## CRIMINAL JUSTICE (continued)

Certificate of Completion
Associate of Applied Science
Associate of Arts Oregon Transfer
Criminal Justice
Associate of Applied Science
(93 credits; six quarters to complete if attending full time)
Degree requirements pending approval

## General education/basic skills

Health ${ }^{2}$ ..... 3-4
Computer competency ${ }^{1}$ ..... 0-4
MTH 60 Algebra I ..... 4
SP 111 Fund Public Speaking ..... 3
or SP 219 Small Group Communication
WR 121 English Comp ..... 3
Support courses
LIB 127 Info Research Skills ..... 2
PSY 201 Mind and Brain ..... 4
PSY 202 Mind and Society ..... 4
PSY 233 Violence \& Aggression ..... 4
SOC 201 Intro to Sociology* ..... 4
SOC 211 Social Deviance ..... 4
SOC 212 Race, Class Ethnicity ..... 4
Electives ..... 10-16
Electives ${ }^{3}$ (from distribution list) ..... 9
Criminal Justice program courses
CJ 100 Survey of Criminal Justice ..... 3
CJ 101 Criminology ..... 4
CJ $120 \quad$ Judicial Process ..... 3
CJ 253 Corrections ..... 4
CJ 201 Intro to Juvenile Justice ..... 3
CJ 280 Co-Op Work Experience ..... 2
CJ electives ${ }^{4}$ ..... 17-18
Associate of Arts Oregon Transfer ( $93+$ credits; six quarters to complete if attending full time)

## General education/basic skills

English composition
WR 121 English Composition ..... 3
WR 122 English Composition ..... 3
WR 123 English Composition ..... 3
or WR 214 Business communicationsor WR 227 Technical WritingSpeechSP 111Fundamentals of Public Speaking3or SP 219Small Group Communication
Mathematics
MTH 105Intro to Contemporary Math (or higher)
Health ${ }^{2}$ ..... 3-4
Computer competency ${ }^{1}$ ..... 0-4

## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

Science
A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

| Social Science (recommended courses) |  |  |
| :--- | :--- | :--- |
| PSY 201 | Mind \& Brain | 4 |
| PSY 202 | Mind \& Society | 4 |
| PSY 233 | Violence \& Aggression | 4 |
| SOC 201 | Introduction to Sociology | 4 |

## Electives

Take enough elective credits to reach the 93 minimum required for the degree. Criminal justice majors should include the following as part of their elective courses:
CJ 100 Survey Systems 3
CJ $101 \quad 4$
CJ $120 \quad$ The Judicial Process 3
CJ 253 Corrections 4
CJ 201 Introduction to Juvenile Justice 3
CJ $280 \quad$ Cooperative Work Experience 2
LIB 127 Info Research Skills 2
SOC 211 Social Deviance 4
SOC 212 Race, Class and Ethnicity 4
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{2}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.
${ }^{3}$ Each of these elective courses must have a different prefix and cannot have a CJ prefix
${ }^{4}$ Any course with a CJ prefix is recommended. Options include: CJ 110, 132, 188, 199, 207, 210, 211, 220, 222, 230, 243.

## Advising information

If transferring to Southern Oregon University: CJ 210, 211 are recommended.

## CULINARY

## Certificate of Completion <br> Associate of Applied Science

# Certificate of Completion <br> ( 65 credits; four to five quarters to complete if attending full time) 

A Cascade Culinary Institute ${ }^{\circledR}$ certificate prepares students in a variety of skill areas: hot and cold food preparation, baking and dining room service. Those completing the program may find positions as prep cooks, line cooks, and in some cases, sous chefs.

The Cascade Culinary Institute ${ }^{\circledR}$ certificate verifies that a student is competent and can compete, as well as communicate and interact with peers and superiors, in traditional foodservice operations.

The Cascade Culinary Institute ${ }^{\circledR}$ certificate program is accredited by the American Culinary Federation Foundation Accrediting Commission. Students working while completing the program are eligible to become certified working cooks by the American Culinary Federation.

## First-term coursework - Level 1

| CCI 21 | Hot Foods Production I | 4 |
| :--- | :--- | :--- |
| CCI 41 | Baking I | 4 |
| CCI 51 | GardeManger I | 4 |
| CCI 61 | Dining Room Service I | 3 |

## Second-term coursework - Level 2

CCI 22 Hot Foods Production II 4
CCI 42 Baking II 4
CCI 52 GardeManger II 4
CCI 62 Dining Room Service II 3
Third-term coursework - Level 3
CCI 23 Hot Foods Production III 4
CCI 43 Baking III 4
CCI 53 GardeManger III 4
CCI 63 Dining Room Management 3

## Other required courses

| CCI 71 | Basic Sanitation (offered fall term only) | 2 |
| :--- | :--- | :--- |
| CCI 81 | Foodservice Nutrition <br> (offered fall term only) | 2 |
| CCI 91 | Foodservice Controls * <br> (offered spring term only) | 3 |
| or HTRM105 | Food Service Management <br> (offered spring term only) | 4 |
| CCI 107 | Culinary Supervision * <br> (offered winter term only) |  |
| CCI 280 | Co-op Work Experience Culinary | 3 |
| WR 65 | Rhetoric \& Critical Thinking II <br> (or higher WR coursework) | 6 |



## Advising information

Cascade Culinary Institute ${ }^{\circledR}$ kitchen courses (CCI 21-63) are scheduled 8 a.m. to 3 p.m., Monday through Thursday, with other labs to be arranged. Other lab assignments may include 6 a.m. baking, weekend and/or evening catering. Students scheduling the kitchen block must commit to being full time. Each kitchen block by level is 15 credits with classes beginning fall, winter or spring terms. Students must meet with and receive permission to register from the program coordinator prior to registration. Average term course load varies depending upon term of entry and length of co-op work experience weekly shifts. Typical credit averages are: fall term, 19 credits; winter term, 18 credits; spring term, 18 credits; summer term, 10 credits.

First term expenses for uniforms, equipment and textbooks are approximately $\$ 660$. All CCI courses carry an additional fee; please see schedule of classes for details.

To obtain the certificate, students must successfully complete the required courses with a grade of C or better and demonstrate skills in subject areas as well as pass written exams.

Students working while completing the program are eligible to become certified working cooks by the American Culinary Federation. Cooperative work experience requires 300 hours of supervised employment.

Certified Dietary Manager certification may also be obtained at COCC; see page 73. See advisor for ease of concurrent Cascade Culinary Institute ${ }^{\circledR}$ and Dietary Management program coursework.

## CULINARY (continued)

Certificate of Completion
Associate of Applied Science

## Associate of Applied Science <br> (93-94 credits; six quarters to complete if attending full time)

Associate of Applied Science culinary management degree prepares students for positions in restaurant management. At the time of this publication, COCC had applied for accreditation to the American Culinary Federation Foundation Accrediting Commission.

## Degree/course requirements

The following is the recommended schedule for students able to attend full-time; 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 or math.

First term (preparatory coursework)
BA $178 \quad$ Customer Service (fall or winter) 3
CCI $71 \quad$ Basic Sanitation (fall term only) 2
CIS 120 Computer Concepts 4
or CIS 131 Software Applications
WR 95 Basic Writing III3

Second through fifth terms (Upon completion of these courses, plus WR 65 or higher, CCI 280 and CCI 71, students will earn a certificate of completion in culinary).

| CCI 21 | Hot Foods Production I | 4 |
| :--- | :--- | :--- |
| CCI 22 | Hot Foods Production II | 4 |
| CCI 23 | Hot Foods Production III | 4 |
| CCI 41 | Baking I | 4 |
| CCI 52 | Baking II | 4 |
| CCI 43 | Baking III | 4 |
| CCI 51 | GardeManger I | 4 |
| CCI 52 | GardeManger II | 4 |
| CCI 53 | GardeManger III | 3 |
| CCI 61 | Dining Room Service I | 3 |
| CCI 62 | Dining Room Service II | 3 |
| CCI 63 | Dining Room Management | 2 |
| CCI 81 | Foodservice Nutrition (fall term only) | 3 |
| CCI 91 | Foodservice Controls <br> (spring term only) |  |
| or HTRM105 | Food Service Management <br> (spring term only) | 4 |
| CCI 107 | Culinary Supervision (winter term only) | 3 |

Additional classes/terms (The following courses are required for the AAS in Culinary Management and may be taken before, during or after the other program courses)
BA 217 Accounting Fundamentals (fall or spring)* 3
CCI 93 Wine and Beverage 3
CCI 280 Co-op Work Experience 6
General education distribution courses ${ }^{1} \quad 9$
Health ${ }^{2}$ 3-4
SP 111 Fundamentals of Public Speaking 3
or SP 218 Interpersonal Communication 3
${ }^{1}$ Choose classes from COCC's distribution list (pages 44 and 45); each course must have a different prefix
${ }^{2}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.

## Advising information

Cascade Culinary Institute ${ }^{\circledR}$ kitchen courses (CCI 21-63) are scheduled Monday through Thursday, 8 a.m. to 3 p.m., with other labs to be arranged. Other lab assignments may include 6 a.m. baking, weekend and/or evening catering. Students scheduling the kitchen block must commit to being full time. Each kitchen block by level is 15 credits (see Cascade Culinary Institute ${ }^{\circledR}$ Certificate on page 70 . Enrollment in kitchen course blocks by permission only and then based upon seat availability.

First-term kitchen block expenses for uniforms, equipment and textbooks are approximately $\$ 660$. All CCI courses carry an additional fee; please see schedule of classes for details.

To meet graduation requirements, students must successfully complete the required courses with a grade of "C" or better.

Students may be eligible for the certificate of completion in culinary after their fifth term.

# DENTAL ASSISTING <br> Certificate of Completion (58-63 credits) <br> (Four quarters to complete if attending full time) <br> There may be changes in this program. Meet with your program advisor to discuss most current details. 

The Dental Assisting program trains individuals in a broad range of clinical and administrative skills, including preparing dental patients for examinations and treatments, performing radiographic procedures and preparing dental materials. Administrative training includes scheduling and appointment procedures, maintenance of medical records, performing basic secretarial and receptionist services and development of internal and external communications and public relations skills. Students can complete the certificate program through four terms of full-time coursework (recommended summer term coursework to be completed the summer prior to starting the program, or the summer immediately following the completion of program-specific coursework. The non-program specific coursework can also be taken once the student is enrolled in the dental assisting program.) The dental assisting program is accredited by the American Dental Association's Commission on Dental Accreditation.

The dental assisting certificate program allows for admission once per year in the fall term. Admission is based on a first-come, first-served basis for all applicants. Prior to starting program classes, all students must complete all of the following: (1) a high school diploma or GED and (2) take COCC's placement test and receive the minimum scores or complete the equivalent courses listed below:

| ASSET scores | COMPASS scores | Coursework |
| :--- | :--- | :--- |
| Reading: 43 | Reading: 84 | WR 65, 75 or 95 |
| Writing: 43 | Writing: 71 |  |
| Numerical Skills: 45 | Pre-Algebra: 49 | MTH 20 |
| Elementary Alg: 48 | Algebra: 21 |  |

Prior to entering the clinical setting, admitted students must have a Hepatitis B immunization series (or must sign a release form indicating their refusal to be immunized), a current TB test and two immunizations for measles. A current CPR card is also required before entering the clinical setting. Students will also be responsible for additional expenses such as lab jackets, materials, certification exams and lab fees.

All program courses must be completed with a minimum of 75 percent or better and students must maintain a 2.0 overall GPA to graduate.

## Summer term (or during program)

| WR 121 | English Composition | 3 |
| :--- | ---: | ---: |
| Health |  |  |
| Computer competency |  |  |
| C | $3-4$ |  |
| SP 218 $\quad$ Interpersonal Communication | $0-4$ |  |



## Fall term

AH 100 Intro Health Occupations 2
DA $110 \quad$ Basic Dental Assisting 4
DA 115 Dental Science 4
DA 125 Dental Infection Control 3
DA 145 Preventive Dentistry 3

## Winter term

DA $120 \quad$ Advanced Dental Assisting 4
DA 130 Dental Materials I 3
DA $134 \quad$ Dental Radiology I 2
DA 160 Oral Medicine 3
DA 181 Dental Seminar I 1
DA 190 Dental Assisting Practicum I 5

## Spring term

| DA 131 | Dental Materials II | 3 |
| :--- | :--- | :--- |
| DA 135 | Dental Radiology II | 3 |
| DA 150 | Dental Office Management * | 3 |
| DA 151 | Dental Computing | 1 |
| DA 182 | Dental Seminar II | 1 |
| DA 191 | Dental Assisting Practicum II | 5 |

${ }^{1}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## DIETARY MANAGERS

Short-term Certificate
( 17 credits; three quarters to complete if attending full time)

The Dietary Manager program is uniquely designed to help students who are already employed to receive certification while working. The program can be completed in three terms, with classroom work offered one day per week. The courses give a foundation in quantity food production, personnel management, nutrition care principles and food service systems management. The field experience may be completed at the student's worksite or on campus and will provide a practical application of the principles learned in coursework. Students completing the program will be prepared to sit for the national examination to become Certified Dietary Managers approved by the Dietary Managers Association.

A dietary manager is an asset to hospitals, long-term care facilities, retirement centers, schools, correction facilities and other food service settings. Dietary managers are trained in understanding the basic nutritional needs of their clientele. They are charged with balancing menu variety and customer satisfaction while managing cost/profit objectives. They purchase the goods, equipment and services used in the food service department. They also hire, motivate, train and supervise their employees.

Dietary managers are highly marketable. The rapidly growing elderly population has put institutional food service in demand. Jobs in the area of dietary manager and the food service industry are projected to grow faster than the average professions both locally and nationally. Career advancement may be in the areas of dietary technology, hospitality, tourism and recreation management, or supervisory management.

Admitted students will be assigned a program advisor to assist with advising and registration. Current students who have taken the placement test must be assigned a program advisor prior to program admission. Any previous transcripts should be forwarded directly to Enrollment Services - Admissions with a request for evaluation prior to the advising session.

Students interested in the dietary manager program must meet basic competencies in reading, writing and math as listed below, as well as hold a high school diploma or its equivalent. Students may begin dietary manager classes at the start of any term. Current COCC students may enroll through the early registration process, with new students enrolling through the standard admission process for new COCC applicants.


## Degree/course requirements

All students interested in the dietary management program must take COCC's placement test and receive the minimum scores or complete the equivalent courses listed below prior to completion of dietary management technical courses:

## ASSET scores

Reading: 43
Writing: 43
Numerical Skills: 48
Elementary Alg: 27

## COMPASS scores

Reading: 84
Writing: 71
Pre-Algebra: 49 MTH 20
Algebra: 21

## Fall term

CCI 71 Sanitation 2
CCI $81 \quad$ Foodservice Nutrition 2
DM 121 Practicum: Sanitation 1
DM 221 Practicum: Foodservice Nutrition 1

## Winter term

CCI 107 Culinary Supervision 3
DM 111 Practicum: Culinary Supervision 1
DM $210 \quad 2$
DM 211 Practicum: Nutrition Therapy 1

## Spring term

CCI 91 Foodservice Controls 3
DM 131 Practicum: Foodservice Controls 1

## EARLY CHILDHOOD EDUCATION

Associate of Arts Oregon Transfer Associate of Applied Science

At COCC, the Early Childhood Education 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. While the program prepares students for direct work with young children in classroom and educational settings, many associate degree-seeking students have additional professional goals (many requiring further education) including but not limited to:

- Early childhood educator roles such as an infant/toddler, preschool/pre-kindergarten, or K-grade 3 classroom teacher, family child care provider, Head Start teacher, or paraprofessional in public schools, early interventionist;
- Home-family support roles such as family advocate, child protective services worker, or parent educator; or
- Professional support roles such as early childhood administrator in a childcare or Head Start program, staff trainer, peer/program mentor, or advocate at the community, state or national level.


## Mission statement

Our belief in early childhood education is that children begin learning from prenatal experiences to each and every experience thereafter. We believe young children benefit from well-designed, developmentally appropriate, and culturally relevant curriculum that reflects children's active role in learning. We believe in the inclusion of all children in quality programming. We also believe children are served best when families, schools, and communities work together as partners through close and ongoing collaboration.

## Degree options

Students in the Early Childhood Education program have numerous options in terms of pathways for further education and career opportunities:

- Associate of Arts Oregon Transfer (AAOT) prepares students intending to transfer to four-year programs with the foundational knowledge in early childhood education and preparation in general education requirements that fulfill state requirements for four-year programs.
- Associate of Applied Science (AAS) prepares students with a strong emphasis in the theories, curriculum goals, developmentally appropriate teaching and guidance strategies necessary to lead an early childhood classroom program or work as a paraprofessional in the public schools.
- Associate of science direct transfer (AS-DT) (pending approval) prepares students intending to transfer to the Oregon State University-Cascade Campus program in Human Development and Family Sciences. The AS-DT combines a strong emphasis
in the theories, curriculum goals, developmentally appropriate teaching and guidance strategies for early childhood and elementary settings with the general education requirements necessary for the bachelor's degree. Additionally, students interested in eventually seeking a master's degree in elementary education may use the AS-DT as a foundation for further education. Contact COCC's Admissions and Records office for up-to-date AS-DT course requirements.


## Associate of Arts Oregon Transfer (93 credits)

## General education/basic skills

## English composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
or WR 214 Business Communications
or WR 227 Technical Writing
Speech
SP 111
Fundamentals of Public Speaking 3
or SP 219 Small Group Communication

## Health <br> HHP 231 Human Sexuality 3 <br> HHP 185xx Activity or Health class 1

Mathematics
MTH 211-213 Fund of Elementary Math I-III 12
$\begin{array}{ll}\text { Computer competency } \\ \\ & \\ & 0-4\end{array}$

## Distribution requirements

## Humanities

SP 218 Interpersonal Communication Skills 3
plus eight additional credits from the humanities distribution list where at least one course has a prefix other than SP.

## Lab science

FN $225 \quad$ Human Nutrition 4
plus three biological or physical science courses with labs, two of which must have the same prefix (12-15 credits).

Social Science
PSY 201 Mind and Brain 4
PSY 2024
PSY 235 Human Development-Child 3
SOC 201 Introduction to Sociology 4

# EARLY CHILDHOOD EDUCATION (continued) 

Associate of Arts Oregon Transfer<br>Associate of Applied Science

## Recommended program electives

To provide the best preparation for upper-division courses, particularly at OSU-Cascades, students should take the following as electives:

| BA 218 | Personal Finance | 3 |
| :--- | :--- | :--- |
| ED 140 | Intro to Early Childhood Education | 4 |
| ED 150 | Environments and Curriculum in ECE | 4 |
| ED 151 | Observation and Guidance of <br> Young Children's Learning | 4 |
| ED 172 | Language and Literacy in <br> Early Childhood Education | 3 |
| ED 173 | Movement, Music, and the Arts <br> in Early Childhood Education | 3 |
| ED 174 | Math, Science, and Technology in <br> Early Childhood Education | 3 |
| ED 250 | Advanced Curriculum Development and <br> Teaching Methods in Early Childhood | 4 |
| ED 269 | Exceptional Children in <br> Early Childhood Education | 3 |
| ED 219 | Multicultural Issues in Education Settings | 3 |
| PSY 236 | Human Development-Adult | 3 |
| LIB 127 | Informational Research Skills | 2 |

${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Associate of Applied Science (93 credits)

## General education/basic skills

WR 121 English Composition 3
WR $122 \quad 3$
WR 123 English Composition 3
SP 218 Interpersonal Communication 3
MTH 65 Algebra II 4
PSY 201 Mind and Brain 4
PSY 202 Mind and Society 4
PSY 235 Human Development—Child 3
Health (recommended health courses)
HHP $231 \quad$ Human Sexuality
or HHP 295 Health and Fitness
and one health module (HHP 185xx) 1
Computer competency ${ }^{1} \quad 0-4$

## Distribution requirements

Lab science (select two of the following)
BI 101 General Biology I 4
or BI 102 General Biology II
or BI 103 General Biology III
or G 201 Geology I
Social Science (select one course from the following)
HST 201 History of the United States 4
HST 225 U.S. Women's History 4
PSY 236 Human Development-Adult 3
SOC 201 Introduction to Sociology 4
SOC 212 Race, Class, Ethnicity 4

## Program requirements and electives

Students should take all of the courses listed below, plus enough additional coursework (see advisor for options) to reach the 93 minimum credits required for the degree.
ED 140 Intro to Early Childhood Education 4
ED 150 Environments and Curriculum in ECE 4
$\begin{array}{ll}\text { ED } 151 & \text { Observation and Guidance of } \\ & \text { Young Children's Learning }\end{array}$
$\begin{array}{ll}\text { ED } 172 & \text { Language and Literacy in } \\ & \text { Early Childhood Education }\end{array}$
$\begin{array}{ll}\text { ED } 173 & \begin{array}{l}\text { Movement, Music, and the Arts } \\ \text { in Early Childhood Education }\end{array}\end{array}$
ED 174 Math, Science, and Technology in
$\begin{array}{ll}\text { ED } 250 & \text { Advanced Curriculum Development and } \\ & \text { Teaching Methods in Early Childhood }\end{array}$
$\begin{array}{ll}\text { ED } 269 & \text { Exceptional Children in } \\ & \text { Early Childhood Education }\end{array}$
ED 261/262 Practicum I and II 6
ED 219 Multicultural Issues in Education Settings 3
FN 225 Human Nutrition 4
LIB 127 Informational Research Skills 2
Humanities elective (select one course from the following)
ARH 201 Introduction to Art History 4
ART 101 Introduction to Visual Arts 4
ENG 104 Introduction to Literature: Fiction 4
ENG 106 Introduction to Literature: Poetry 4
ENG 221 Introduction to Children's Literature 4
HUM 240 Native American Literature and Culture 4
MUS 201 Understanding Music 3
WR 227 Technical Writing 3
WS 101 Introduction to Women's Studies 4
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

Economics is the study of how society allocates its scarce resources to satisfy its many needs and wants. The focus of lower division economics courses at COCC is on how the American economy works. The U.S. economy relies primarily on free markets to allocate resources and to provide final goods and services. To understand how markets work, students study the forces of supply and demand. They also look closely at both competitive markets and monopoly markets. Economics studies the role of government in the economy both in promoting social objectives and in keeping the economy healthy through fiscal and monetary policies. Economics gives an understanding of how the U.S. produces and distributes the goods and services it needs and enjoys. This program is good preparation for careers in business, engineering, resource management or government, as well as solid training for graduate or law school.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 economics.

## General education/basic skills

English Composition
WR 121 English Composition 3
WR 1223
WR 123 English Composition 3
Speech
SP $219 \quad$ Small Group Communication 3
$\begin{array}{ll}\text { Mathematics } & \\ \text { MTH } 111 & \text { College Algebra }\end{array}$

| Health $^{1}$ | $3-4$ |
| :--- | :--- |
| Computer competency $^{2}$ | $0-4$ |

## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

Social Science
EC 201 Microeconomics 4
EC 202 Macroeconomics 4
plus two additional courses from the social sciences distribution list, one of which must have a prefix other than EC 7-8

## Electives

Take enough elective courses to meet the minimum 93 credits required for the degree. Elective courses should include:
MTH 241 Calculus for Management/Social Science 4
MTH 243 Math for Management/Life/Social Science 4
MTH 244 Intro to Methods of Probability \& Stats 4

## Advising notes

${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266:
Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR- HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## EDUCATION

Associate of Arts Oregon Transfer (93 credits)

## EMERGENCY MEDICAL SERVICES

Associate of Applied Science
(107-115 credits; seven quarters to complete if attending full time)

The Associate of Applied Science degree (AAS) in Emergency Medical Services (EMS) is designed for students seeking an EMS career and those seeking a career in Central Oregon in 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 requires participants to spend many hours outside the classroom in clinical and field settings. Students may be required to purchase some special equipment and clothing. Specific immunization records are required prior to registration in EMT Basic and EMT paramedic classes; these immunizations must remain current for the duration of the courses; contact the EMS office at (541) 383-7287 for immunization details.

The program contains certification requirements at the EMT Basic and EMT Paramedic levels. Students will need to test through the Oregon Department of Human Services EMS and Trauma Section and the National Registry of EMT's to complete certification. Students also need to be aware of the College insurance policy prior to participation in the program. A statement concerning College insurance policies is listed on page 22 and on all EMS course syllabi.

COCC offers lower division coursework for students preparing to become teachers in Oregon. In general, the Associate of Arts degree (see pages 37-38 for the AAOT degree checklist) is reasonable preparation for students intending to transfer to a teacher preparation program. In Oregon, students may achieve an initial license to teach through a bachelor's program, a postbaccalaureate 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 a transfer degree in early childhood education through COCC (see pages 74-75) 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. For students intending to stay in Central Oregon to pursue their studies in education, there are several options for completing a teaching licensure program.

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 http://www.tspc.state.or.us and the Oregon Teacher advising guide, www.ous.edu/teachedguide.htm.

Students entering either the Structural Fire Science (SFS) or the EMS degree programs can pursue the dual degree program obtaining AAS degrees in both SFS and EMS within three years. Students should contact an advisor for details.

First-year classes are open to all students. Upon completion of EMT 151 and 152, EMT Basic Part A and B, students must pass the Oregon EMT exam prior to applying for admission into EMT paramedic courses. Students must complete all these courses and general education requirements prior to applying to the second-year paramedic program (see "Selection Process" in the EMS Handbook at http://web.cocc.edu/admit/new/publ/ emshandbook.pdf). Second-year classes (those numbered 200 and above) are open only to admitted EMS students. Admission is competitive and an application process is required. All students should contact the COCC Admissions Office for application details during their first year or see the EMS Web site at http:// alliedhealth.cocc.edu/Programs_Classes/EMS/EMS+Entrance/.

| YEAR ONE |  |  |
| :---: | :---: | :---: |
| Fall term |  |  |
| BI 231 | Human Anatomy and Phys I | 4 |
| EMT 151 | EMT Basic Part ${ }^{3}$ | 5 |
| EMT 175 | Intro to EMS | 4 |
| or SFS 101 | Intro to EMS |  |
| MTH 85 | Technical Mathematics I ${ }^{4}$ | 4 |
| or MTH 60 | Elementary Algebra |  |

## Fall term

1 Human Anatomy and Phys I 4
EMT 175 Intro to EMS 4
or SFS 101 Intro to EMS
or MTH 60 Elementary Algebra

## EMERGENCY MEDICAL SERVICES (continued)

Associate of Applied Science
(107-115 credits; seven quarters to complete if attending full time)

## Winter term

| AH 111 | Medical Terminology I | 3 |
| :--- | :--- | ---: |
| BI 232 | Human Anatomy and Physiology II | 4 |
| EMT 152 | EMT Basic Part B |  |
| WR 121 | English Composition | 5 |
| General education distribution course | 3 |  |
| $^{5}$ | $3-4$ |  |

## Spring term

| BI 233 | Human Anatomy and Phys III | 4 |
| :--- | :--- | ---: |
| Health $^{2}$ |  | $3-4$ |
| Computer competency $^{1}$ | $0-4$ |  |
| General education distribution course $^{5}$ | $3-4$ |  |
| SP 218 | Interpersonal Communication | 3 |
|  |  |  |
| YEAR TW0 |  | 3 |
| Fall term |  | 8 |
| EMT 170 | Comm \& Patient Transport |  |
| EMT 290 | EMT Paramedic Part 1 | 2 |
| EMT 291 | EMT Paramedic Part 1 Clinical | 4 |
| SFS 230 | Rescue Practices |  |
|  |  | 3 |
| Winter term |  |  |
| BA 285 | Business Human Relations | 3 |
| or FOR 211 | First Line Supervision* |  |
| EMT 195 | Crisis Intervention | 8 |
| EMT 292 | EMT Paramedic Part 2 | 3 |
| EMT 293 | EMT Paramedic Part 2 Clinical |  |

Spring term
EMT 294 EMT Paramedic Part 3
EMT 295 EMT Paramedic Part 3 Clinical 3
General education distribution course ${ }^{5}$ 3-4

Summer term
EMT 280
Paramedic Co-op Work Experience
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{2}$ To meet this requirement, students can choose between HHP $231,242,258,266$ or 295 and one activity or health module. HHP 252a is recommended for students who have not yet taken EMT 151 and 152.
${ }^{3}$ Upon completion of EMT 151 and 152, students must pass the Oregon EMT exam before continuing in paramedic courses. Currently certified students do not need to retake the courses for the degree but must hold a current EMT Basic Oregon Certification to enter the paramedic program.
${ }^{4}$ Students planning to transfer should take MTH 105 or 111.

${ }^{5}$ See the COCC catalog Humanities and Social Science Distribution lists only. PSY 201, PHL 205 or SOC 201 are recommended. Foreign language classes will be accepted at the 100 level. Courses must each have a different prefix.

## Advising information

It is strongly advised that candidates applying to the EMS 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.

Recommended preparation for EMT basic students includes COMPASS placement test scores of: Writing, 71+ and Reading, $84+$ OR successful completion of WR 40, 65 OR 95; Prealgebra, 49+ OR Algebra, 21+ OR successful completion of MTH 20.

Second-year paramedic courses are open only to students who have been admitted to the program. Admission is competitive and students must make application in the spring term of their first year. Students should contact the Admissions Office for an application packet. Students are strongly encouraged to complete all first year courses and general education requirements prior to applying to the second year paramedic program as the time requirements for didactic and clinical training are significant.

Students must pass all EMT classes with a 75 percent or higher and maintain an overall GPA of 2.0 to graduate.

## ENGLISH/LITERATURE

Associate of Arts Oregon Transfer (93 credits)

English majors and minors with a solid humanities foundation and strong writing, reading, critical thinking and research skills, are sought after in many careers, including advertising, business, marketing and public administration; communication and media; computer-based information and education, software and Web development; counseling and social services, government civil service; law and criminal justice; recreation; and teaching/education.

COCC's Humanities department offers courses in

- English (American, British, Children's and Western World Literature, and Introduction to Literature: Fiction, Drama, Poetry);
- Foreign Languages (French, German, Italian and Spanish);
- Humanities (American Multiculturalism, Film Arts, NonWestern Cultures \& Literature, Popular Culture);
- Philosophy;
- Reading; and
- Writing (English Composition, Technical Writing and Creative Writing: Fiction, Non-Fiction, Poetry, Scriptwriting as needed to satisfy lower-division requirements for bachelor's degrees and to prepare transfer students for success in achieving their academic and professional goals. COCC transfer students are encouraged to consult college catalogs and work closely with their advisors. Students seeking a bachelor's degree in English/ literature or an interdisciplinary humanities degree featuring literary studies are often best served by pursuing the Associate of Arts degree, while students intending to transfer to Oregon State University or OSU-Cascades should consider the Associate of Science degree (ASOT) option.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 English/Literature.

## General education/basic skills

## English Composition

WR 121 English Composition 3
WR $122 \quad 3$
WR 123 English Composition 3
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication 3

## Mathematics

MTH 105 Intro to Contemporary Math (or higher) 4
Health ${ }^{1}$ ..... 3-4
Computer competency ${ }^{2}$ ..... 0-4

## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, which must include two courses with the same prefix and one course with a different prefix. English/Literature majors are advised to choose two courses with an English prefix in British and/or Americal Literature from:
ENG 204 Survey British Literature I 4
ENG 205 Survey British Literature II 4
ENG 253 Survey American Literature I 4
ENG 254 Survey American Literature II 4
plus one additional course from the humanities distribution list with a different prefix.

Social Science
A minimum of 15 credits from the social science distribution list, which must include two courses with the same prefix and one course with a different prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, which must include three biological or physical science courses with labs, two courses of which must have the same prefix and one course with a different prefix.

## Electives

Choose enough electives to reach the minimum of 93 credits required for the AAOT. Most Oregon and other universities require English/literature majors to complete lower-division coursework in surveys of British and American literature, as well as at least one course in Shakespeare. Therefore English/literature majors are encouraged to complement their general education/ distribution humanities courses with electives chosen from the following courses:

ENG 204 Survey British Literature I 4
ENG 205 Survey British Literature II 4
ENG 253 Survey American Literature I 4
ENG 254 Survey American Literature II 4
ENG 201 Shakespeare 4
or ENG 202 Shakespeare
NOTE: ENG 140, Shakespeare in Ashland (3) may also satisfy Shakespeare requirement at some universities.

## ENGLISH/LITERATURE (continued)

Associate of Arts Oregon Transfer (93 credits)

However, lower-division requirements for majors, minors and related specializations in English/Literature vary among four-year institutions. Therefore, 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 Children's Literature 4

English/Literature and humanities degree programs may also require or recommend one or more courses in:
(1) Western World Literature

ENG 107 Western World Literature: Ancient 4
ENG 108 Western World Literature: Middle Ages 4
ENG 109 Western World Literature: Modern 4
(2) Non-Western World Literature (may satisfy cultural diversity requirements)
HUM $210 \quad$ Culture \& Literature of Asia 4
HUM 211 Culture \& Literature of Africa 4
HUM 212 Culture \& Literature of the Americas 4
HUM 213 Culture \& Literature of the Middle East 4
(3) American Multiculturalism (may satisfy cultural diversity requirements)
HUM 230 Immigrant Experience American Literature 4
HUM 240 Native American Literature and Culture 4
HUM 251 Introduction to African-American Literature 4
(4) Introductory genre courses in Literature, Film and/or Popular Culture courses
ENG 104 Introduction to Literature: Fiction 4
ENG 105 Introduction to Literature: Drama 4
ENG 106 Introduction to Literature: Poetry 4
FA 101 Introduction to Film 3
FA 257 Literature into Film 4
HUM 261 Popular Culture: Science Fiction 4
HUM 262 Popular Culture: The American Western 4
HUM 263 Popular Culture: Detective Stories 4
HUM 264 Popular Culture: Spy Thriller 4
HUM 265 Popular Culture: Noir Film and Fiction 4
HUM 266 Popular Culture: Travel Literature 4

## Advising notes

${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one
activity or health module -OR-HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Transfer Information

Oregon University System (OUS) universities that offer bachelor's degrees with majors, minors or specializations in English/Literature and related fields include:

## Oregon State University-Cascades Campus

English (minor): American Literature; English Language Arts authorization level or endorsement area; Liberal Studies (BA/BS): Humanities option.

## Oregon State University-Corvallis

American Studies; English (major), BA; English Literature minor; Writing minor; Print Media minor; Elementary and Secondary Education: English Language Arts authorization level or endorsement area; Ethnic Studies (focus: American multiculturalism); Liberal Studies (interdisciplinary themes, including English/Literature, Education, Ethnic Studies, European Studies, Foreign Languages \& Literatures, Philosophy, Writing)

## University of Oregon

Comparative Literature, English, Ethnic Studies, Film Studies, Humanities.

## Portland State University

English, Film Studies (minor only), Professional Writing (minor only)

## Eastern Oregon University

English/Writing (concentration in Literature, Literature/Film, Discourse Studies, or Writing)

## Southern Oregon University

English and Writing, Native American Studies, Shakespeare Studies

## Western Oregon University

English (B.A.: English/Language Arts Common Core, English/ Literature, English/Linguistics, English/Writing).
Note: WOU English majors and language arts secondary teaching majors should take ENG 107, ENG 108, and ENG 109).

## EXERCISE SCIENCE

Associate of Arts Oregon Transfer
Associate of Science

## Associate of Arts Oregon Transfer (96-101 credits)

The Associate of Arts Oregon Transfer 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.

## General education/basic skills

## English composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
or WR 214 Business Communications
or WR 227 Technical Writing
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
MTH 105 Intro to Contemporary Math (or higher) 4
Health $^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

## Humanities

11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Social Science

15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix. Recommend including:
PSY $201 \quad$ Mind and Brain 4
PSY 202 Mind and Society 4
SOC 201 Intro to Sociology 4
Science/Math/Computer Science
15 credits from the science/math/computer science list, with at least two different prefixes and three biological or physical science courses with labs, two of which must have the same prefix. Recommend including:
BI $231 \quad$ Human Anatomy and Physiology I 4
BI 232 Human Anatomy and Physiology II 4
BI 233 Human Anatomy and Physiology III 4
HHP 220 Intro to Epidemiology 3
or FN 225 Human Nutrition 4

## Electives

17-34 credits. Choose enough elective credits to reach a minimum total of 93 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, professional technical courses ( 12 credits maximum) or CWE/HHP/performance classes ( 15 credits maximum). The following is a list of recommendedd electives:
HHP 131 Intro to Exercise/Sport Science (offered fall) 3
HHP 212 CPR-American Heart Association 1
or HHP 212A CPR-AHA Health Care Providers
HHP 259 Care and Prevention of Athletic Injury (offered spring) 3
HHP 260 Intro to Human Movement (offered winter) 3
HHP 261 Basic Exercise Physiology (offered fall) 3
HHP 262 Training Theory and Applications (offered spring)
HHP 266 Nutrition for Health 3
HHP 270 Sport and Exercise Psychology (offered winter) 3
HHP 280 Co-op Work Experience - HHP
2
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity class or CPR —OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity or CPR class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Oregon public universities with an exercise science major

Oregon University System (OUS) universities that offer bachelor's degrees with majors, minors or specializations in exercise science and related fields include:

## Eastern Oregon University-Distance Education

Physical Activity and Health
Oregon State University
Health and Human Sciences
Portland State University
Health Studies
Southern Oregon State University
Health and Physical Education

## Advising information

Lab fees:
\$20 for HHP 295 Health and Fitness, 3 credits or
HHP 252a, Fit/First Aid, 3 credits
$\$ 15$ for HHP 212, CPR, 1 credit and HHP 212A, CPR for Health Care Providers, 1 credit $\$ 16$ for all HHP 185 activity classes for Mazama user fee

## EXERCISE SCIENCE (continued)

Associate of Arts Oregon Transfer<br>Associate of Science

## Associate of Science (95-97 credits)

The Associate of Science degree with a focus in exercise science is intended for students who want to work in the fitness industry immediately upon graduation or current employees who wish to upgrade their skills. This degree can help prepare a student to sit for the ACSM Personal Trainer or Health Fitness Instructor Certificate exams.

## General education/basic skills

## English composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
or WR 214 Business Communications
or WR 227 Technical Writing
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
MTH 105 Intro to Contemporary Math (or higher) 4
Health $^{1}$ 3-4
Computer competency ${ }^{2}$ 0-4

## General education/distribution

## Social Science

Choose nine- 12 credits from the social science distribution list. Must include at least two different prefixes and at least two courses with the same prefix. Recommend including:
PSY 201 Mind and Brain 4
PSY 202 Mind and Society 4
SOC 201 Intro to Sociology 4
Science/Math/Computer Science
Choose nine- 12 credits from the science/math/computer science distribution list. Must include at least two different prefixes and at least two courses with the same prefix. Recommend including:
BI 231 Human Anatomy and Physiology I 4

BI 232 Human Anatomy and Physiology II 4
BI 233 Human Anatomy and Physiology III 4
HHP 220 Intro to Epidemiology 3
or FN 225 Human Nutrition 4
Humanities
Choose six to eight credits from the humanities distribution list. Must include at least two different prefixes and at least two courses with the same prefix.

## Program requirements

HHP 131 Intro to Exercise/Sport Science (offered fall) 3
HHP 212 CPR-American Heart Association 1
or HHP 212A CPR- AHA Health Care Provider

| HHP 259 | $\begin{array}{l}\text { Care and Prevention of Athletic Injury } \\ \\ \text { (offered spring) }\end{array}$ |
| :--- | :--- |

HHP 260 Intro to Human Movement ${ }^{3}$ (offered winter) 3
HHP 261 Basic Exercise Physiology ${ }^{3}$ (offered fall) 3
HHP 262 Training Theory and Applications ${ }^{3}$ (offered spring)
HHP 266 Nutrition for Health 3
HHP 270 Sport and Exercise Psychology (offered winter) 3
HHP 280 Co-op Work Experience - HHP 2

## Electives

17-34 credits. Choose enough elective credits to reach a minimum total of 93 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, professional technical courses ( 12 credits maximum) or CWE/HHP/performance classes ( 15 credits maximum).

## Advising notes

${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity class or CPR —OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity or CPR class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{3}$ Can be used to meet the science/math/computer science distribution requirement

## Transfer information

Eastern Oregon University-Distance Education
Physical Activity and Health
Oregon State University
Health and Human Sciences
Portland State University
Health Studies
Southern Oregon State University
Health and Physical Education

## Advising information

Lab fees:
\$20 for HHP 295 Health and Fitness, 3 credits or HHP 252a, Fit/First Aid, 3 credits
$\$ 15$ for HHP 212, CPR, 1 credit and
HHP 212A, CPR for Health Care Providers, 1 credit
$\$ 16$ for all HHP 185 activity classes for Mazama user fee

FOREIGN LANGUAGES
Associate of Arts Oregon Transfer (93 credits)

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 foreign language.

COCC's Humanities Department offers first- and second-year French, German, Italian and Spanish as well as 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. COCC students seeking a bachelor's degree in French, German, Italian or Spanish; or a related degree or a teaching endorsement featuring foreign language, literature and culture studies; are often best served by pursuing the Associate of Arts degree. Students wishing to begin or continue study of a foreign language at COCC are encouraged to consult college catalogs and work closely with their advisors.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 foreign languages.

## General education/basic skills

English Composition
WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
Speech
SP 111 Fundamentals of Public Speaking
or SP 219 Small Group Communication
Mathematics
MTH 105 Intro to Contemporary Math (or higher) 4
Health ${ }^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$


## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, which must include two courses with the same prefix and one course with a different prefix. Note: Second-year foreign language courses with the same prefix may be used to satisfy the humanities general education distribution requirement.

## Science/Math/Computer Science

A minimum of 15 credits, which must include three biological or physical science courses with labs, two courses of which must have the same prefix and one course with a different prefix.

## Social Science

A minimum of 15 credits from the social science distribution list, which must include two courses with the same prefix and one course with a different prefix.

## Electives

Choose enough electives to reach the minimum of 93 credits required for the AAOT. Note: First-year foreign language courses may be counted as electives, as may any second-year foreign language courses not used to satisfy the humanities general education/distribution requirement above.
${ }^{1}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## FOREIGN LANGUAGES (continued)

Associate of Arts Oregon Transfer (93 credits)

## Transfer information

Oregon University System (OUS) universities that offer bachelor's degrees, minors, certificates or endorsements in foreign languages and related fields:

## Oregon State University-Corvallis

Foreign Languages \& Literatures (majors): French, German, Spanish; International Degree Program (including Foreign Languages \& Literatures, Cultural Diversity, Contemporary Global Issues, and Western Culture); Liberal Studies (interdisciplinary themes, including Foreign Languages \& Literatures); Education (Pre-Elementary, Elementary and Secondary); Ethnic Studies (focus: American multiculturalism).

## University of Oregon

French, Italian, Spanish (Romance Languages \& Literatures); German (Scandinavian Languages \& Literatures); Comparative Literature, Ethnic Studies, European Studies, Humanities, International Studies, Latin American Studies, Linguistics, Peace Studies, Second Language Acquisition and Teaching; School of Education: English for Speakers of Other Languages/ESOLBilingual endorsement areas include Spanish, French and German.

## Portland State University

Foreign Languages and Literatures offer majors and minors in French, German, Spanish; International Studies certificate programs require language and area studies, and encourage study abroad; certificate programs include European Studies, Latin American Studies, Middle East Studies and Canadian Studies, as well as International Business Studies; Teaching English as a Second Language (certificate).

## Eastern Oregon University

International Studies; Modern Languages Dept. offers minors in German and Spanish, and BA in Liberal Studies with concentration in German or Spanish.

## Southern Oregon University

Foreign Languages \& Literatures offers degrees in French, German, and Spanish, including BA's in Language and Culture, Arts and Letters, and Interdisciplinary Studies. International Studies require proficiency in a one foreign language equivalent to three years of college-level instruction and encourage study abroad with immersion in a related foreign culture and an intensive language component.


## Western Oregon University

Bachelor's degrees include German Studies, Humanities (emphasis options include Modern Languages, French, German, or Spanish), International Studies (specialization options include Modern Language in one language or Social Science: French Studies, German Studies, or Latin American Studies), Spanish, and Spanish Teacher Education. Minors are offered in Chicano/a Studies, French, German, International Studies, Latin American Studies and Spanish. Education degree programs include endorsements in Foreign Language (French, German, Spanish) and Bilingual/ESOL Education.

## FORESTRY

Associate of Applied Science
Transfer Preparation

## Associate of Applied Science <br> (100-104 credits; six quarters to complete if attending full time)

The Associate of Applied Science (AAS) degree program provides the education and practical skills needed to succeed as a technician in forestry and natural resource fields throughout the western U.S. The AAS degree program in forest resource technology from COCC is recognized by the Society of American Foresters. Job opportunities exist for technicians with government agencies (county, state and federal), contractors, consultants and private companies.

This program is designed for entry in fall term, however it can also accommodate entry in other terms. Students entering in other terms without proper preparation in math, writing or computer skills can expect to take more than two years to complete the program. All required program classes must be passed with a grade of at least a C. Students are expected to provide their own appropriate field clothing and tools. A list will be provided in FOR 100, Forestry Program Orientation.

Institutions with which COCC has articulation agreements in forest resource technology are: Oregon State University-Cascades Campus; University of Idaho; and Humboldt State University.

## YEAR ONE <br> Fall term

FE 210A Map, Compass and GPS 3
FOR 240A Forest Ecology 3
FOR 241A Dendrology I 3
FOR 100 Forestry Program Orientation 1
FOR 111 Forestry Perspectives* (also offered winter) 4
MTH 85 Technical Mathematics $\mathrm{I}^{1} \quad 4$
Computer competency ${ }^{2} \quad 0-4$
Winter term
FE 210B Forest Surveying 3
FOR 203 Applied Forest Ecology 3
FOR 220B Resource Measurement 4
GEOG 211 Computer Cartography 3
MTH 86 Technical Mathematics II 4

## Spring term

FOR 110 Wildland Fire Science I 2
FOR 202 Forest Entomology/Pathology 3
FOR 220A Aerial Photo 3
FOR 241B Dendrology II 3
WR 121 English Composition ${ }^{3} 3$
Summer term
FOR 180

Cooperative Work Experience - Forestry 3


## YEAR TWO

Fall term
FOR 205 Silviculture \& Harvesting Processes 5
FOR 210 Wildland Fire Science II 2
FOR 240B Wildlife Ecology 3
SP 111 Fundamentals of Public Speaking 3
General education distribution course ${ }^{4} \quad 3$
Winter term
FOR 211 First-Line Supervision* 3
FOR 220C Resource Sampling 4
GEOG 265 Geographic Information Systems 3
HHP 252A Fitness/First Aid 3
General education distribution courses ${ }^{4} \quad 3$

## Spring term

FOR 208 Soils: Sustainable Ecosystems 4
FOR 215 Forest Resource Capstone 3
FOR 260 Conservation of Nat Resources 3
FW 218 Survey of Northwest Wildlife 3
General education distribution courses ${ }^{4} 3$
${ }^{1}$ Students planning to transfer should take MTH 111 or 112 and should see advisor for specific transfer requirements.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{3}$ Transfer students should also take WR 227, Technical Writing.
${ }^{4}$ Select nine credits from the general education distribution course list; all courses must have a different prefix other than FE, FOR, FW.

## FORESTRY (continued)

Associate of Applied Science
Transfer Preparation


## Transfer Options (credits vary)

Students planning on transferring to Oregon State University, the University of Idaho, or Humboldt State University 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. Additional information can be found at each of the college Web sites indicated below and from a forestry program advisor.

Oregon State University www.osucascades.edu/academics
naturalresources or www.cof.orst.edu
Fisheries \& Wildlife
Forest Management
Forest Engineering
Forest Engineering/Civil Engineering Program (Dual Degree)
Range Management
Recreation Resource Management
Wood Science and Technology
University of Idaho www.cnrhome.uidaho.edu.
Ecology and Conservation Biology
Fishery Resources
Forest Products
Forest Resources
Rangeland Ecology and Management
Resource Recreation and Tourism
Wildlife Resources
Humboldt State University www.humboldt.edu)
Conservation Biology
Fisheries Biology
Forest Hydrology
Forest Production Management
Forest Resource Conservation
Forest Soils
Rangeland Resource Science
Wildland Fire Management
Wildlife Management \& Conservation
Wildland Soil Science

## Transfer and/or articulation information

Articulation and transfer options currently exist with:
Oregon State University
University of Idaho
Humboldt State University

## GENERAL SCIENCE

Associate of Arts Oregon Transfer (93+ credits)

The general science curriculum allows students to design academic programs that lead to a bachelor of science degree and provide more breadth than traditional science programs. General science can work for many career interests and for students whose scientific interests do not fit well within a single discipline. Students planning graduate study or technical careers, as well as students preparing for careers in the health sciences, science education, science-related business or social service might be best served by a well-designed multidisciplinary science program. The neurosciences, environmental sciences and biophysical sciences are examples of such cross-disciplinary areas. Combined with a second major or minor in English, for example, general science can be excellent preparation for a writing career in science, technology or natural history. The major also works well for students who want to teach elementary school or middle school science.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 general science.

## General education/basic skills

English Composition
WR $121 \quad 3$
WR 1223
WR 227 Technical Writing 3
Speech
SP $111 \quad$ Fundamentals of Public Speaking 3
Mathematics
MTH 111 College Algebra 4
Health ${ }^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science ${ }^{3}$

Choose a three-term lab science sequence from those listed in the electives section plus one additional class from the science/math/ computer science distribution list with a different prefix.

## Social Science

A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

| BI 211 | Principles of Biology I | 5 |
| :--- | :--- | :--- |
| BI 212 | Biology of Plants II | 5 |
| BI 213 | Biology of Animals III | 5 |
| CH 221 | General Chemistry I | 4 |
| CH 222 | General Chemistry II | 4 |
| CH 223 | General Chemistry III | 4 |
| G 201 | Geology I | 4 |
| G 202 | Geology II | 4 |
| G 203 | Geology III | 4 |
| MTH 251 | Calculus I | 4 |
| MTH 252 | Calculus II | 4 |
| MTH 253 | Calculus III | 4 |
| PH 201 | General Physics I | 5 |
| PH 202 | General Physics II | 5 |
| PH 203 | General Physics III | 5 |
| or PH 211 | General Physics I |  |
| PH 212 | General Physics II |  |
| PH 213 | General Physics III |  |

${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module --OR- HHP 252A.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{3}$ University of Oregon majors must take two additional science sequences from those not used to meet the COCC Science Distribution requirement listed above.

## Transfer information

The University of Oregon is currently the only public institution in Oregon that offers a Bachelor of Science degree in general science. This degree is offered in Bend. Students interested in this program should contact OSU-Cascades for additional information.

## GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Certificate of Completion<br>Associate of Applied Science

A Geographic Information System is an information system designed to work with data referenced by spatial or geographic coordinates. A GIS is both a database system with specific capabilities for spatially referenced data, as well as a set of operations for working [analysis] with the data. (Star and Estes, 1990)

GIS combines map layers with information about a place to give someone a better understanding of that place. Which layers of information are combined depends on the purpose: finding the best location for a new store; analyzing environmental damage; viewing similar crimes in a city to detect a pattern; and so on.

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.

Students in this program create data and maps that identify quantities and/or densities, analyze what's inside or near a study area and indicate change. Graduates work in natural resources, education, federal/state/local governments, retail and commercial businesses, Internet, publishing and real estate. GIS careers typically include positions such as GIS technician, project manager, computer programmer, database administrator, system administrator, cartographic designer, and related managerial and administrative roles.

The following are the goals of the GIS program:

- Utilize mechanisms to input, store, query and retrieve spatial and attribute data in a digital format.
- Obtain, analyze, document and utilize geographic information from various sources.
- Communicate geographic information to a variety of users verbally, graphically and in writing.
- Utilize "tools" of the discipline in the collecting, processing and presentation of geographic data.
- Critically analyze and present plans/solutions to geographic problems/questions.
- Interact within a multidisciplinary setting.

The AAS degree program is intended for someone who wishes to begin a career in GIS and has little or no technical or academic background.

The one-year certificate program is intended for those with existing skills and/or an academic degree who wish to obtain GIS-specific tools for use in their discipline.

Additionally, certificates of short-term training incorporating courses required for the geographic information systems AAS degree may be obtained. These certificates acknowledge student
progress in an area of expertise and are ideal for use in job applications and possible employment advancement. Certificates can be obtained while completing the degree or certificate requirements.

Please contact Art Benefiel by phone, (541) 383-7703, or e-mail, abenefiel@cocc.edu, or visit http://gis.cocc.edu for more details. It is recommended that students start the program in fall term.

## Mapping/Cartography Short-term Training <br> (13 credits)

FE 210A Map, Compass and GPS 3
FE 210B Forest Surveying 3
GEOG 211 Computer Cartography 3
GEOG 265 Intro to Geographic Information Systems 4

## Spatial Data Editing and Design <br> Short-term Training <br> (14 credits)

GEOG 265 Intro to Geographic Information Systems 4
GEOG 266 ArcGIS 5
GEOG 267 Geodatabase Design 5

## Image Processing <br> Short-term Training <br> (13 credits)

FE 210A Map, Compass and GPS 3
FE 210B Forest Surveying 3
FOR 220A Aerial Photo 3
GEOG 286 Remote Sensing 4

## Data Collection Short-term Training <br> ( 15 credits)

FE 210A Map, Compass and GPS 3
FE 210B Forest Surveying 3
FOR 220B Resource Measurements 4
GEOG 273 Spatial Data Collection 5

## Advanced GIS Concepts <br> Short-term Training <br> ( 15 credits)

GEOG 280 GIS Practicum 5
GEOG 285 Data Conversion and Documentation 5
GEOG 287 Analysis of Spatial Data 5

## GEOGRAPHIC INFORMATION SYSTEMS (GIS) (continued)

Certificate of Completion
Associate of Applied Science
Associate of Applied Science


> GIS Application Programming Short-term Training (16 credits)

## GIS Application Programming

GEOG 265 Intro to Geographic Information Systems 4
GEOG 266 ArcGIS 5
CIS 122 Computer Concepts III 3
GEOG 284 GIS Customization 4
Geographic Information Systems
Certificate of Completion
$(47$ credits $)$

## Fall term

GEOG 265 Intro to Geographic Info. Systems 4
GEOG 266 ArcGIS 5
GEOG 273 Spatial Data Collection 5
WR 1213
Winter term
GEOG 211 Computer Cartography 3
GEOG 285 Data Conversion and Documentation 5
GEOG 287 Analysis of Spatial Data* 5
Spring term
GEOG 267 Geodatabase Design 5
GEOG 280 GIS Practicum 5
GEOG 286 Remote Sensing 4
BA 285 Business Human Relations 3
Geographic Information Systems
Associate of Applied Science
( 93 credits; six quarters to complete if attending full time)

## YEAR ONE

Fall term
FE 210A Map, Compass, GPS ..... 3
GEOG 265 Geographic Info Systems ..... 4
GEOG 266 ArcGIS ..... 5
MTH 85 Technical Math I ..... 4
Winter term
FE 210B Forest Surveying ..... 3
FOR 220B Resource Measurement ..... 4
GEOG 211 Computer Cartography ..... 3
MTH 86 Technical Math II ..... 4
Spring term
CIS 122 Computer Concepts III ..... 3
FOR 220A Aerial Photo ..... 3
GEOG 267 Geodatabase Design ..... 5
WR 121 English Composition ..... 3
Summer term
GEOG 191 Co-Op Work Experience ..... 3
YEAR TWO
Fall term
GEOG 273 Spatial Data Collection ..... 5
HHP 252A Fitness/First Aid ..... 3
WR 227 Technical Writing ..... 3
General education distribution course ${ }^{1}$ ..... 3
Winter term
GEOG 284 GIS: Customization ..... 4
GEOG 285 Data Conversion \& Documentation ..... 5
GEOG 287 Analysis of Spatial Data ..... 5
General education distribution course ${ }^{1}$ ..... 3
Spring term
BA 285 Business Human Relations ..... 3
GEOG 280 GIS Practicum ..... 5
GEOG 286 Remote Sensing ..... 4
General education distribution course ${ }^{1}$ ..... 3
${ }^{1}$ Choose a minimum of nine credits from COCC's distribution list (pages 44 and 45); each course must have a different prefix.

## GEOGRAPHY

Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 geography.

## General education/basic skills

## English Composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
Speech
SP $111 \quad$ Fundamentals of Public Speaking 3
or SP 219 Small Group Communication 3
Mathematics
MTH 111 College Algebra (required) 4
Health ${ }^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## Recommended general education/distribution

## Humanities

Second year of a foreign language ( 12 credits) plus one additional course from the humanities distribution list with a different prefix.

Science distribution courses
G 201 Geology I 4
G 202 Geology II 4
G 203 Geology III 4
MTH 243 Math for Management/Life/Social Science 4
Social Science distribution courses
GEOG 105 Physical Geography 4
GEOG 106 Economic Geography 4
GEOG 107 Cultural Geography 4
plus one additional course in Anthropology or World History 4


## Electives

LIB 127 Information Research Skills 2
MTH 244 Intro to Methods of Probability \& Stats 4
GEOG 190 Environmental Geography 4
GEOG 201 World Regional Geography I 4
GEOG 202 World Regional Geography II 4
--- First-year foreign language 12
plus enough electives to reach the 93 minimum number of credits needed for overall degree requirements.
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module --OR— HHP 252A.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## GEOLOGY

Associate of Arts Oregon Transfer (93 credits)
(Six quarters to complete if attending full time)

Geology provides an understanding of the materials that constitute the earth and the processes that have shaped the earth from its deep interior to the surface environment. It is a science that explores problems by combining field investigations with laboratory experiments and theoretical studies. Geology addresses many natural hazards such as earthquakes, flooding and volcanic eruptions that affect humans. It also addresses the impact of humans on the Earth's surface environment where we extract resources, contaminate ground water, contribute to rapid erosion, or attempt to re-engineer rivers and shorelines. In addition, geology draws upon many other disciplines including biology, chemistry, mathematics and physics in order to understand earth processes in the reference frame of geologic time. Emphasis areas vary among universities and typically include mineralogy, paleontology, environmental geology and geophysics.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 geology.

## General education/basic skills

English Composition
WR 121 English Composition 3
WR 1223
WR 227 Technical Writing 3
Speech
SP 111 Fundamentals of Public Speaking 3
Mathematics
MTH 111 College Algebra4

Health ${ }^{1}$

Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

Science/Math/Computer Science
$\begin{array}{lll}\text { G } 201 & \text { Geology I } & 4\end{array}$

| G203 | Geology III | 4 |
| :--- | :--- | :--- |
| CH 221 | General Chemistry I | 4 |

## Social Science

A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

| BI 101 | General Biology I | 4 |
| :--- | :--- | :---: |
| BI 102 | General Biology II | 4 |
| BI 103 | General Biology III | 4 |
| CH 222 | General Chemistry II | 4 |
| CH 223 | General Chemistry III | 4 |
| G162CV | Cascades Volcanoes | 3 |
| GS 108 | Oceanography | 4 |
| LIB 127 | Information Research Skills | 3 |
| MTH 254 | Vector Calculus I | 4 |
| MTH 255 | Vector Calculus II | 4 |
| MTH 256 | Applied Differential Equations | 4 |
| PH 211 | General Physics I | 4 |
| PH 212 | General Physics II | 4 |
| PH 213 | General Physics III | 4 |

${ }^{1}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Advising information

Students planning to transfer to OUS institutions should take the following:
CH 221, 222 and 223
PH 201, 202 and 203 or PH 211, 212 and 213
Those planning to transfer to

- OSU should take MTH 112, 251 and 252;
- PSU should take MTH 251, 252, 253 and 254;
- SOU should take MTH 111, 112, 251 and 252;
- UO should take MTH 251, 252 and 253.

Students are strongly encouraged to contact the appropriate transfer university for the most current requirements of their major and emphasis area.

## Transfer information

Oregon universities with a geology major include: University of Oregon; Oregon State University; Portland State University; and Southern Oregon University.

## HEALTH INFORMATION TECHNOLOGY

Certificates of Completion Associate of Applied Science

The Health Information Technology program provides a career ladder approach to the health information management profession. Students proceed up the ladder as follows:

- When students have completed the first two academic quarters, they receive an Insurance Certificate.
- At the end of the first three quarters (year one) students are awarded a Medical Secretary Certificate.
- After completing the first three quarters of coursework (year one), plus the completion of HIT131C, Transcription Application, offered summer term and passing a qualifying exam, students earn a Medical Transcription Certificate.
- After completing four academic quarters (year one plus fall quarter of year two) and passing a proficiency exam, students earn an Electronic Medical Billing Certificate.
- Adding two additional coding courses and passing a proficiency exam qualifies students for a Medical Coding Certificate.
- At the end of six academic quarters (two years), students earn an Associate of Applied Science degree in health information technology.

Students have the freedom to exit and re-enter the program after the first year. The program includes preparation in technical coursework, human relations, communications, computation and computer technology.

It is strongly recommended that students obtain competency in the following areas before entering the health information curriculum:

- Math 20
- Keyboarding, 40 WPM minimum
- Computer basics
- Basic English (writing skills)
- Study skills
- Spelling skills

The health information technology program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). It is one of only two accredited health information programs in the state of Oregon.

The following is the suggested course sequence for students able to attend full time. 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. Note that students must complete all program courses with a "C" grade ( 75 percent) or better.


> Insurance
> Certificate of Completion (35 credits; two quarters to complete if attending full time)

## Fall term

AH $100 \quad$ Intro Health Occupations 2
AH 111 Medical Terminology I 3
BI $121 \quad$ Human Anatomy \& Function I $^{1} 4$
HIT 103 Health Information Procedures* 5
WR 1213

## Winter term

AH $112 \quad$ Medical Terminology II 3
BI $122 \quad$ Human Anatomy \& Function II $^{1} \quad 4$
HIT 104 Health Data Content \& Structure 5
WR 122 English Composition 3
or WR 227 Technical Writing
General education distribution course ${ }^{2} 3$

## Medical Secretary <br> Certificate of Completion <br> ( 53 credits; three quarters to complete if attending full time)

Complete Insurance Certificate 35
Spring term

| AH 113 | Intro to Study of Disease | 5 |
| :--- | :--- | :--- |
| CIS 120 | Computer Concepts I | 4 |
| or CIS 131 | Software Application |  |
| HIT 131A | Document Management \& Technology | 3 |
| HIT 180 | HIPAA Management | 2 |
| HIT 182 | Intro to Medical Coding | 4 |

# HEALTH INFORMATION TECHNOLOGY (continued) 

Certificates of Completion<br>Associate of Applied Science

Medical TranscriptionCertificate of Completion(57 credits; four quarters to complete if attending full time)
Complete Medical Secretary Certificate ..... 53
Summer term
HIT 131C Medical Transcription Applications ..... 4
Pass qualifying exam ..... 0
Electronic Medical Billing Certificate of Completion
(69-73 credits; five quarters to complete if attending full time)
Complete Medical Transcription courses (HIT 131C optional) ..... 53-57
Fall term
HIT 201 Legal Aspects/Medical Records ..... 4
HIT 205 Intro/Medical Record Analysis ..... 3
General education distribution course ${ }^{2}$ ..... 3
HIT 296 Ambulatory Data Systems ..... 3
HIT 193 Directed Practice ..... 3
Pass proficiency exam ..... 0
Medical Coding
Certificate of Completion
(79-83 credits; seven quarters to complete if attending full time)
Complete Electronic Medical Billing Certificate ..... 69-73
Winter term
HIT 283 Coding Classifications ..... 6
Spring term
HIT 284 Classifications \& Reimb Systems ..... 4
Pass proficiency exam ..... 0
Associate of Applied Science
(102-103 credits; eight quarters to complete if attending full time)
YEAR ONE
Fall term
AH 100 Intro Health Occupations ..... 2
AH 111 Medical Terminology I ..... 3
BI $121 \quad$ Human Anatomy \& Function I ${ }^{1}$ ..... 4
HIT 103 Health Information Procedures ..... 5
WR 121 English Composition ..... 3

## Winter term

| AH 112 | Medical Terminology II | 3 |
| :--- | :--- | :--- |
| BI 122 | Human Anatomy \& Function II | 4 |
| HIT 104 | Health Data Content \& Structure | 5 |
| WR 122 | English Composition | 3 |
| or WR 227 | Technical Writing |  |
| General education distribution course $^{2}$ | 3 |  |

## Spring term

| AH 113 | Intro to Study of Disease | 5 |
| :--- | :--- | :--- |
| CIS 120 | Computer Concepts I | 4 |4or CIS 131 Software Application

HIT 131A Document Management \& Technology ..... 3
HIT 180 HIPAA Management ..... 2
HIT 182 Intro to Medical Coding ..... 4
Summer term
HIT 131C Medical Transcription Applications (optional) 4 HIT 193 Directed Practice (1st) ..... 3
YEAR TWO
Fall term
Health ${ }^{3}$ ..... 3-4
HIT 201 Legal Aspects/Medical Records ..... 4
HIT 205 Intro/Medical Record Analysis ..... 3
General education distribution course ${ }^{2}$ ..... 3
HIT 296 Ambulatory Data Systems ..... 3
Winter term
HIT 281 Health Data Collection* ..... 3
HIT 283 Coding Classifications ..... 6
HIT 203 Health Care Delivery and Tech ..... 2
General education distribution course ${ }^{2}$ ..... 3
Spring term
HIT 272 Health Information Mgmt ..... 5
HIT 282 Quality Improvement in Hlth Care ..... 5
HIT 284 Classifications \& Reimb Systems ..... 4
Summer term requirement for graduation
HIT 293 Directed Practice (2nd) ..... 3
${ }^{1}$ BI 121 and 122 are not transferable courses. Students wishing to transfer should take BI 231, 232 and 233: Anatomy \& Physiology I, II and III.
${ }^{2}$ See AAS checklist, general education distribution requirements, page 41.
${ }^{3}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.

## HEALTH PROMOTION

Associate of Arts Oregon Transfer (93+ credits)

Careers in health promotion are multifaceted, as are the areas of further study. Careers include health promotion, health education/teaching health, working in various disciplines of public health, health science, health care administration and environmental health. This Associate of Arts program is designed as a broad-based degree in the area of health studies. It is also designed for maximum transferability to several specific health programs including: Portland State University (School of Community Health), Eastern Oregon University (School of Education), Eastern Washington University (School of Community Health Education), Boise State University (School of Education/ Health Promotion), Oregon State University (College of Health and Human Performance-Public Health Department), and Southern Oregon University Department of Health and Physical Education (Health Promotion/Fitness Management).

The Associate of Arts Oregon Transfer 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 lowerdivision 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 transferring to a bachelor's degree program in health promotion.

## General education/basic skills

## English Composition

WR 121 English Composition ..... 3
WR 122 English Composition ..... 3
WR 123 English Composition ..... 3
or WR 214 Business Communications
or WR 227 Technical Writing

Speech

SP $111 \quad$ Fundamentals of Public Speaking 3
or SP 219 Small Group Communication3

Math
MTH 105 Intro to Contemporary Math (or higher) 4
Health ${ }^{1}$ 3-4
Computer competency ${ }^{2}$ 0-4

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

Science/Math/Computer Science
A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and
three biological or physical science courses with labs, two of which must have the same prefix. Recommend:
BI 231 Human Anatomy \& Physiology I 4
BI 232 Human Anatomy \& Physiology II 4
BI 233 Human Anatomy \& Physiology III 4
HHP 220 Intro to Epidemiology 3
or FN 225 Human Nutrition 4
Social Science
A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix. Recommend:
PSY 201 Mind and Brain 4
PSY $202 \quad 4$

## Electives

Elective credits, 17-34 credits. Choose enough elective credits to reach a minimum total of 93 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, professional technical courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum).
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity class or CPR —OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/CPR class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Advising information

Lab fees:
\$20 for HHP 295 Health and Fitness, 3 credits or HHP 252a, Fit/First Aid, 3 credits
$\$ 15$ for HHP 212, CPR, 1 credit and HHP 212A, CPR for Health Care Providers, 1 credit $\$ 16$ for all HHP 185 activity classes for Mazama user fee

## Transfer information

Note that an agreement between COCC and Eastern Oregon University's distance education program in business $\&$ health promotion is pending approval. Contact COCC's Admissions and Records office for course requirements.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 history.

## General education/basic skills

## English Composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
Speech
SP $111 \quad$ Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
MTH 105 Intro to Contemporary Math (or higher) 4
Health ${ }^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

Social Science
A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix. Recommend that students take 12 credits of any HST prefix course.


## Electives

LIB 127 Information Research Skills 2
From the history offerings, select 16 to 18 credits, in addition to those used for the distribution requirement above. 16-23
Foreign language: two years recommended 24
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module --OR—HHP 252A.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Advising information

In the field of history, it is often necessary to achieve a graduate degree in order to work in the field as a professional. A student who takes a major or minor in history graduates with writing, research, and communication skills that can lead to success in multiple career areas other than history.

## Articulation information

Oregon State University-Cascades Campus History (minor)

University of Oregon through OSU-Cascades
General Social Science (major)

## HUMANITIES

## Associate of Arts Oregon Transfer (93 credits)

Oregon and other universities offer bachelor's degrees in specific and interdisciplinary fields of the humanities, which include literature and writing, modern and classical languages, philosophy and ethics, theory and criticism of the arts, history, humanistic content and methods of other social sciences, and "study and application of the humanities to the human environment with particular attention to reflecting our diverse heritage, traditions and history and to the relevance of the humanities to the current conditions of national life" (National Endowment for the Humanities). Many U.S. and global careers are open to students with a solid humanities foundation; strong writing, reading, critical thinking and research skills; and proficiency in one or more foreign languages.

COCC's Humanities department offers courses in

- English (American, British, Children's and Western World Literature, and Introduction to Literature: Fiction, Drama, Poetry);
- Foreign Languages (French, German, Italian and Spanish);
- Humanities (American Multiculturalism, Film Arts, Non-Western Cultures \& Literature, Popular Culture);
- Philosophy (Ethics, Epistemology, Logic)
- Reading; and
- Writing (English Composition, Technical Writing and Creative Writing: Fiction, Non-Fiction, Poetry, Scriptwriting as 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 humanities fields are often best served by pursuing the Associate of Arts degree, while students intending to transfer to Oregon State University or OSU-Cascades should consider the Associate of Science Direct Transfer-OSU degree option. COCC transfer students are encouraged to consult college catalogs and work closely with their advisors.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 humanities.

## General education/basic skills

## English Composition

WR 121 English Composition ..... 3
WR 122 English Composition ..... 3
WR 123 English Composition ..... 3
Speech
SP 111 Fundamentals of Public Speaking ..... 3
or SP 219 Small Group Communication
Mathematics
MTH 105 Intro to Contemporary Math (or higher) ..... 4
Health ${ }^{1}$ ..... 3-4
Computer competency ${ }^{2}$ ..... 0-4

## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix. Transfer students seeking a bachelor's degreee in specific or interdisciplinary humanities fields are advised to consult college catalogs, work closely with advisors and select distribution courses that will also meet lower-division major or minor requirements at their tranfer institution.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, which must include three biological or physical science courses with labs, two courses of which must have the same prefix and one course with a different prefix.

## Social Science

A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

Choose enough electives to reach the minimum of 93 credits required for the AAOT.

Transfer students seeking a bachelor's degree in specific or interdisciplinary humanities fields are advised to select general education/distribution and electives 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.

## HUMANITIES (continued)

Associate of Arts Oregon Transfer (93 credits)

## Advising notes

${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR- HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Transfer information

Oregon University System (OUS) universities that offer bachelors' degrees with specializations in humanities fields:

## Oregon State University-Cascades Campus

English (minor); Liberal Studies, BA/BS Spanish (minor).

## Oregon State University-Corvallis

American Studies; Education (Pre-Elementary, Elementary and Secondary); English; Ethnic Studies (focus: American multiculturalism); Foreign Languages \& Literatures (majors: French, German, Spanish); History, International Degree Program (including Western Culture, Cultural Diversity, Contemporary Global Issues, Foreign Languages \& Literatures); Liberal Studies (interdisciplinary themes, including English/ Literature, Education, Ethnic Studies, European Studies, Foreign Languages \& Literatures, Philosophy, Writing); Philosophy.

## University of Oregon

Comparative Literature, English, Ethnic Studies, Film Studies, French, German, History, Humanities, International Studies, Italian, Linguistics, Peace Studies, Philosophy, Second Language Acquisition and Teaching, Spanish, Women's and Gender Studies.

## Portland State University

African Studies, Applied Linguistics, Black Studies, Chicano/ Latino Studies (certificate), English, European Studies, Foreign Language (French, German or Spanish); Film Studies (minor only), Hispanic/Latin American Studies, History, International Studies, Latin American Studies (certificate), Middle East Studies, Native American Studies (minor only), Philosophy, Professional Writing (minor only), Teaching English as a Second Language (certificate).


## Eastern Oregon University

English/Writing (concentration in Literature, Literature/Film, Discourse Studies, or Writing), Gender Studies, History, Humanities, International Studies, Liberal Studies, Modern Languages, Philosophy.

## Southern Oregon University

Education, English and Writing, Foreign Languages, History, International Peace Studies, International Studies, Native American Studies, Philosophy, Shakespeare Studies.

## Western Oregon University

Chicano/a Studies, Education (Early Childhood, Elementary, Middle Level, High School), English (B.A.: English/Language Arts Common Core, English/Literature, English/Linguistics, English/Writing), Film Studies, French, Gender Studies, German Studies, History, Interdisciplinary Studies, International Studies, Latin American Studies, Literature (see English), Philosophy, Spanish, Writing (see English).

## MANUFACTURING TECHNOLOGY <br> Certificates of Completion <br> Associate of Applied Science

The Manufacturing Technology program is a self-directed, outcome-based program designed to prepare students for technician-level employment in a variety of manufacturing environments. The program is offered exclusively at the Manufacturing and Applied Technology Center (MATC) at COCC's Redmond Campus. Curriculum offered provides students with the ability to align educational goals with career opportunities by offering four options (short-term certificates of completion, a one-year certificate, a two-year certificate and an Associate of Applied Science degree in manufacturing technology) in an open-entry and open-exit training format. Departmental approval is required for enrollment at the Manufacturing and Applied Technology Center.

A person considering a career in manufacturing can expect continuous employment, steady advancement, prestige and job security. Graduates can expect local, as well as national placement based on the current demand for highly trained technicians.

## CNC Machining Short-term Certificate ( 25 credits)

(Two to three quarters to complete if attending full time)
The CNC Machining certificate incorporates a blend of CNC and manual machine courses designed to help employers and their current employees, as well as undecided career-seeking students, obtain the skills needed for the industrial and manufacturing work environment.

All levels require instructor permission, COCC placement testing and a one-time MATC new student orientation prior to starting the training. Level II and Level III coursework will require completion of Level I coursework, verifiable on-the-job employment in a machine shop from a current employer, or verifiable high school classwork in CNC machining with the high school instructor's signature.

Instructor approval required prior to registration. All credits offered in this certificate can be used to satisfy the requirements of COCC's one-year certificate, two-year certificate and the Associate of Applied Science degree in manufacturing technology.

## Level I course requirements

MFG 101 Blueprint Reading 2
MFG 110 Manufacturing Processes I 3
MFG 112 Manufacturing Processes II 3
MFG 115 Design Processes I 2
Level II course requirements
MFG 114 Manufacturing Processes III 3
MFG 211 CNC Mill Operator 2
MFG 213 CNC Turning Operator 2

## Level III course requirements

MFG 230 CNC Programming Mill 2
MFG 232 CNC Programming Lathe 2
MFG 234 CAD/CAM Mill 2
MFG 236 CAD/CAM Lathe 2

## Fabrication Sheet Metal Short-term Certificate ( 31 credits) <br> (Two to three quarters to complete if attending full time)

The Fabrication Sheet Metal certificate is a unique blend of MATC courses designed to help employers, their current employees and undecided career-seeking students obtain the skills needed for the industrial and manufacturing work environment.

All levels require instructor permission, COCC placement testing and a one-time MATC new student orientation prior to starting the training. Level II and Level III coursework will require completion of Level I coursework, verifiable on-the-job employment in a machine shop from a current employer, or verifiable high school classwork in sheet metal fabrication with the high school instructor's signature.

Instructor approval required prior to registration. All credits offered in this certificate can be used to satisfy the requirements of the one-year certificate, two-year certificate and the Associate of Applied Science degree in manufacturing technology at COCC.

## Level I course requirements

MFG 101 Blueprint Reading ..... 2
MFG 102 Blueprint Reading Sheet Metal ..... 2
MFG 103 Welding Technology I ..... 3
MFG 105 Welding Technology II ..... 3
MFG 110 Manufacturing Processes I ..... 3
Level II course requirements
MFG 107 Welding Technology III ..... 3
MFG 205 Drill Press ..... 2
MFG 202 Metals Preparation ..... 2
MFG 262 Welding Inspection/Quality Control ..... 2
MFG 267 Oxygen Fuel \& Plasma Cutting ..... 2
Level III course requirements
MFG 287 CNC Press Brake and Shearing ..... 3
MFG 288 Industrial Fabrication ..... 3
MFG 289 Material Handling-Fork Lift Safety ..... 1

# MANUFACTURING TECHNOLOGY (continued) 

Certificates of Completion<br>Associate of Applied Science

## Manual Machining <br> Short-term Certificate ( 27 credits) <br> (Two to three quarters to complete if attending full time)

The Manual Machining certificate incorporates a blend of manual machine courses designed to help employers and their current employees, as well as undecided career-seeking students, obtain the skills needed for the industrial and manufacturing work environment.

All levels require instructor permission, COCC placement testing and a one-time MATC new student orientation prior to starting the training. Level II and Level III coursework will require completion of Level I coursework, verifiable on-the-job employment in a machine shop from a current employer or verifiable high school classwork in manual machining with the high school instructor's signature.

Instructor approval required prior to registration. All credits offered in this certificate can be used to satisfy the requirements of COCC's one-year certificate, two-year certificate and the Associate of Applied Science degree in manufacturing technology.

Level I course requirements
MFG 101 Blue Print Reading 2
MFG 110 Manufacturing Processes I 3
MFG 112 Manufacturing Processes II 3
MFG 115 Design Processes I 2
Level Il course requirements
MFG 114 Manufacturing Processes III 3
MFG 203 Layout 2
MFG $210 \quad$ Vertical Milling 2
MFG 214 Lathe Operator I 2
Level III course requirements
MFG 202 Metals Preparation 2
MFG 205 Drill Press 2
MFG 212 Horizontal Milling 2
MFG 216 Lathe Operator II 2

## Quality Assurance Short-term Certificate ( 19 credits)

(Two to three quarters to complete if attending full time)
The Quality Assurance certificate incorporates a blend of quality assurance and CAD/CAM courses designed to help employers and their current employees, as well as undecided careerseeking students, obtain the skills needed for the industrial and manufacturing work environment.

All levels require instructor permission, COCC placement testing and a one-time MATC new student orientation prior to starting the training. Level II and Level III coursework will require completion of Level I coursework, verifiable on-the-job employment in a machine shop from a current employer or verifiable high school classwork in quality assurance with the high school instructor's signature.

Instructor approval required prior to registration. All credits offered in this certificate can be used to satisfy the requirements of COCC's one-year certificate, two-year certificate and the Associate of Applied Science degree in manufacturing technology.

## Level I course requirements

MFG 101 Blueprint Reading 2
MFG 115 Design Processes I 2
MFG 133 Quality Assurance 2
MET $160 \quad$ Materials Engineering 2

## Level II course requirements

MFG 237 Digital Metrology 1
MFG 238 Optical Comparator 1
MFG 239 Coordinate Measurement Machine 1

## Level III course requirements

MFG 202 Metals Preparation 2
MFG 203 Layout 2
MFG 234 CAD/CAM Mill 2
MFG 236 CAD/CAM Lathe 2

## MANUFACTURING TECHNOLOGY (continued)

## Certificates of Completion <br> Associate of Applied Science

Welding<br>Short-term Certificate (31 credits)

(Two to three quarters to complete if attending full time)
The Welding Manufacturing Technology short-term certificate incorporates a blend of MATC manufacturing technology courses designed to help employers and their current employees, as well as undecided career-seeking students, obtain the skills needed for the industrial and manufacturing work environment.

All levels require instructor permission, COCC placement testing and a one-time MATC new student orientation prior to starting the training. Level II and Level III coursework will require completion of Level I coursework, verifiable on-the-job employment in a machine shop from a current employer or verifiable high school classwork in welding with the high school instructor's signature.

Instructor approval required prior to registration. All credits offered in this certificate can be used to satisfy the requirements of the one-year certificate, two-year certificate and the Associate of Applied Science degree in manufacturing technology at COCC.

## Level I course requirements

MFG 101 Blue Print Reading 2
MFG 103 Welding Technology I 3
MFG 105 Welding Technology II 3
MFG 107 Welding Technology III 3

## Level II course requirements

MFG 262 Welding Inspection/Quality Control 2
MFG $271 \quad$ Shielded Metal Arc Welding I 2
MFG 272 Gas Metal Arc Welding I 2
MFG 281 Gas Tungsten Arc Welding I 2
MFG 282 Flux Core Arc Welding I 2
Level III course requirements
MFG 267 Oxygen Fuel \& Plasma Cutting 2
MFG 273 Shielded Metal Arc Welding II 2
MFG 274 Gas Metal Arc Welding II 2
MFG 283 Gas Tungsten Arc Welding II 2
MFG 284 Flux Core Arc Welding II 2

## One-Year Certificate of Completion (42 credits) <br> (Three to four quarters to complete if attending full time)

A one-year certificate focuses on development of foundation skills in welding, machining, fluid power, robotics, blueprint reading, quality control, technical communication and math. It provides students with introductory theory and the basic skills needed to gain entry-level manufacturing positions. The one-year certificate is also suitable for those seeking apprenticeship-related training, or for those starting a new career participating in the state-funded vocational rehabilitation program.

## Requirements

Complete all of the following courses prior to starting the two-year certificate program. Courses do not need to be repeated for the one-year certificate if previously taken for other manufacturing certificates.

| BA 285 | Business Human Relations | 3 |
| :---: | :---: | :---: |
| or SP 218 | Interpersonal Communication |  |
| or PSY 207 | Applied Psychology |  |
| WR 75 ${ }^{+}$course |  | 3 |
| MTH 85 | Technical Math I | 4 |
| MET 160 | Materials Engineering | 2 |
| 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 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 | 2 |
| MFG 153 | Robotic Programming I | 2 |

Two-Year Certificate of Completion (80 credits) (Five to six quarters to complete if attending full time)

Requires completion of the one-year certificate in manufacturing technology plus an additional 38 credits from the list below. Students may choose a minimum of any 38 credits from any of the following courses to complete the two-year certificate in manufacturing technology. This training can focus on welding, machining and automation or include a combination of courses from these fields of study. This certificate is suitable for currently employed individuals wanting to continue their education, or for continuing one-year certificate students seeking a degree. Sequences of courses are offered in CAD/CAM, quality control, CNC programming, welding, machining and computer

## MANUFACTURING TECHNOLOGY (continued)

Certificates of Completion<br>Associate of Applied Science

integrated manufacturing. The curriculum is designed, where possible, to match nationally recognized requirements making it possible to earn nationally recognized certification, depending on the specialty pursued. See MATC advisor for details and for planning career goals.

## Welding courses

MFG 102 Blueprint Reading Sheet Metal 2
MFG 202 Metals Preparation 2
MFG 205 Drill Press 2
MFG 262 Welding Inspection/Quality Control 2
MFG 264 Automated Welding/Cutting 2
MFG 266 Manufacturing Cost Estimation 2
MFG 267 Oxygen Fuel \& Plasma Cutting 2
MFG 271 SMAW I 2
MFG 273 SMAW II 2
MFG 275 SMAW III 2
MFG 272 GMAW I 2
MFG 274 GMAW II 2
MFG 276 GMAW III 2
MFG 281 GTAW I 2
MFG 283 GTAW II 2
MFG 285 GTAW III 2
MFG 282 FCAW I 2
MFG 284 FCAW II 2
MFG 286 FCAW III 2
MFG 288 Industrial Fabrication 3
MFG 290 Certification Test Prep AWS I 1
MFG 292 Certification Test Prep AWS II 1
MFG 294 Certification Test Prep AWS III 1

## Automation courses

BA 100+ Business Elective 3
CIS $120 \quad$ Computer Concepts I 4
MFG 117 Design Processes II 2
MFG 120 Fluid Power Systems II 2
MFG 237 Digital Metrology 1
MFG 241 Electric Motor Control 2
MFG 242 Programmable Logic Ctrl I 2
MFG 243 Industrial Sensors 2
MFG 244 Programmable Logic Ctrl II 2
MFG 245 Electrical Ctrl/Fluid Power 2
MFG 251 Robotic Programming II 2
MFG 253 Computer Integrated Mfg I 2
MFG 254 Manufacturing Jigs \& Fixtures 2
MFG 255 Computer Integrated Mfg II 2
MFG 199 ST: Manufacturing 1-3

## Machining courses

MFG 201 Bench Work 2
MFG 202 Metals Preparation 2
MFG 203 Layout 2

MFG 205 Drill Press 2
MFG 206 Surface Grinding I 2
MFG $210 \quad$ Vertical Milling 2
MFG $211 \quad$ CNC Mill Operator 2
MFG 212 Horizontal Milling 2
MFG 213 CNC Turning Operator 2
MFG 214 Lathe Operator I 2
MFG 216 Lathe Operator II 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
MFG 237 Digital Metrology 1
MFG 238 Optical Comparator 1
MFG 239 Coordinate Measurement Machine 1
MFG 254 Manufacturing Jigs \& Fixtures 2
MFG 287 CNC Press Brake and Shearing 3
MFG 289 Material Handling-Fork Lift Safety 1
MFG 291 Certification Test Prep NIMS I 1
MFG 293 Certification Test Prep NIMS II 1
MFG 295 Certification Test Prep NIMS III 1
MFG 296 Certification Test Prep SME 1
MFG 297 Certification Test Prep NAIT 1
Associate of Applied Science ( 96 credits minimum)
(Six quarters to complete if attending full time)

## Requirements

Requires completion of the two-year certificate in manufacturing technology plus the additional credits from the list below to earn the AAS degree in manufacturing technology. Minimum of a 2.0 cumulative GPA is required to earn the AAS degree.

Computer competency test 0
or CIS 120 Computer Concepts I 4
or CIS 131 Software Applications
HHP 252A Fitness/First Aid 3
MFG 280 CWE Manufacturing 1-3
Distribution requirements: nine credits from the COCC
distribution list; each must have a different prefix
(e.g., HHP, MUS, SOC).

SP $111 \quad$ Fundamentals of Public Speaking 3

## Transfer articulation information

The AAS degree program in manufacturing technology articulates with the Bachelor of Science in manufacturing engineering technology at Oregon Institute of Technology (OIT) in Klamath Falls, Oregon; an additional agreement between COCC and OIT's Bachelor of Science in mechanical engineering technology is pending approval. See the manufacturing technology program coordinator for details.

## MASSAGE THERAPY

## One-Year Certificate of Completion Two-Year Certificate of Completion <br> Associate of Applied Science

The benefits of alternative and complementary forms of health care are on the rise and the demand for professional massage therapy has increased dramatically. COCC is preparing students to be massage therapy professionals who can work with health care providers to improve the health of the community.

Licensed massage therapists work with doctors, nurses, physical therapists, psychologists, chiropractors, naturopaths, acupuncturists, sport teams, veterinarians and wellness programs within corporate businesses. They may choose to have a private practice or be employed at hospitals, athletic clubs, family health centers, and/or on cruise ships, vacation resorts, spas and salons.

Students are highly advised to take LMT 95, Introduction to a Massage Career, prior to enrolling in the LMT program. The introductory class is currently offered in spring, winter and fall terms. Students are required to obtain program director permission before enrolling in the LMT technical courses. Please call (541) 318-3757 for an appointment.

All LMT courses carry an $\$ 88 /$ credit fee in addition to tuition.

## PROGRAM OPTIONS

The COCC Massage Therapy program offers both a one- and two-year certificate. The one-year certificate requires 740 hours (four terms) of instruction and qualifies the student to apply for Oregon State massage therapy licensing as an entry-level therapist. The two-year certificate requires an additional 410 hours of massage and business course instruction. Certificates are obtained by completing all courses listed below. The degree program includes both the one- and two-year program classes with the addition of general education classes specified.

The AAS degree in massage therapy and the certificate programs have been accredited by the Oregon Board of Massage Therapists, Oregon Department of Education and the Northwest Association of Schools and Colleges.

Prior to starting the program, students must demonstrate the following skills via the ASSET or COMPASS placement tests or coursework:

| ASSET scores | COMPASS scores | Coursework |
| :--- | :--- | :--- |
| Reading: 43 | Reading: 61 |  |
| Writing: 43 | Writing: 42 | WR 65, 75 or 95 |
| Numerical Skills: 49 | Pre-Algebra: 49 |  |
| Elementary Algebra: 27 | Algebra: 49 | MTH 20 |

Admission is on a first-come, first-served basis for all applicants meeting the minimum testing scores or coursework. Students must have a high school diploma or equivalent and be 18 years of age prior to starting the LMT program.

| One-Year Certificate <br> (50 credits; four quarters to complete if attending full time) |  |  |
| :--- | :--- | :--- |
|  |  |  |
| First term |  | 4 |
| BI 121 | Human Anatomy and Function I | 3 |
| LMT 113 | Kinesiology I | 3 |
| LMT 155 | Eastern Theory and Practice | 2 |
| LMT 170 | Ethics and Rules * |  |
| Second term |  | 4 |
| BI 122 | Human Anatomy and Function II | 4 |
| LMT 118 | Kinesiology II | 4 |
| LMT 145 | Massage I |  |
|  |  |  |
| Third term |  | 3 |
| LMT 124 | Kinesiology III | 5 |
| LMT 140 | Pathology | 4 |
| LMT 150 | Massage II * | 2 |
| LMT 175 | Clinic I * |  |
| Fourth term |  | 3 |
| BA 150 | The Business of Massage ${ }^{\text {* }}$ |  |
| LMT 128 | Kinesiology IV | 3 |
| LMT 160 | Hydrotherapy | 2 |
| LMT 165 | Mentorship | 1 |
| LMT 180 | Clinic II | 3 |

${ }^{1}$ Students may consult with the program director about substituting BA 101, Introduction to Business*, for this requirement.

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## MASSAGE THERAPY (continued)

One-Year Certificate of Completion
Two-Year Certificate of Completion
Associate of Applied Science


Two-Year Certificate
(79 credits; seven quarters to complete if attending full time)

## Required technical courses

Prior to starting the two-year certificate coursework, students must complete all one-year certificate courses above or hold a current massage therapy license.

## Fall term

BA 217 Accounting Fundamentals * 3
LMT $210 \quad$ Advanced Clinic ${ }^{1} \quad 2$
LMT 240 Advanced Treatment I 5
LMT 280 Effective Thinking/Office Decisions 2

Winter term
LMT 250 Advanced Treatment II 5
LMT $270 \quad$ Clinical Assessments 4
Spring term
LMT 260 Advanced Treatment III 5
LMT 295 Integrated Therapies 3
${ }^{1}$ Students may take one HHP/FN credit in lieu of Advanced Clinic I, excluding HHP 185 courses. Advisor approval required prior to substitution.

## Associate of Applied Science

(107 credits; eight quarters to complete if attending full time)

## General education requirements

In addition to the one- and two-year certificate courses listed above, the following general education courses are required for the AAS degree; note that these courses can be taken at any point before, during or after program classes.

| WR 121 | English Composition | 3 |
| :--- | :--- | ---: |
| WR 214 | Business Communications | 3 |
| or WR 227 | Technical Writing |  |
| LIB 127 | Information Research Skills | 2 |
| SP 118 | Interpersonal Communication | 3 |
| Health $^{1}$ |  | $3-4$ |
| Computer competency $^{2}$ | $0-4$ |  |

plus nine credits from COCC's distribution list. Courses must each have a different prefix. See pages $44-45$ for options.
${ }^{1} \mathrm{HHP} 252 \mathrm{~A}$ is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## MATHEMATICS

## Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 mathematics.

## General education requirements

English Composition

| WR 121 | English Composition | 3 |
| :--- | :--- | :--- |
| WR 122 | English Composition | 3 |
| WR 123 | English Composition | 3 |
| or WR 227 | Technical Writing |  |

Speech
SP $111 \quad$ Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Health ${ }^{1}$ 3-4
CIS $120 \quad$ Computer Concepts I 4
or CIS 131 Software Applications
MTH 111 College Algebra4

## General education distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, which must include three biological or physical science courses with labs, two courses of which must have the same prefix and one with a different prefix.
Recommend:

| PH 211 | General Physics I | 5 |
| :--- | :--- | :--- |
| PH 212 | General Physics II | 5 |
| PH 213 | General Physics III | 5 |
| MTH 112 | Trigonometry | 4 |

## Social Science

A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

MTH 113 Topics in Precalculus 4
MTH 241 Calculus for Management/Social Science 4
MTH 243 Math for Management/Life/Social Science 4
MTH 244 Intro to Methods of Probability \& Stats 4
MTH $251 \quad$ Calculus I 4
MTH 252 Calculus II 4
MTH 253 Calculus III 4
MTH 254 Vector Calculus I 4
MTH $255 \quad$ Vector Calculus II 4
MTH 256 Applied Differential Equations 4
${ }^{1}$ To meet this requirement, students can choose between
HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR-HHP252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.

## Advising information

Students planning to transfer to OSU need to take:
HHP 295 Health and Fitness 3
and HHP 185 Activity class 1

## Oregon public universities with a math major

University of Oregon through OSU-Cascades Secondary Teaching
University of Oregon
Pure Math
Applied Math
Secondary Teaching
Design your own
Oregon State University
Mathematics
Secondary Teaching emphasis
Mathematical Sciences
Southern Oregon University
Portland State University
Eastern Oregon University
Western Oregon University

# MEDICAL ASSISTING <br> Certificate of Completion <br> (54-59 credits; four quarters to complete if attending full time) 

The Medical Assisting program is a one-year certificate program which can be completed in four quarters (includes summer). The program trains individuals to assist health care providers in their offices or other medical settings in both clinical and administrative procedures. The Medical Assisting program is accredited by the AAMA (American Association of Medical Assistants). Upon successful completion of the program, students receive a certificate of completion from Central Oregon Community College. At that time students are eligible to submit an application and, if accepted, sit for the AAMA CMA Certification examination. Upon passing the AAMA exam medical assistants have earned the CMA (Certified Medical Assistant). Only graduates of accredited medical assisting programs are eligible to sit for the AAMA CMA Certification Examination.

Medical assistants work primarily in medical offices and are usually responsible for both clinical and administrative functions. Clinical duties include infection control, taking patient histories and vital signs, preparing patients for medical procedures, assisting the physician with examinations and treatments, and administering selected diagnostic tests and medications as directed by the physician. Administrative duties include scheduling and receiving patients, preparing and maintaining medical documentation, handling oral and written correspondence between the office and outside agencies and individuals, and working with insurance regulations and requirements. The medical assistant may also be responsible for equipment maintenance and supply inventories, as well as managing financial records.

The Medical Assisting certificate program allows for admission once per year in the fall term. Admission is based on a first-come, first-served basis for all applicants.

Prior to starting program classes, students must have (1) a high school diploma or GED and (2) take COCC's placement test and receive the minimum scores or complete the equivalent courses listed below:

ASSET scores
Reading: 43
Writing: 43
Numerical Skills: 48
Elementary Alg: 27

## COMPASS scores

Reading: 84
Writing: 71
Pre-Algebra: 49
Algebra: 21

## Coursework

WR 65, 75 or 95

MTH 20

Prior to the start of clinical lab classes in winter term, admitted students must have a Hepatitis B immunization series started (or must sign a release form indicating their refusal to be immunized), a current TB test (within the last year) and two measles immunizations. Prior to entering the clinical setting, current CPR and First Aid cards are required. Students will also be responsible for additional expenses such as blood pressure cuff (sphygmomanometer), stethoscope, lab jackets, materials and certification exams.

To meet accreditation requirements the student must complete all Medical Assisting program core courses with a minimum of 75 percent. Students must receive a minimum grade of C in all other coursework.

## Fall term

AH 100 Introduction to Health Occupations 2
AH $111 \quad$ Medical Terminology I 3
BI 121 Anatomy and Function I 4
Computer competency ${ }^{1}$ 0-4
MA 113 Introduction to Medical Assisting 2
MA 125 Medical Office Procedures I 4

## Winter term

AH 112 Medical Terminology II 3
BI 122 Anatomy and Function II 4
Health ${ }^{2}$ 3-4
MA 123 Medical Assisting Basic Procedures* 4
MA 135 Medical Office Procedures II 4

## Spring term

AH 113 Intro to Study of Disease 5
MA 133 Medical Assisting Advanced Procedures* 4
MA 145 Computerized Medical Office Procedures 1
SP 111 Fundamentals of Public Speaking 3
or SP 218 Interpersonal Communication
or SP 219 Small Group Communication
or SP 241 Media, Communication, Society
WR 1213
Summer term
MA 147 Medical Assisting Practicum 5
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{2}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.

## Advising information

MA specific classes require instructor approval prior to registration. It is strongly recommended that students complete their computer coursework prior to MA 135 and MA 145. Interested students must contact Medical Assisting program director during spring term to be cleared for Medical Assisting program registration; registration is on a first-come, first-served basis. Contact Liberty Matthews, 383-7292, or lmatthews@cocc.edu.

MILITARY SCIENCE
Transfer Preparation (20 credits)

MUSIC
Associate of Arts Oregon Transfer (93 credits)

The Oregon Army National Guard offers unique leadership development specifically for the civilian, career-minded student. The Guard Officer Leader Detachment (GOLD) program provides on-campus military science instruction. Classroom and outdoor activities are designed to challenge students in all aspects. Upon graduation with a Bachelor of Arts, students could earn a commission as an Army officer. Many timeline options exist for those at different stages of their study. For further information, contact the GOLD program at (541) 322-3143.

## YEAR ONE

Fall term
MS 101
Military Science I
MS 180
Army Physical Fitness

## Winter term

MS $102 \quad$ Military Science II 1
MS 180 Army Physical Fitness 1

## Spring term

MS 103 Military Science III 1
MS $180 \quad$ Army Physical Fitness 1
Summer term
MS 205
OCS Phase I5

YEAR TWO
Fall term
MS 201 Basic Military Skills 2
MS 180 Army Physical Fitness 1
Winter term
MS 202 Land Navigation 2
MS 180 Army Physical Fitness 1
Spring term
MS 203
Leadership \& Management 2
MS 180 Army Physical Fitness 1

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 classes 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, and to that end we have no fewer than six ensembles in which a student could participate including the Cascade Chorale, College Choir, Central Singers, Big Band Jazz, Cascade Winds Symphonic Band and Central Oregon Symphony.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 music.

## General education/basic skills

English Composition
WR 121 English Composition 3
WR 1223
WR 123 English Composition 3
or WR 214 Business communications
or WR 227 Technical Writing
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Math
MTH 105 Intro to Contemporary Math 4
Health ${ }^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$


## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix. Recommend MUS 101, Music Fundamentals; MUS 201, Understanding Music; and MUS 111, Music Theory as well as another non-music Humanities course. Additional MUS classes can be taken, but will be applied to the AAOT as elective credits.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

Social Science
A minimum of 15 credits from the social science distribution list with at least two different prefixes and at least two courses with the same prefix.

## Electives

Choose enough electives to reach the minimum of 93 credits for the AAOT. 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 Class Piano I, II, and III, and (Applied) or Private Lessons 74, 174, 274.

MUS 201: Understanding Music, while not required, is an excellent survey course of music history and provides a solid background for future in-depth studies of music history.

MUP 74, 174, 274: (Applied) or Private Lessons, while not required, will help develop individual growth and provide a solid background in solo repertoire, proper language annunciation, and in-depth studies of music genres.

A second year of a foreign language is also recommended.
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Transfer information

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, allowing students to transfer in at junior class status, most music schools will not accept a direct transfer of credits for classes 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 classes, 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 classes 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

## Certificate of Completion

Associate of Applied Science

COCC's Nursing program is accredited by the Oregon State Board of Nursing to provide students with the academic and clinical preparation to sit for the national licensure exam upon completion of the program. The nursing program provides a career ladder with exit points at the practical nurse and registered nurse levels. All students, regardless of desired exit point, apply and enter the nursing program together.

After completing all required support and prerequisite courses, as well as the first three terms of the nursing courses, students are awarded COCC's certificate in Practical Nursing. This certificate qualifies students to take the NCLEX-PN national licensure exam and apply for licensure as a practical nurse from the State Board of Nursing. Students may choose to exit the program at the end of the first year of nursing courses to work at the PN level. Students may apply for re-admission into the second year of the nursing program at a later time. Re-admission is competitive and on a space-available basis. Students seeking re-admission should see the COCC Web site for current prerequisite and support course requirements and the nursing program's re-admission policy. Students admitted to the nursing program and completing the first year of nursing courses may continue on into the RN sequence of courses with no additional application requirements.

Students are admitted to the nursing program through a selective admission process. Admission to the certificate and AAS program is competitive and enrollment is limited. Admission to the program allows a student to take the required nursing (NUR) courses. Nursing program prerequisite and support courses are open to all students. Students are encouraged to complete as many support courses as possible prior to accepting a position in the program. See the COCC Web site for all current admission requirements.

Students are required to attend an orientation session offered by Enrollment Services to learn about COCC's Nursing program and the admission requirements. Students should refer to the Selection Process Handbook found on the COCC Web site. Potential students should review the essential functions required for admission to the nursing program. All nursing programs are demanding and rigorous, and students should consider their readiness for admission to the program including adequate financial, child care and family support. A large majority of students report that working more than 16-24 hours a week negatively affected their success in the program. Students are encouraged to consider applying for scholarships, grants and financial aid to avoid the necessity of working full time while in the nursing program.

## Practical Nursing Certificate of Completion ( 66 credits)

Graduates of the Practical Nurse certificate program may continue to the second year of COCC's Nursing program or seek admission or advanced placement at several Oregon community colleges. Colleges with nursing ladder programs include:

- Clatsop Community College, Astoria, Oregon
- Chemeketa Community College, Salem, Oregon
- Columbia Gorge Community College, The Dalles, Oregon
- Oregon Coast Community College, Newport, Oregon

The following is a recommended sequence of courses for students preparing to apply to COCC's Nursing program in spring term. COCC's Nursing program also requires that students complete NUR 95, Nursing Assistant class (may be taken any term) or hold a current CNA license prior to applying to the program.

## PREREQUISITES AND SUPPORT COURSES (Year One)

## Fall term

| BI 231 | Anatomy \& Physiology I | 4 |
| :--- | :--- | :--- |
| MTH 95 | Intermediate Algebra | 4 |
| WR 121 | Endish Co |  |

WR 1213

## Winter term

BI 232 Anatomy \& Physiology II 4
Computer competency ${ }^{1}$ 0-4
PSY 215 Developmental Psychology 4

## Spring term

BI 233 Anatomy \& Physiology III 4
BI 234 Microbiology 4

## NURSING PROGRAM REQUIREMENTS (Year Two) Fall term

NUR 106 Nursing I* 9
NUR $260 \quad$ Pharmacology I 2
Winter term
NUR 107 Nursing II 10
Spring term
NUR 108 Nursing III 9
NUR $261 \quad$ Pharmacology II 2
${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

Certificate of Completion
Associate of Applied Science

Registered Nursing<br>Associate of Applied Science (104-108 credits)

After completing all required support and prerequisite courses, as well as six quarters of nursing-specific courses, students are awarded COCC's Associate of Applied Science in nursing degree. This degree qualifies graduates to take the NCLEX-RN national licensure exam and to apply for licensure as a registered nurse from the State Boards of Nursing.

Students leaving the nursing program at any point must apply for readmission into the program. Readmission is competitive and on a space available basis. Students seeking re-admission should see the COCC Web site for the nursing program's readmission policy and current prerequisites and support course requirements. LPNs who have graduated from another nursing program may seek advanced placement into the RN level of the program and should see the COCC Web site for the advanced placement requirements and application materials.

Graduates of COCC's Registered Nursing program may continue their education in the pursuit of a bachelor's degree in nursing from several universities and colleges in Oregon and Washington:

- Linfield College, Portland, Oregon
- Oregon Health Sciences University, Portland, Oregon; Ashland, Oregon; Klamath Falls, Oregon; and La Grande, Oregon.
- University of Portland, Portland, Oregon
- Walla Walla College, Walla Walla, Washington
- Gonzaga University, Spokane, Washington
- University of Phoenix, Online education

The following is a recommended sequence of courses for students preparing to apply to COCC's Nursing program in spring term and able to attend full time. Part-time students should work with an advisor to determine the most appropriate schedule. COCC's Nursing program also requires that students complete NUR 95, Nursing Assistant (may be taken any term) or hold a current CNA license prior to applying to the program.

## PREREQUISITES AND SUPPORT COURSES (Year One) Fall term

| BI 231 | Anatomy \& Physiology I | 4 |
| :--- | :--- | ---: |
| CH 104 | Introduction to Chemistry I | 4 |
| or CH 221 | General Chemistry I |  |
| or CS 105 | Physical Science: Chemistry |  |
| Computer competency |  |  |
| MTH 95 | Intermediate Algebra | $0-4$ |

## Winter term

| BI 232 | Anatomy \& Physiology II | 4 |
| :--- | :--- | ---: |
| Health |  |  |
| PSY 215 | Developmental Psychology | $3-4$ |
| WR 121 | English Composition | 4 |
|  |  | 3 |
| Spring term |  | 4 |
| BI 233 | Anatomy \& Physiology III | 4 |
| BI 234 | Microbiology | 4 |
| FN 225 | Human Nutrition | 3 |
| WR 122 | English Composition |  |
| or WR 123 | English Composition |  |
| or WR 227 | Technical Writing |  |

## NURSING PROGRAM REQUIREMENTS (Year Two)

## Fall term

NUR 106

Nursing I* ..... 9

NUR 260
Pharmacology I ..... 2
Winter term
NUR 107 Nursing II ..... 10
Spring term
NUR 108 Nursing III ..... 9
NUR 261 Phamacology II ..... 2
NURSING PROGRAM REQUIREMENTS (Year Three)
Fall term
NUR 206 Nursing IV ..... 11
Winter term
NUR 207 Nursing V ..... 10
Spring term
NUR 208 Nursing VI ..... 9

## Advising note

${ }^{1}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{2}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module --OR—HHP 252A.

## Advising information

Students considering pursuing a bachelor's degree in nursing should see a nursing advisor, the COCC Web site or the baccalaureate institution's catalog for other course requirements.

## OFFICE ASSISTANT

Certificate of Completion ( 46 credits)
(Four quarters to complete if attending full time)

The Office Assistant certificate is designed for persons

- preparing for immediate entry-level employment in office occupations and
- already in business who desire to update and enhance their skills.


## Certificate requirements

Full-time suggested term-by-term coursework schedule assumes college-level placement in reading, writing and math. For parttime students and those with schedule conflicts, please see advisor for proper course sequencing and prerequisite requirements.

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

## Fall

BA 51 Applied Accounting ${ }^{1} 3$
BA 101 Introduction to Business 4
BA 104 Business Math * 3
CIS 70 Introduction to Computers 2
WR 121 English Composition 3
Winter
BA 178 Customer Service 3
BA 285 Business Human Relations 3
CIS 131 Software Applications 4
WR 214 Business Communications 3
Spring
CIS 235 Information Technology in Business ${ }^{1}$ 4
CIS 125S Intermediate Spreadsheets 4
CIS 125WD Intermediate Word Processing ${ }^{1}$ 4
OA 116 Office Systems \& Procedures 3
Summer
OA 280 Co-op Work Experience 3
${ }^{1}$ Class is offered specified term only in 2007-08.

## Advising and/or other pertinent information

It is expected that students entering into the certificate program have competency in keyboarding skills at 25 words per minute or better and college-level placement in reading, writing, spelling, math and study habits. Opportunities to gain or strengthen any of these skills are available. CIS 110 is recommended for basic keyboarding skills acquisition.

*This program includes course work that meets accreditation standards for communication, human relations and computation.

Associate of Science - Direct Transfer<br>Associate of Science<br>Associate of Arts Oregon Transfer

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 Associate of Arts Oregon Transfer (AAOT) degree, Associate of Science (AS) degree or Associate of Science Direct Transfer (AS-DT) degree with a focus in outdoor leadership at COCC in preparing to transfer to a baccalaureate institution to pursue a higher degree in any one of the above areas.

At the time of this publication, coursework is being approved toward an AS-DT that is specific for transfer to Oregon State University-Cascades Campus. This degree will allow students to meet all lower-division baccalaureate and major requirements for a Bachelor of Science in outdoor recreation leadership and tourism. Contact an outdoor leadership advisor or the COCC Admissions and Records office for up-to-date course requirements.

The general AS degree is a good option for students who plan to transfer to a specific out-of-state institution. This degree provides more flexibility, allowing students and their advisor to tailor the degree for transfer to a specific four-year institution and to follow a more specific plan of study. All changes must be approved by both the advisor and the department chair of COCC's Health and Human Performance department, as well as meet the AS degree requirements.

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 lowerdivision general education requirements; with the appropriate course planning, 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.

There are no entrance requirements for the outdoor leadership program. However, beginning fall 2007, students entering into the program, whether to pursue the AS-DT, AS or AAOT, will be required to complete a freshman 'package' of courses before being admitted into the sophomore level. Freshman completion requirements for admission into the sophomore level include completion of a minimum of 36 college-level credits made up, in part, by the following courses:
WR $121 \quad 3$
WR $122 \quad 3$
SP $111 \quad$ Fundamentals of Public Speaking 3
HHP 295 Health and Fitness for Life 3
CIS 131 Software Applications 4
GEOG 212 Tourism and Recreation 3
HHP 199 Intro to Outdoor Leadership 3 (new course for 2007-08)
HHP 253 Wilderness Advanced First Aid 3
HHP 255 Outdoor Living Skills 3

## Associate of Arts Oregon Transfer (93 credits)

## General education/basic skills

English Composition
WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
or WR 214 Business Communications
or WR 227 Technical Writing
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
$\begin{array}{ll}\text { Mathematics } & \\ \text { MTH } 105 & \text { Intro to Contemporary Math (or higher) }\end{array}$
Health ${ }^{1} \quad$ 3-4
Computer competency ${ }^{2}$ 0-4

## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, which must include three biological or physical science courses with labs, two courses of which must have the same prefix and one course with a different prefix.

## Social Science

A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

Choose enough elective credits to reach a minimum total of 93 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, professional technical courses ( 12 credits maximum) or CWE/ HHP/performance classes ( 15 credits maximum). The following courses are recommended:
FOR 240A Forest Ecology 3
FOR 251 Recreational Resource Management 3
GEOG 212 Tourism and Recreation 3
HHP 199 Intro to Outdoor Leadership 3
HHP 253 Wilderness Advanced First Aid 3
HHP 255 Outdoor Living Skills 3
HHP 271 Facilitating Group Experiences 3
HHP 273 Outdoor Recreation Leadership 3
HHP 294WG Whitewater Raft Guiding 3
or HHP 294RC Teaching Rock Climbing
or HHP 294CC Challenge Course Practices
or FOR 255 Resource Interpretation

## OUTDOOR LEADERSHIP (continued)

Associate of Arts<br>Associate of Science

${ }^{1}$ To meet this requirement, students can choose between HHP 231, Human Sexuality; HHP 242, Stress Management; HHP 258, Prevention of Chronic Diseases, or HHP 266, Nutrition for Health; HHP 295, Health and Fitness; and one activity class or CPR —OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity or CPR class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

Lab fees:
$\$ 20$ for HHP 295 Health and Fitness, 3 credits or HHP 252a, Fit/First Aid, 3 credits
$\$ 35$ for HHP 271, Facilitating Group Experiences, 3 credits $\$ 50$ for HHP 294CC, Challenge Course Practices, 3 credits $\$ 16$ for all HHP 185 classes for Mazama user fee

## Associate of Science (95-97 credits)

## General education/basic skills

English Composition

| WR 121 | English Composition | 3 |
| :--- | :--- | :--- |
| WR 122 | English Composition | 3 |
| WR 123 | English Composition | 3 |
| or WR 214 | Business Communications |  |
| or WR 227 | Technical Writing |  |

Speech
SP $111 \quad$ Fundamentals of Public Speaking 3
Mathematics
MTH 111 College Algebra 4
Health ${ }^{1}$ 3-4
CIS 131 Software Applications 4

## General education/distribution

## Humanities

Two courses from the humanities distribution list, six to eight credits. If planning to transfer to OSU-Cascades, one course must have ARH, ENG or MUS prefix and must be 200-level or higher.

## Social Science

ANTH 103 Cultural Anthropology 4
GEOG 201 World Regional Geography I 4
GEOG 202 World Regional Geography II 4
Science/Math/Computer Science ..... 11
FOR 240A Forest Ecology ..... 3
and two courses from
GS 106 Geology ..... 4
GS 107 Astronomy ..... 4
GS 108 Oceanography ..... 4
Program requirements
BA 223 Marketing Principles I ..... 3
BA 226 Business Law I ..... 3
FOR 251 Recreational Resource Management ..... 3
GEOG 212 Tourism and Recreation ..... 3
HHP 199 Intro to Outdoor Leadership ..... 3
HHP 253 Wilderness Advanced First Aid ..... 3
HHP 255 Outdoor Living Skills ..... 3
HHP 271 Facilitating Group Experiences ..... 3
HHP 273 Outdoor Recreation Leadership ..... 3
HHP 280 Co-op Work Experience
(two courses at 2 credits each) ..... 4
Choose two courses from
FOR 255 Resource Interpretation ..... 3
HHP 294CC Challenge Course Practices ..... 3
HHP 294RC Teaching Rock Climbing ..... 3
HHP 294WG Whitewater Raft Guiding ..... 3

## Electives

Choose enough elective credits to reach a minimum total of 93 overall degree credits. Elective classes must be numbered 100 or above and can be any combination of general electives, professional technical courses ( 12 credits maximum) or CWE/ HHP/performance classes ( 15 credits maximum).
${ }^{1}$ To meet this requirement, students can choose between HHP 231, Human Sexuality; HHP 242, Stress Management; HHP 258, Prevention of Chronic Diseases or HHP 266, Nutrition for Health; HHP 295, Health and Fitness; and one activity class or CPR —OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity or CPR class.

## Lab fees:

\$20 for HHP 295 Health and Fitness, 3 credits or HHP 252a, Fit/First Aid, 3 credits
$\$ 35$ for HHP 271, Facilitating Group Experiences, 3 credits $\$ 50$ for HHP 294CC, Challenge Course Practices, 3 credits $\$ 16$ for all HHP 185 classes for Mazama user fee

While there are small differences between the programs of each branch of engineering and physics, COCC works to provide the courses common to all programs. Students may have to take some additional classes at the university after transferring to reach junior status within their major.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 physics, engineering and engineering technology. Know that in some instances an Associate of Science degree may help students better meet transfer institution course requirements; see advisor for details.

## General education/basic skills

English Composition
WR 121 English Composition 3
WR 122 English Composition 3
WR 227 Technical Writing 3
Speech
SP 111 Fundamentals of Public Speaking 3

## Mathematics

MTH $111 \quad 4$
Health $^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

BI $101 \quad 4$
PH 211 General Physics I 5
PH 212 General Physics II 5
PH 213 General Physics III 5


Social Science
A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Electives

CH 221 General Chemistry I 4
CH 222 General Chemistry II 4
CH 223 General Chemistry III 4
ENGR 201 Electrical Fundamentals 3
ENGR 211 Statics 4
ENGR 212 Dynamics 4
ENGR 213 Strength of Material 4
GE 101 Engr Orientation 3
GE 102 Engineering Problem Solving and Technology 3
MTH 251 Calculus I 4
MTH 252 Calculus II 4
MTH 253 Calculus III 4
MTH 254 Vector Calculus I 4
MTH 255 Vector Calculus II 4
MTH 256 Applied Differential Equations 4
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module - OR- HHP 252A.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## POLITICAL SCIENCE

## Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 political science.

## General education/basic skills

## English Composition

| WR 121 | English Composition | 3 |
| :--- | :--- | :--- |
| WR 122 | English Composition | 3 |

WR 123 English Composition 3
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
MTH 111
College Algebra4

Health ${ }^{1}$

3-4

Computer competency ${ }^{2}$ 0-4

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

## Social Science

A minimum of 15 credits from the following courses. Note that students must choose at least one course with a different prefix to fulfill this requirement.
HST 101 History of Western Civilization ..... 4
HST $102 \quad$ History of Western Civilization ..... 4
HST 103 History of Western Civilization ..... 4
or
HST 104 World History ..... 4
HST 105 World History ..... 4
HST 106 World History ..... 4
or
HST 201 History of the United States ..... 4
HST 202 History of the United States ..... 4
PS 201 Intro to US Gov and Politics ..... 4
or PS 205 Intro to International Relations
Electives
EC 201 Microeconomics ..... 4
EC 202 Macroeconomics ..... 4
LIB 127 Information Research Skills ..... 2
MTH 243 Math for Management/Life/Social Science ..... 4
MTH 244 Intro to Method of Prob and Stats ..... 4
PS 204 Intro to Comparative Politics ..... 4
or PS 206 Intro to Political Thought
plus enough additional electives to reach the 93 minimumnumber of credits needed for overall degree requirements.
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## PRE-DENTAL HYGIENE

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Transfer Preparation (57 credits)
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While Central Oregon Community College 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. Below is a listing of courses that fulfill most pre-dental hygiene transfer requirements, although students should contact their intended transfer school to determine exact requirements.

| ANTH 103 | Cultural Anthropology | 4 |
| :--- | :--- | :--- |
| BI 231 | Human Anatomy \& Physiology I | 4 |
| BI 232 | Human Anatomy \& Physiology II | 4 |
| BI 233 | Human Anatomy \& Physiology III | 4 |
| BI 234 | Microbiology (optional) | 4 |
| CH 104 | Introduction to Chemistry I | 4 |
| CH 105 | Introduction to Chemistry II | 4 |
| CH 106 | Introduction to Chemistry III | 4 |
| FN 225 | Human Nutrition | 4 |
| MTH 111 | College Algebra | 4 |
| PSY 201 | Mind \& Brain | 4 |
| SOC 201 | Introduction to Sociology | 4 |
| SP 111 | Fundamentals of Public Speaking | 3 |
| WR 121 | English Composition | 3 |
| WR 122 | English Composition | 3 |



## PRE-LAW

Associate of Arts Oregon Transfer (93 credits)

(Six quarters to complete if attending full time)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 pre-law.

## General education/basic skills

## English Composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
Speech
SP $111 \quad$ Fundamentals of Public Speaking 3
Mathematics
MTH $111 \quad 4$
Health ${ }^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

Science
A minimum of 15 credits, which must include three biological or physical science courses with labs, two courses of which must have the same prefix and one course with a
different prefix.

## Social Science

PS 201 American Governments 4
PS 204 Introduction to Comparative Politics 4
PS 205 Introduction to International Relations 4
plus one additional course from the social science 4
distribution list with a different prefix.

## Electives

EC 201 Microeconomics 4
EC 202 Microeconomics 4
HST 201 History of the United States 4
HST 202 History of the United States 4


| LIB 127 | Information Research Skills | 2 |
| :--- | :--- | :--- |
| PS 206 | Introduction to Political Thought | 4 |
| PSY 216 | Social Psychology | 4 |
| PSY 219 | Abnormal Psychology | 4 |
| PSY 233 | Psychology of Violence \& Agression | 4 |

${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module --OR—HHP 252A.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Advising information

Preferred baccalaureate degrees will vary by law school. Therefore, students should refer to the catalog of the chosen four-year institution and prospective law school programs to determine specific degree or major requirements.

## PRE-MEDICINE, PRE-DENTISTRY, PRE-VETERINARY

Associate of Arts Oregon Transfer (93 credits)

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 degree, with an emphasis on pre-med, -vet and -dentistry related coursework; specific course of study is listed below. Students may transfer to a baccalaureate institution without the AAOT; however, completion of this degree guarantees that a student will transfer with junior standing and that all lower-division general education coursework is complete.

## General education/basic skills

English Composition

| WR 121 | English Composition | 3 |
| :--- | :--- | :--- |
| WR 122 | English Composition | 3 |
| WR 123 | English Composition | 3 |
|  |  |  |
| Speech |  | 3 |
| SP 219 | Small Group Communication |  |
| or SP 111 | Public Speaking |  |

Mathematics
MTH $111 \quad 4$
Health $^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

Science/Math/Computer Science
BI $211 \quad$ Principles of Biology I 5
BI 212 Biology of Plants II 5
BI 213 Biology of Animals III 5
CH 221 General Chemistry I 4

Social Science
A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix.


## Electives

CH $222 \quad$ General Chemistry II 4
CH 223 General Chemistry III 4
CH 241 Organic Chemistry I 5
CH $242 \quad$ Organic Chemistry II 5
CH 243 Organic Chemistry II 5
MTH 112 Elementary Functions 4
MTH 113 Analytic Geometry 4
MTH 251 Calculus I 4
MTH $252 \quad 4$
MTH 253 Calculus III 4
PH 201 General Physics I 5
PH 202 General Physics II 5
PH 203 General Physics III 5
or PH 211 General Physics I
PH 212 General Physics II
PH $213 \quad$ General Physics III

## Advising notes

${ }^{1}$ HHP 252A is recommended to meet this requirement, but students can also choose between HHP 295, 231, 242, 258 or 266 and one activity or health module.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

Central Oregon Community College provides the prerequisite courses for Oregon Institute of Technology's Bachelor of Science in medical imaging technology degree. Students complete specific courses at COCC and then transfer to OIT for the second and third year of the program, noting that admission to the MIT program is competitive; contact OIT's Admissions Office for details. The fourth year is spent doing an externship in a hospital setting.

## Prerequisite courses

AH 111 Medical Terminology I 3
BI 231 Anatomy \& Physiology I 4
BI 232 Anatomy \& Physiology II 4
BI 233 Anatomy \& Physiology III 4
CH 104 Introduction to Chemistry I 4
or CH 221 General Chemistry I
MIT 103 (offered online via OIT, http://www.oit.edu/dist) 3
MTH 111 College Algebra 4
MTH 112 Trigonometry 4
PSY 201 Mind \& Brain 4
SP 111 Fundamentals of Public Speaking 3
WR 121 English Composition 3
WR 122 English Composition 3
Social Science distribution course ${ }^{1}$ 3-4
Humanities distribution course ${ }^{1}$ 3-4
${ }^{1}$ See advisor for recommendations.

Linn-Benton Community College (LBCC) offers an Associate of General Studies in diagnostic imaging (radiological technology) distance education program. Students complete specific prerequisite courses at COCC and then apply to the LBCC Distance program, noting that admission to the LBCC program is competitive. The LBCC radiology technologist courses are taught online and the clinical component courses are taught by LBCC in various locations in Central Oregon. Please see the Selection Process Handbook available in the Admissions and Records office or on the COCC Web site, www.cocc.edu, for details.

## Required prerequisites

AH 111 Medical Terminology I 3
BI 231 Anatomy \& Physiology I 4
BI 232 Anatomy \& Physiology II 4
BI 233 Anatomy \& Physiology III 4
CIS 120 Computer Concepts 1 4
$\begin{array}{cll}\text { or CIS 131 } & \text { Software Applications } & \\ \text { HHP } & \text { Health Course }^{1} & 3\end{array}$
HHP 185XX Activity Class 1
MTH $111 \quad 4$
SP 111 Fundamentals of Public Speaking 3
WR 121 English Composition 3

## Support courses

| CH 104 | Introduction to Chemistry | 4 |
| :---: | :--- | :---: |
| or GS 105 | Physical Science: Chemistry |  |
| or CH 221 | General Chemistry I |  |
| $\begin{array}{l}\text { BI 101 } \\ \text { or BI 211 }\end{array}$ | Introduction to Biology | Principles of Biology I |

AH 112 Medical Terminology II 3
PSY 215 Developmental Psychology 4

## Other

Cultural diversity course (see LBCC's catalog for options) 3-4
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness or HHP 252A: Fit/First Aid.

## PSYCHOLOGY

Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 psychology.

## General education/basic skills

## English Composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
Speech
SP 219 Small Group Communication 3
Mathematics
MTH $111 \quad 4$
Health $^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

Humanities
A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

Science/Math/Computer Science
BI $101 \quad$ General Biology I 4
BI $102 \quad$ General Biology II 4
BI 103 General Biology III 4
or (preferred)
BI 231 Human Anatomy \& Physiology I 4
BI 232 Human Anatomy \& Physiology II 4
BI 233 Human Anatomy \& Physiology III 4
and three or more credits of another course from the science/ math/computer science distribution list, other than a BI prefix.

## Social Science

Four credits from the social science distribution list with an SOC or ANTH prefix
and PSY 201 Mind \& Brain
and PSY 202 Mind \& Society 4

## Electives

From the following courses, select 24 credits:
LIB 127 Information Research Skills 2
MTH 243 Math for Mgmt/Life/Social Science 4
MTH 244 Intro to Method of Prob and Stats 4
Foreign Language, two years recommended 24
From the following courses, select 16 to 18 credits:
PSY 214 Personality Psychology 4
PSY 215 Developmental Psychology ${ }^{3}$ 4
PSY 216 Social Psychology 4
PSY 219 Abnormal Psychology 4
PSY 233 Psychology of Violence \& Agression 4
PSY 235 Child Psychology ${ }^{3} 3$
PSY 236 Adolescent/Adult Psychology ${ }^{3}$ 3
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{3}$ PSY 235 \& PSY 236 are preferred over PSY 215

## Advising information

Please note that in the field of psychology, it is often necessary to achieve a graduate degree in order to work in the field as a professional.

## Transfer information

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 (e.g., UO requires Psychology majors to complete PSY 302 and PSY 303, Statistics and Research Methods, prior to admission to the PSY program, but admission to the school is automatic with the AAOT).

Students have the option of pursuing a bachelor's degree in Psychology through the University of Oregon (contact Diane Pritchard, UO advisor, 617-4665) or through a distance program with Eastern Oregon University (contact Barb DeKalb, EOU advisor, 385-1137); both programs are available in Central Oregon.

## SOCIOLOGY

Associate of Arts Oregon Transfer (93 credits)

The Associate of Arts Oregon Transfer 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 lowerdivision 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 sociology.

## General education/basic skills

## English Composition

WR 121 English Composition 3
WR 122 English Composition 3
WR 123 English Composition 3
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
MTH 111 College Algebra 4

Health ${ }^{1}$ 3-4
Computer competency ${ }^{2}$ 0-4

## General education/distribution

## Humanities

A minimum of 11 credits from the humanities distribution list, with at least two different prefixes and at least two courses with the same prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

Social Science
SOC 201 Introduction to Sociology 4
SOC 211 Social Deviance 4
SOC $212 \quad$ Race, Class \& Ethnicity 4
plus additional course from the social science distribution list with a prefix other than SOC.

${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR— HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Electives

Choose enough electives to reach the 93 minimum number of credits needed for overall degree requirements.

## SPEECH COMMUNICATION

Associate of Arts Oregon Transfer (93 credits)

COCC's Speech Communication program offers courses in public speaking, small group communication, interpersonal communication, as well as classes on the media, gender, intercultural communication and communicating love. One-credit, workshop-style courses are also available for those who want to learn team skills, conflict management, listening skills and emotional intelligence. A degree in speech communication 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.

The Associate of Arts Oregon Transfer 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 lowerdivision 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 speech communication.

## General education/basic skills

## English Composition

WR 1213
WR 122 English Composition 3
WR 123 English Composition 3
or WR 214 Business Communications
or WR 227 Technical Writing
Speech
SP 111 Fundamentals of Public Speaking 3
or SP 219 Small Group Communication
Mathematics
$\begin{array}{cl}\text { MTH } 105 & \text { Intro to Contemporary Math } \\ \text { or MTH } 111 \text { College Algebra }\end{array}$

Health $^{1}$ 3-4
Computer competency ${ }^{2} \quad 0-4$

## General education/distribution

## Humanities

Two courses from HUM 261-266 plus one additional course from the humanities distribution list other than an HUM prefix.

## Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list, with at least two different prefixes, and three biological or physical science courses with labs, two of which must have the same prefix.

## Social Science

A minimum of 15 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix; speech communication majors should consider courses with a PSY or SOC prefix.

## Electives

Choose enough electives to reach the minimum of 93 credits for the AAOT. In addition to the recommendations listed below, speech communication majors should consider taking a broad range of courses.
SP 115 Intro to Intercultural Communication 3
SP 218 Interpersonal Communication 3
SP 219 Small Group Communication 3
SP 220 Gender Communication 3
SP 241 Media, Communication, and Society 4
SP 270 Communicating Love 3
${ }^{1}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module -OR- HHP 252A. Students planning to transfer to OSU (Corvallis or Cascades Campus) should choose HHP 295 and one activity/health class.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.

## Advising information

Students planning to transfer to OSU need to take:
HHP 295 Health and Fitness 3
and HHP 185 Activity class 1

Associate of Arts Oregon Transfer (93 credits)

## STRUCTURAL FIRE SCIENCE

Associate of Applied Science<br>( 94 credits; six quarters to complete if attending full time)

## Transfer information

The Oregon University System offers a variety of programs for speech communication majors who seek a bachelor's or more advanced degree.

Oregon State University-Cascades offers a speech communication minor; contact COCC's Admissions office for lower-division course requirements

OSU's (Corvallis) Department of Speech Communication offers undergraduate programs leading to B.A. or B.S. degrees, with concentrations in communication or theater art. Additionally, students at OSU can complete a minor either in communication or theater arts, as well as one in the multimedia minors. At the graduate level they participate in the Master of Arts in interdisciplinary studies program.

The University of Oregon's School of Journalism and Communication offers majors in six areas: advertising, electronic media, communication studies, magazine journalism, newseditorial or public relations.

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.

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.

The Associate of Applied Science degree (AAS) 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 program meets or exceeds the required technical skills and knowledge necessary for employment in many fire service organizations throughout the country.

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. Passage of 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 will need to be aware of the College insurance policy prior to participation in the program. A statement concerning College insurance policies is listed on page 22 and on all SFS degree syllabi. Students are expected to provide hearing protection, helmet, eye protection and gloves. Other special equipment and clothing may be required as part of this program.

Each of the degree program classes cycle once a year starting in the fall term. As a general rule, 100-level courses are recommended for first year, and 200-level courses are recommended for second year. Exceptions can be made based on individual student education and experience. All required general education, technical and elective courses must be passed with a minimum 75 percent, a letter grade of C or better and a minimum GPA of 2.0. Proof of immunizations (Hepatitis B and measles) and current TB test results are required prior to registration in EMT Basic Part A and B.

Students who complete COCC's program are also eligible for Eastern Oregon University's bachelor's degree in fire administration upon completion of additional coursework. Students interested in this option should work closely with EOU's distance education advisor (Barb DeKalb, 385-1137, Boyle Education Center, Room 161). The program also meets the undergraduate requirements for a Bachelor of Science degree in fire administration at Western Oregon University.

Students should contact the SFS program coordinator at (541) 383-7265 or the EMS program coordinator at (541) 383-7287 for details concerning a dual degree in both SFS and EMS. Additional information can be found at: http://alliedhealth.cocc.edu/Programs_Classes/Fire+Science/ default.aspx.

## STRUCTURAL FIRE SCIENCE (continued)

Associate of Applied Science
( 94 credits; six quarters to complete if attending full time)
Degree/course requirements
YEAR ONE
Fall term
EMT 151 EMT Basic Part A ..... 5
SFS 101 Intro to Emergency Svcs ..... 4
or EMT 175 Intro to EMS
SFS 102 Fire Service Safety \& Survival ..... 1
WR 121 English Composition ..... 3
General education distribution course ${ }^{1}$ ..... 3
Winter term
Computer competency ${ }^{2}$ ..... 0-4
EMT 152 EMT Basic Part B ..... 5
GS 105 Physical Science: chemistry ..... 4
MTH 85 Technical Mathematics ..... 4
or MTH 60 Elementary Algebra
Spring term
Health ${ }^{3}$ ..... 4
SP 111 Fund of Public Speaking ..... 3
or SP 218 Interpersonal Communications or WR 227 Technical WritingGeneral education distribution course ${ }^{1}$6
YEAR TWO
Fall term
GS 104 Physical Science: Physics ..... 4
SFS 110 Building Construction for Fire ..... 3
SFS 111 Water Distribution Systems ..... 3
SFS 112 Public Education/Fire Prevention ..... 3
Elective (see advisor for options) ..... 3
Winter term
FOR 211 First Line Supervision * ..... 3
or BA 285 Business Human Relations
SFS $120 \quad$ Fixed Systems \& Extinguishers ..... 3
SFS 210 Fire Investigation ..... 3
SFS 212 Fire Codes \& Ordinances ..... 3
Elective (see advisor for options) ..... 3
Spring term
SFS 130 Interface Fire Operations 3
SFS 211 Fire Tactics \& Strategies ..... 3
SFS 230 Rescue Practices ..... 4
SFS 232 Fire Service Hydraulics ..... 3
SFS 283 Capstone Fire Science ..... 1
Elective (see advisor for options) ..... 3
${ }^{1}$ See AAS checklist, general education distribution requirements, page 41.
${ }^{2}$ Pass computer basic skills competency test (see page 35 for details) or take CIS 120, Computer Concepts I, or CIS 131, Software Applications.
${ }^{3}$ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Prevention of Chronic Diseases or HHP 266: Nutrition for Health, HHP 295: Health and Fitness and one activity or health module.

## Advising information

In order to receive an AAS in structural fire science (SFS), students must also be affiliated with a fire agency and receive NFPA Firefighter I, I-200 Incident Command System, NFPA HazMat Awareness and Operations and OHD EMT Basic Certification. Contact advisor for information.

## Articulation information

Students transferring from COCC to EOU's Fire Science Administration program will be given full credit for many COCC SFS courses. Please check with program coordinator for current courses approved for transfer. Students who plan to transfer to EOU's FSA program are encouraged to take Math 105. (Completion of the AAOT will satisfy all general education requirements at EOU, but is not required for institution or program admission. The following link shows COCC courses which transfer into EOU's general education categories. This information is subject to change and should always be checked with the EOU advisor prior to registration in these courses, http://www.eou.edu/advising/transfer/cocc.htm )

Students are encouraged to review the degree requirements for the EOU Fire Services Administration degree found at: http:// www.eou.edu/dde/Degrees/FSA.htm.

## WILDLAND FIRE SCIENCE

Certificate of Completion
Associate of Applied Science

COCC offers students the following options within the Wildland Fire program:

- Certificate of completion in Wildland Fire Suppression The certificate of completion 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.
- Associate of Applied Science degree in wildland fire/ fuels management
This degree is designed to update the skills of fire/fuels employees. It is a supplementary degree for current employees of wildland fire suppression organizations only. New students interested in earning an Associate of Applied Science degree are encouraged to pursue the AAS in forestry resources or talk with the wildland fire coordinator about other options.
Wildland Fire Suppression
Certificate of Completion
(47 credits; three quarters to complete if attending full time)
(pending state approval)


## Fall term

FE 210A Map, Compass and GPS 3
HHP 252A Fitness/First Aid 3
MTH 85 Technical Mathematics I 4
SP 218 Interpersonal Communications 3

## Winter term

FOR 111 Forestry Perspectives (also taught fall term) 4
WF $100 \quad$ I-100 \& I-200 IC System 3
WF 101 S-130, S-190, L-180 3
WF 260 S-260 Interagency Incident Bus Mgmt 2
WR 121 English Composition 3

## Spring term

BA 101 Intro to Business 4
FOR $110 \quad$ Wildland Fire Science I 2
WF 131 S-131 Adv Firefighter Train 2
WF $211 \quad$ S-211 Portable Pumps 2
WF 212 S-212 Wildfire Powersaws 3
WF 234 S-234 Ignition Operations 3
WF $290 \quad$ S-290 Int Wildfire Behavior 3


## Advising and/or other pertinent information

Students are expected to provide hard hat, gloves, 18" leather boots with Vibram soles and fire clothes for the courses.
Some fire clothes may be provided by the College, check with program coordinator.

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 page 22 and on all wildland fire syllabi.

# WILDLAND FIRE SCIENCE (continued) 

Certificate of Completion<br>Associate of Applied Science

Associate of Applied Science (100-102 credits)(More than six quarters to complete if attending full time)
YEAR ONE
Fall term
CIS 120 Computer Concepts I ..... 4
or CIS 131 Software Applications
FE 210A Map, Compass and GPS ${ }^{1}$ ..... 3
FOR 240A Forest Ecology ..... 3
FOR 241A Dendrology I ${ }^{1}$ ..... 3
MTH 85 Technical Mathematics I ..... 4
Winter term
FOR 111 Forestry Perspectives ..... 4
FOR 220B Resource Measurement ..... 4
MTH 86 Technical Mathematics II ..... 4
WF 101 S-130, S-190, Fire Behavior ..... 3
WR 121 English Composition ..... 3
Spring term
FOR 203 Applied Forest Ecology ..... 3
FOR $110 \quad$ Wildland Fire Science I ..... 2
FOR 202 Forest Entomology/Pathology ..... 3
FOR 220A Aerial Photo ..... 3
FOR 241B Dendrology II ..... 3
Second year
Fall term
FOR 205 Silviculture/Harvesting Proc ..... 5
FOR $210 \quad$ Wildland Fire Science II ..... 2
WF 100 I-100, I-200 IC System ..... 3
WF 260 S-260 Interagency Incident Bus Mgmt ..... 2
Elective course ${ }^{2}$ ..... 2-4
Winter term
HHP 252A Fitness/First Aid ..... 3
SP 218 Interpersonal Communication ..... 3
WF 211 S-211 Portable Pumps ..... 2
WF 215 S-215 Fire Ops Urban Interface ..... 3
Spring term
FOR 209 Fire Ecology \& Effects ..... 3
FOR 260 Conservation Natural Resources ..... 3
WF 270 S-270 Basic Air Operations ..... 3
WF 290 S-290 Intermediate Wildfire Behavior ..... 3
General education distribution course ..... 3

## Additional Wildland Fire Management short courses required

WF 180 L-180 Human Factors on the Fireline 1
WF 230 S-230 Crew Boss 3
WF 234 S-234 Ignition Operations 3
WF 281 L-280 Followership Leadership 2
WF 298 S-390 Fire Behavior Calculations 2
${ }^{1}$ General education requirement
${ }^{2}$ Choose from BA 101 Intro to Business; WF 134 S-134 Lookouts, Communications, Escape Routes, Safety Zones; or WF 212 S-212 Wildfire Powersaws

## Advising information

Because the short courses are sponsored by the East Slope Training region, the short (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.
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 coordinator.

A minimum of three months fire-related work experience approved by the wildland fire science coordinator is required for graduation.

Additional information can be found at: http://wfs.cocc.edu or calling the program coordinator at Bend campus, (541) 383-7265, or Redmond campus, (541) 504-2932.

## COURSE DESCRIPTIONS

Central Oregon Community College has a diverse selection of transfer and professional technical 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.
Not every class is offered every term. All of COCC's current courses may not be included in this list as the College may add or subtract classes after the catalog is published. Consult the COCC credit class schedule online (www.cocc.edu) for information about where and when classes meet.

## HOW TO READ A COURSE DESCRIPTION

## COURSE LISTING

## BI 212

BIOLOGY OF PLANTS II
Surveys diversity of Monera, Protista, Fungi and plant kingdoms; examines living plants, their evolutionary interrelationships, morphology and physiology. Prerequisite: BI 211 or instructor's permission.

## Credits: 5 Lecture: 4 Lab: 3

## EXPLANATION

Courses are grouped by area of study and listed alphabetically by letter prefix and course number. Some professional-technical courses are listed by the digitdecimal numbering system from 1.000 to 8.999 . Courses numbered 100 and above are designed for transfer to other colleges for degree credit. Digit-decimal numbered courses apply to certificates and Associate of Applied Science and Associate of General Studies degrees and may have limited transferability.

BIOLOGY OF PLANTS II . . . . . . . . . . The title of the course is listed in all capital letters.
Surveys diversity of Monera, . . . . . . . The course description briefly summarizes the course content. Protista, Fungi and plant

Prerequisites: BI 211 . . . . . . . . . . . . . Prerequisites, if any, are listed by course number after the course or instructor's permission. description. It is important to note prerequisites prior to registering. A prerequisite is a course which should be completed prior to enrolling in the selected course. A corequisite is a course which should be completed prior to or while attending the selected course.

Credits: 5 Lecture: 4 Lab: 3. . . . . . . The number of hours per week in lecture and labs is noted, as is the number of credits earned by taking the course. A few areas of study, such as Forestry, list lecture and lab hours for the entire term.

## MIC, "M" COURSES

COCC offers courses in a variety of subject areas designated as 'MIC,' or Multicultural Infusion Component. These courses cover the subject matter of the course title, but they infuse multicultural or international components into the course. These include free-standing units within single courses, all-purpose courses on multicultural or international issues or courses which integrate material on diverse groups into their content. MIC courses are designed to satisfy transfer requirements for cultural diversity or perspective classes.

## WIC, "W" COURSES

COCC offers courses in a variety of subject areas designated as "WIC," or Writing in Context. These courses cover the subject matter of the course title using a significant component of formal and informal writing to help students learn the course content. For example, a history WIC course may assign informal written worksheets and formal essays, or a physics "WIC" course may require written lab reports. WIC courses are designed to satisfy transfer requirements for lower-division writing-across-disciplines or writingintensive coursework.

## ADDICTIONS STUDIES

HD 161

## ETHICS FOR HUMAN SERVICES

Course is designed for those desiring employment in the helping fields. A professional can expect to encounter complexities in keeping the client's needs as the primary concern. Students will explore how to set and maintain professional boundaries. The course will relate abstract ethical principles to tangible examples and will offer a practical framework for analyzing ethical issues. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

## HD 162

## EFFECTIVE HELPING SKILLS I

Introductory course for people interested in pursuing a career in the helping professions or who may be working in a helping role now. Students practice basic interviewing skills, learn to create a helping climate, and organize and conduct an informational interview. Introduces students to basic interaction, referral, interviewing and listening skills.
Credits: 3 Lecture: 3

## HD 180 <br> HIV, AIDS AND ADDICTIONS

Provides a thorough investigation of HIV/AIDS epidemic and expectations of professionals in dealing with it. Covers epidemiology, HIV/AIDS related policy, effects of chemical dependency and chemical use in promoting the spread of HIV infection, routes of exposure to virus and manner in which various populations are infected and treated. Guidelines and directives for counseling individuals who are HIV seropositive and those at high risk for HIV infection.
Credits: 2 Lecture: 2

## HD 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 pre- or corequisite: WR 121.
Credits: 3 Lecture: 3

## HD 201

FAMILIES AND ADDICTIONS
Course is designed for people who are training to become chemical dependency counselors or current counselors who are seeking to increase their knowledge base. Focuses on basic theory, technique and experience in doing family therapy with families of addicts. Primary models of family therapy used will be systemic and structural. Recommended pre- or corequisite: WR 121.
Credits: 3 Lecture: 3

## HD 205 <br> YOUTH AND ADDICTIONS

Provides a beginning knowledge of child/adolescent development and results in an understanding of 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 prerequisite: WR 121.
Credits: 3 Lecture: 3

## HD 206 <br> GROUPS AND ADDICTIONS TREATMENT

Provides individuals who will be working in the addictions field with a basic understanding of group therapy and the skills required to facilitate recovery. Various themes and critical issues of group work with addictions will be explored, including common and difficult therapeutic problems.
Credits: 3 Lecture: 3

## HD 208

## MULTICULTURAL ISSUES AND ADDICTION

Highlights the impacts of cultural differences on both client and human service provider. Examines the major categories of diversity, heritage, biases, and stereotypes and how these might impact client treatment. Identifies cultural expectations that may lead to high risk for various chemical dependency problems. Examines how knowledge of diversity issues can be essential to the counselor in communications, treatment planning and implementation. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

## HD 210

## DUAL DIAGNOSIS

Introduces clinical presentation and management of dually diagnosed chemical abusers. The complex interplay of psychiatric illness and substance abuse in clients with depression, anxiety, schizophrenia, as well as other conditions, will be explored. Students will become familiar with diagnostic criteria as well as chemical dependency. Treatment strategies for addressing the needs of the dually diagnosed will be presented. Recommended prerequisite: WR 121.
Credits: 4 Lecture: 4

## HD 223 <br> DRUGS AND ADDICTION

Covers knowledge required to pass the pharmacology section of the CADC 1 exam. 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. Also addressed are special populations such as pregnant, HIV positive, elderly and tubercular users. Recommended prerequisite: WR 121.

## Credits: 3 Lecture: 3

## HD 260 <br> 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 prerequisite: WR 121.
Credits: 3 Lecture: 3

## HD 262 <br> EFFECTIVE HELPING SKILLS II

Introduces students to intentional 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. Audio and videotaping are used extensively. Recommended prerequisites: HD 162 or instructor approval.
Credits: 3 Lecture: 3

## HD 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

## HD 266 <br> CASE MANAGEMENT FOR THE CHEMICALLY DEPENDENT CLIENT

Provides foundation skills to successfully manage client cases in a treatment setting. Includes skills in client assessment, treatment planning, treatment plan review, writing of clinical progress notes, treatment summary and discharge planning and coordination with other agencies. Methods of instruction include role-play, lecture, class discussion, guest speakers, student presentations and review of students' videotaped assessment interviews. Recommended prerequisite: HD 262 or instructor approval. Recommended corequisites: WR 121, HD 260.

## Credits: 4 Lecture: 4

## HD 291

## PRACTICUM ADDICTIONS TREATMENT

Practicum is closely supervised opportunity to implement professional skills, knowledge and attitudes presented in prior addictions studies coursework. Students are placed locally or regionally at schools, public or private agencies and treatment centers, and complete a minimum of 30 clock hours for each credit earned. Students also attend a weekly seminar and meet individually with both the practicum instructor and the site supervisor throughout the quarter. Course is repeatable for credit. NOTE: A minimum of nine credits of HD 291 is
required for the Addictions Studies Certificate and 1,000 hours supervised experience are required before taking the Oregon CADC I exam.
Credits: 3 Lecture: 1 Other: 6

## ALLIED HEALTH

See also program courses under Dental Assisting, Dietary Management, Emergency Medical Services, Health Information Technology, Massage Therapy, Medical Assisting, Nursing and Structural Fire Science.

## MIT 103

MEDICAL IMAGING TECHNOLOGY
MIT 103 Medical Imaging Technology is offered through a partnership between COCC and OIT, which allows students to complete the pre-medical imaging (freshman) year at COCC before applying to any of the four B.S. programs in medical imaging at OIT. The second and third years are completed in Klamath Falls, and the final year is an externship in a hospital setting. Students are required to take MIT 103 from OIT during the first year, and may do so by taking OIT's online course. To get more information about how to enroll in the course, go to http://www.oit.edu/dist, and then click on the MIT 103 link.

## AH 100 <br> INTRODUCTION TO HEALTH OCCUPATIONS

Introduces current issues in the health care professions, including medical, dental, complementary, and community health. Includes an overview of the health care delivery system, medical ethics, legal issues such as HIPAA legislation, holistic and alternative medicine, confidentiality and human relations in health care, communication as a member of a health care team, and resources available in community health care. Working professionals in the health care industry will speak on selected topics.
Credits: 2 Lecture: 2

## AH 111 <br> 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.
Credits: 3 Lecture: 3

## AH 112 <br> MEDICAL TERMINOLOGY II

Covers terminology pertaining to pharmacology, nervous, mental health, special senses (eye and ear), reproductive (male and female), obstetrics, digestive, urinary and endocrine systems. Includes standard abbreviations, anatomic, diagnostic, symptomatic and operative terms related to these body systems. Recommended prerequisite: AH 111.
Credits: 3 Lecture: 3

## AH 113 <br> INTRODUCTION 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. Fulfills program requirements for health information technology and medical assisting. Recommended prerequisites: BI 121, BI 122 or BI 231, 232 and 233. Course is offered winter and spring terms.

## Credits: 5 Lecture: 5

## AH 199

SPECIAL STUDIES: ALLIED HEALTH
Reserved for courses that cover topics of general interest in health occupations.
Credits: 1 to 3

## AH 283

## INTEGRATIVE MEDICINE

Introduces the historical and sociopolitical context of biomedicine and "alternative" medical systems as they relate to medical pluralism in the United States. Alternative medical practices are examined in the context of class, race, gender, ethnicity and power within the larger structure of the dominant health care system in America. Recommended prerequisite: WR 121. Credits: 4 Lecture: 4

## AH 299

SELECTED TOPICS: ALLIED HEALTH
Credits: 1 to 4

## PHL 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 prerequisites: WR 121 and WR 122.
Credits: 3 Lecture: 3

## 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. Topics include archaeological concepts, survey, excavation, analysis and interpretation of data, dating techniques, research methods, and theories of cultural change. Recommended prerequisite: WR 121.
Credits: 4 Lecture: 4

## ANTH 103 <br> 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. Recommended prerequisite: WR 121.
Credits: 4 Lecture: 4

## ANTH 141 <br> FILM \& SOCIETY: RACE, GENDER, AND CLASS

Course 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.

## Credits: 2 Lecture: 1 Lab: 3

## ANTH 142 <br> 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
Credits: 1 to 3

## ANTH 199 <br> SELECTED TOPICS: ANTHROPOLOGY <br> Credits: 1 to 3

## ANTH 230

## PhYSICAL ANTHROPOLOGY

Course is an introduction to physical anthropology. The goal of this course is to achieve the basic scientific literacy necessary to understand contemporary human variation, bio-cultural interactions, and five million years of human evolution. Course consists of lectures, videos, readings, and discussions.

## 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 student's own. May be taught with a MIC and WIC designation. Recommended pre- or corequisite: 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 anthropology 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. Recommended prerequisite: WR 121.
Credits: 4 Lecture: 4

## ANTH 295 <br> gender and sexuality in an anthrological 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 prerequisites: WR 121 and ANTH 103.
Credits: 4 Lecture: 4
ANTH 299
SELECTED TOPICS: ANTHROPOLOGY
Credits: 1 to 4

## APPRENTICESHIP

### 9.221

BOILER/TURBINE APPRENTICESHIP
Credits: 4.5 Other: 7.2

### 9.231 <br> ELECTRICAL MANUFACTURING PLANT APPRENTICESHIP <br> Credits: 4.5 Other: 7.2

9.239

SHEET METAL APPRENTICESHIP
Credits: 4.5 Other: 7.2

### 9.240

## SHEET METAL MATH

Introduces skills in fractions and decimals; geometric shapes; equation solutions; ratios and proportions; perimeters, areas, and volumes of geometric shapes; use of the trigonometric sine, cosine, and tangent functions for right triangle solutions; powers; and use of the scientific calculator. Emphasis is on applications to applied sheet metal fabricators. Recommended prerequisite: MTH 60 or admission to program.

## Credits: 4 Lecture: 4

## ART

## Art History courses

## ARH 188

## SPECIAL STUDIES: ART HISTORY

Credits: 1 to 4

## ARH 199

SELECTED TOPICS: ART HISTORY

## Credits: 1 to 4

## ARH 201

## INTRODUCTION TO ART HISTORY

Surveys the major periods in art history of Western civilization. Introduces students to the concepts of art and surveys the development of art, in historical context, from Paleolithic cave paintings up through the 13th Century Romanesque and Gothic styles. Emphasizes architecture, painting and sculpture. Need not be taken in sequence. May be offered with a WIC designation.

## Credits: 4 Lecture: 4

## ARH 202 <br> INTRODUCTION TO ART HISTORY

Surveys the major periods in art history of Western civilization. This course surveys the development of art, in historical context, from 14th Century Late Gothic up through the early 19th Century Neoclassic and Romantic styles. Emphasizes
development of painting, architecture and sculpture in historical context. Need not be taken in sequence. May be offered with a WIC designation.
Credits: 4 Lecture: 4

## ARH 203

INTRODUCTION TO ART HISTORY
Surveys major art history periods of Western civilization. This course surveys the development of art from 19th Century Realism through Impressionism, Cubism and Abstract to 20th Century Modernism. Emphasizes painting, sculpture, architecture and photography. Need not be taken in sequence. May be offered with a WIC designation.
Credits: 4 Lecture: 4

## ARH 206

MODERN ART HISTORY
Survey of modern art from mid-19th Century Impressionism through the "isms" of the 20th Century emphasizing painting, sculpture, architecture and photography. May be offered with a WIC designation. Not offered every year.

## 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. May be taught with a MIC and/or WIC designation. Usually offered spring term.
Credits: 4 Lecture: 4

## Art studio courses

## ART 101

## INTRODUCTION TO THE VISUAL ARTS

Provides a foundation in the basic concepts, vocabulary of the elements and principles of design, materials and the methods and processes of the visual arts with a hands-on experience exploring a variety of media.
Credits: 4 Lecture: 4

## ART 188

SPECIAL STUDIES: ART
Credits: 1 to 3

ART 199
SELECTED TOPICS: ART
Credits: 1 to 3

ART 299
SELECTED TOPICS: ART
Credits: 1 to 3

## Art Studio courses - Basic Design

## ART 115 <br> 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: 2 Lab: 4

## 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 twodimensional color design problems. Offered winter term.
Credits: 3 Lecture: 2 Lab: 4

## ART 117

BASIC DESIGN: 3-D
Explores elements and principles of design using hands-on experience to make three dimensional constructions using inexpensive materials. May only be offered one term each year. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 2 Lab: 4

## Art Studio courses - Ceramics

## ART 154

CERAMICS I
Hand building skills in Ceramics I include developing designs for both functional and nonfunctional work, texturing, and glaze application. Development of imaginative ideas for expression in clay media is expected. Should be taken in sequence.
Credits: 3 Lecture: 2 Lab: 4

## ART 155

## CERAMICS II

Improve hand building skills with more complex designs and wheel throwing skills. Includes developing designs for both functional and nonfunctional work. Development of imaginative ideas for expression in clay media is expected. Should be taken in sequence.
Credits: 3 Lecture: 2 Lab: 4

## ART 156

CERAMICS III
Ceramics III includes developing designs for both functional and nonfunctional work, mastering hand building and throwing skills, and glaze application. Development of imaginative ideas for expression in clay media is expected. Should be taken in sequence. Recommended prerequisites: ART 155, ART 117 and ART 131.
Credits: 3 Lecture: 2 Lab: 4

## ART 254 <br> CERAMICS IV

Ceramics classes include developing designs for both functional and nonfunctional work, mastering hand building, advanced throwing skills and glaze application. Glaze formulation and the firing process may be included. Development of imaginative ideas for expression in clay media is expected. Should be taken in sequence. Recommended prerequisites: ART 117 and ART 131.
Credits: 3 Lecture: 2 Lab: 4

## ART 266

## RAKU-SPECIAL TOPICS

Short course focusing on the raku firing process. Recommended prerequisite: ART 154. Usually offered fall and spring terms.

## Credits: 2 Lecture: 1 Lab: 3

Art Studio courses - Drawing

## ART 131

## DRAWINGI

Emphasis on observing and developing fundamental drawing and composition skills. Still life material used extensively.
Credits: 3 Lecture: 2 Lab: 4
ART 132
DRAWING II
Concepts and skills developed in ART 131 will be applied to introduction to drawing the figure and portraits. Recommended prerequisite: ART 131.
Credits: 3 Lecture: 2 Lab: 4
ART 133
DRAWING III
Emphasis on landscape drawing and creative expression working with a broader range of media. Recommended prerequisite: ART 131.
Credits: 3 Lecture: 2 Lab: 4
ART 231, 232, 233
DRAWING IV, V, VI
Application of drawing skills with increased emphasis on individual direction and creative expression. Should be taken in sequence. Recommended prerequisites: ART 131, ART 132, ART 133.
Credits: 3 Lecture: 2 Lab: 4

## ART 234, 235, 236

FIGURE DRAWING I, II, III
Studio introduction to drawing the clothed and unclothed figure using a variety of techniques and media. Recommended prerequisite: ART 131 or instructor approval.

## Credits: 3 Lecture: 2 Lab: 4

## Art Studio courses - Metalcraft

## ART 157 <br> 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 prerequisite: MTH 60. Not offered every term.
Credits: 3 Lecture: 2 Lab: 4

## ART 158

## METALCRAFT II

Improves basic skills necessary to work nonferrous metals plus casting, texturing, chain making, chasing and repousse and stonesetting. 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 prerequisite: ART 157.
Credits: 3 Lecture: 2 Lab: 4

## ART 159 <br> METALCRAFT III

Skills necessary to work nonferrous metals such as mechanisms, casting, etching, hinges, chasing and repousse, angle-raising and stone-setting are included. Projects can be jewelry, hollowware or small sculpture. Development of imaginative ideas and personal aesthetic direction is expected. Experimentation and invention is encouraged. Recommended prerequisite: ART 158 and ART 117.
Credits: 3 Lecture: 2 Lab: 4

## ART 257, 258, 259

## METALCRAFT IV, V, 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 or small sculpture. Development of imaginative ideas and personal aesthetic direction is expected. Experimentation and invention are encouraged. Recommended prerequisites: ART 159 and ART 117.
Credits: 3 Lecture: 2 Lab: 4

## Art Studio courses - Painting

## ART 181

## PAINTINGI

Introduction to materials and techniques using 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 prerequisite: ART 131 or instructor approval.

## Credits: 3 Lecture: 2 Lab: 4

## 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 prerequisites: ART 131 and ART 181 or instructor approval.
Credits: 3 Lecture: 2 Lab: 4

## ART 183

## PAINTING III

Exploration of personal iconography. Studio experience using still life, landscape, figure in context, abstract spatial and abstract geometric. Recommended prerequisites: ART 131 and ART 182 or instructor approval.

## Credits: 3 Lecture: 2 Lab: 4

## 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 non-traditional supports. Recommended prerequisites: ART 131 and ART 183 or instructor approval.

## Credits: 3 Lecture: 2 Lab: 4

## ART 282

PAINTING V
Emphasis on individual exploration of color, visual concepts, critical doubling, the diptych and scale. Recommended prerequisites: ART 131 and ART 281 or instructor approval.

## Credits: 3 Lecture: 2 Lab: 4

## 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 prerequisites: ART 131 and ART 282 or instructor approval.
Credits: 3 Lecture: 2 Lab: 4
Art Studio courses - Photography
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 outside of class shooting, as will text readings. In class critiques of work are a major part of this course. Recommended prerequisite: ART 115.
Credits: 3 Lecture: 2 Lab: 4

## ART 162 <br> 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 prerequisite: ART 161.

## Credits: 3 Lecture: 2 Lab: 4

## ART 163 <br> 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 prerequisite: ART 161.

## Credits: 3 Lecture: 2 Lab: 4

## Art Studio courses - Sculpture

## ART 191 <br> SCULPTURE

Studio introduction to articulation of visual ideas in three dimensions using additive and subtractive processes. Recommended prerequisite: ART 117 and ART 131. Not offered every year.
Credits: 3 Lecture: 2 Lab: 4

## Art Studio courses - Watercolor

## ART 184, 185, 186, 284, 285, 286

## WATERCOLOR I, II, III, IV, V, 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 prerequisite for ART 185-
ART 286 is ART 131 or instructor approval.
Credits: 3 Lecture: 2 Lab: 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 prerequisites:

## ART 131 and ART 154.

Credits: 3 Lecture: 2 Lab: 4

## AUTOMOTIVE TECHNOLOGY

## AUT 101 <br> 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. Prerequisites: AUT 106 and MTH 10.
Credits: 2 Lab: 6

## AUT 102

## AUTOMOTIVE ELECTRIC I

Studies disassembly, testing, and rebuilding of various electrical equipment. Stresses troubleshooting and using various test equipment common to the automotive trade. Prerequisites: AUT 101, AUT 107.
Credits: 4 Lecture: 2 Lab: 6

## 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 101, AUT 102, AUT 107.
Credits: 2 Lecture: 1 Lab: 3

## AUT 104 <br> 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. Recommended prerequisites: AUT 101, AUT 102 and AUT 107.
Credits: 2 Lecture: 1 Lab: 3

## AUT 105 <br> 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 102 and AUT 107.
Credits: 2 Lecture: 1 Lab: 3

## AUT 106

## AUTOMOTIVE PROGRAM ORIENTATION

Introduction to the Automotive Program. Provides an understanding of the fundamental principles of automotive shop safety and tool care. Instruction given to the self-paced course program.
Credits: 1 Lecture: 1

## AUT 107 <br> 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. Prerequisite: AUT 106.
Credits: 3 Lab: 9

## AUT 108

## AUTOMOTIVE - HUMAN RELATIONS

Course explores career making tools in the area of human relations. Students will evaluate their own strengths and weaknesses, with comparable case studies, as they compare their own experiences in a "safe" mode of learning. Includes introductions to Human Relations, Supervisory Practices, Principles of Management, Communications, and Career and Self-Explorations. A self-paced course. Prerequisite: WR 60.
Credits: 1 Lab: 3

## AUT 110

## SMALL GAS ENGINES

Course is 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: AUT 106, MTH 10.

## Credits: 3 Lab: 9

## AUT 111 <br> 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 101, AUT 102, AUT 106, AUT 107 and MTH 20.
Credits: 5 Lecture: 3.5 Lab: 4.5

## AUT 199 <br> SELECTED TOPICS: AUTOMOTIVE <br> Credits: 1 to 4

## AUT 201 <br> 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 106, AUT 107, AUT 110 and MTH 10. Credits: 4 Lecture: 2 Lab: 6

## AUT 202 <br> MANUAL DRIVE TRANSMISSION I

Studies standard transmissions, clutches, drive shafts, rear axle assemblies, transaxles, shift controls, and four-wheel drive components. Students will learn operating principals, diagnosis, and approved repair procedures on manual transmissions and related power train components. Prerequisites: AUT 101, AUT 106, AUT 107 and MTH 20.
Credits: 3 Lecture: 1.5 Lab: 4.5

## AUT 204 <br> STEERING AND SUSPENSION

Designed to study and apply the theory, operation, diagnoses and repair of the modern suspension and steering systems of both domestic and import vehicles. Prerequisites: AUT 106, AUT 107, AUT 208 and MTH 10.
Credits: 3 Lecture: 1.5 Lab: 4.5

## AUT 205 <br> ENGINE PERFORMANCE I

Studies the diagnosis of drivability problems. Covers engine analysis, cooling and exhaust systems, ignition and fuel management systems. Recommended prerequisites: AUT 101, AUT 103, AUT 104 and AUT 107.
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. Recommended prerequisites: AUT 101, AUT 102, AUT 103, AUT 107, AUT 111 and AUT 205.
Credits: 2 Lecture: 1 Lab: 3

## AUT 208 <br> 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 106, AUT 107 and MTH 10.
Credits: 3 Lecture: 1.5 Lab: 4.5

## 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 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. Prerequisite: completion of two terms of Automotive Technology curriculum.

## Credits: 1 to 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. Prerequisites: AUT 101, AUT 106, AUT 107 and MTH 20.
Credits: 3 Lab: 9

## AUT 252

## AUTOMATIC TRANSMISSIONS II

This is the second part of an automatic transmission sequence. Course continues 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. A self-paced course. Prerequisites: AUT 101, AUT 106, AUT 107, AUT 251 and MTH 20.
Credits: 1 Lecture: . 5 Lab: 1.5

## 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, AUT 106, AUT 111 and MTH 20.
Credits: 3 Lecture: 1.5 Lab: 4.5

## AVIATION-PROFESSIONAL PILOT AIRPLANE

## AV 101 <br> INTRODUCTION TO AVIATION

Designed to help students explore various career options and prepare for a career in aviation. A variety of employment opportunities is investigated, including commercial, business, corporate, military and general aviation related business. Emphasis will be given to careers in operations and flight technology.

## Credits: 3 Lecture: 3

## AV 104 <br> INTRODUCTION TO AIRCRAFT SYSTEMS

Course 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 Aviation Regulations, including the use of Minimum Equipment Lists, will be studied.
Credits: 4 Lecture: 4

## AV 108

## METEOROLOGY I

Designed as an introduction to the fundamentals of meteorology and the understanding and application of basic weather concepts to flight planning and in-flight operations. Emphasis is placed on maximizing aircraft performance and minimizing exposure to weather hazards. Study will include atmospheric circulation patterns and resultant weather systems. Detailed analysis of weather reports and forecasts will place emphasis on pilot flight planning and decision making with respect to flight operations.
Credits: 4 Lecture: 4

## AV 110

## PRIVATE PILOT

Provides initial ground instruction in aeronautical skills and knowledge applicable to the Professional Pilot syllabus and private pilot rating. Course involves an introduction to pilot training, human factors in aviation, and aviation opportunities, with emphasis on flight planning and decision-making, human factors, and crew resource management. Comprehensive course that includes all aspects pertaining to Private Pilot flight operations. Three hours of flight simulator or Advanced Training Device time required.

## Credits: 5 Lecture: 5

## AV 111

## FLIGHT MANEUVERS

Provides the preflight training required for the FAA approved FAR Part 141 private pilot syllabus. Topics include global positioning systems, aircraft and pilot logbooks/documents, preflight preparation, flight maneuvers and phase exams. Recommended corequisites: AV 110 Private Pilot and enrollment in the FAR 141 program.
Credits: 3 Lecture: 3

## AV 115

## PRIVATE PILOT-HELICOPTER

Covers fundamentals of flight, flight operations, aviation weather, performance and navigation, aircraft systems, aeronautical publications, Federal Aviation Regulations, flight planning, radio procedures, meteorology and human factors. Students will be prepared for the FAA Private Pilot Rotocraft knowledge test. Recommended prerequisite: MTH 20.
Credits: 8 Lecture: 8

## AV 150 <br> AERODYNAMICS

Course is 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
airplace design and operational characteristics. Aircraft stability and control are related to airplace performance and safety.
Students will demonstrate their knowledge of aerodynamics through projects in which they predict aircraft performance. Recommended prerequisite: MTH 95.
Credits: 4 Lecture: 4

## AV 199

## SELECTED TOPICS: AVIATION

Credits: 1 to 8

## AV 204 <br> ADVANCED AIRCRAFT SYSTEMS

Course encompasses a detailed study of aircraft systems and structures and enables the students 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 Federal Aviation Regulations, including use of Minimum Equipment Lists, will be studied. Recommended prerequisite: AV 104.
Credits: 4 Lecture: 4

## AV 208 <br> METEOROLOGY II

Course will focus on application of meteorology theory to aviation and the availability, understanding and use of available weather products for flight planning and in-flight operations. Emphasis is placed on maximizing aircraft performance and minimizing exposure to weather hazards. Study will include 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 in flight planning and decision making. Recommended prerequisite: AV 108 or instructor approval.

## Credits: 4 Lecture: 4

## AV 210A <br> INSTRUMENT-AIRPLANE

The instrument rating ground school prepares students for the FAA instrument written exam and an FAA Instrument rating. Course will include an in-depth study of basic altitude instrument flying, IFR navigation systems and procedures, aircraft flight instruments, aviation weather, applicable FARs and the instrument charts required for IFR flight. Recommended prerequisites: AV 110 and/or Private Pilot certificate.
Credits: 5 Lecture: 5

## AV 210H

## INSTRUMENT-HELICOPTER

The instrument rating ground school for helicopter prepares students for the FAA instrument written exam and an FAA Instrument rating. Course will include an in-depth study of basic altitude instrument flying, IFR navigation systems
and procedures, aircraft flight instruments, aviation weather, applicable FARs and the instrument charts required for IFR flight. Recommended prerequisites: AV 115 and/or Private Pilot certificate.
Credits: 5 Lecture: 5

## AV 220

## COMMERCIAL PILOT

Ground instruction of aeronautical skills and knowledge applicable to the commercial pilot certification portion of the Professional Pilot training syllabus. Subjects covered include night flight, aviation physiology, advanced aerodynamics, aircraft performance, weight and balance, complex aircraft operations, advanced airplace systems, commercial operations and Federal Aviation Regulations for commercial pilots and noncommercial flight operations, with emphasis on human factors, crew resource management, and decision-making. Course requires 16 hours of simulator instruction. Recommended prerequisite: AV 110 and/or FAA Private Pilot Rating.
Credits: 4 Lecture: 4

## AV 225

## COMMERCIAL HELICOPTER

Course is designed to review 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 written exam. Recommended prerequisites: AV 115 and/or Private Pilot certificate.
Credits: 4 Lecture: 4

## AV 230

## MULTI ENGINE PILOT

Ground instruction of aeronautical skills and knowledge applicable to the commercial and multi-engine pilot certification portion of the Professional Pilot training syllabus. Emphasis is on flight planning and decision-making, human factors, and crew resource management. Course requires four hours of Advanced Training Device instruction. Recommended prerequisites: AV 110 and/or FAA Private Pilot Rating.

## 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. Three hours of simulator training is required to complete this course.

## Credits: 4 Lecture: 4

## AV 246 <br> 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 and analysis of accident reports.
Credits: 3 Lecture: 3

## AV 255

## CERTIFIED FLIGHT INSTRUCTOR-HELICOPTER

Course teaches techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and Federal Aviation Regulations applicable to flight instructors. Some practice teaching will be required. Preparation for the FAA written exam included. Course requires five hours of simulator instruction. Recommended prerequisites: AV 225 and/or Commercial Pilot certificate.

## Credits: 5 Lecture: 5

## AV 256 <br> CERTIFIED FLIGHT INSTRUCTOR GROUND SCHOOL

This course is designed to provide the commercial pilot/flight instructor applicant with fundamental concepts and practice for successful flight instruction at the 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. Students participate by giving one-on-one flight briefings, leading classroom discussions, and teaching in a classroom setting. Course requires three hours of simulator instruction. Recommended prerequisite: AV 220;
FAA Commercial Pilot Rating.
Credits: 5 Lecture: 5

## AV 299

SELECTED TOPICS: AVIATION
Credits: 1 to 8

## BIOLOGY

## BI 101

## GENERAL BIOLOGY I

Designed to fulfill general education requirements, courses are intended for non-major students whose program requires biology courses. Centers on concepts of unity of living organisms including evolution, biochemistry, cell biology (morphology and physiology), genetics and development.

## Credits: 4 Lecture: 3 Lab: 3

## BI 102 <br> GENERAL BIOLOGY II

Designed to fulfill general education requirements, courses are intended for non-major students whose program requires biology
courses. Focus is on concepts of biological diversity including evolution and adaptations to local environments.
Credits: 4 Lecture: 3 Lab: 3

## BI 103 <br> GENERAL BIOLOGY III

Designed to fulfill general education requirements, courses are intended for non-major students whose program requires biology courses. Focus is on interconnections such as coevolutionary adaptations among organisms and interactions with environmental factors/resources.
Credits: 4 Lecture: 3 Lab: 3

## BI 121, 122

## ANATOMY AND FUNCTION I, II

Covers body organization, cell, skin, blood, heart and circulation, immunity, respiration, bones and muscles. Designed for medical assisting, health records, practical nursing and massage therapy programs. Lecture and lab must be taken simultaneously; not offered as separate classes. Should be taken in sequence.
Credits: 4 Lecture: 3 Lab: 3

## BI 188

SS: BIOLOGY
Credits: 1 to 6

## BI 205 <br> 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 <br> PRINCIPLES OF BIOLOGY I

Introduces basic principles common to all living organisms. Emphasizes cellular morphology and physiology, genetics, evolution, and ecology. Designed for majors in the life sciences. Recommended prerequisites: LIB 127 and CH 221, 222, 223 or concurrent enrollment.
Credits: 5 Lecture: 4 Lab: 3

## BI 212

BIOLOGY OF PLANTS II
Surveys diversity of Monera, Protista, Fungi and plant kingdoms; examines living plants, their evolutionary interrelationships, morphology and physiology. Recommended prerequisites: LIB 127 and BI 211 or instructor approval.

## Credits: 5 Lecture: 4 Lab: 3

## BI 213 <br> BIOLOGY OF ANIMALS III

Examines types of living animals, their interrelationship, morphology and physiology. Recommended prerequisites: LIB 127 and BI 211 or instructor approval.
Credits: 5 Lecture: 4 Lab: 3

## BI 214

## BIOCHEMISTRY AND GENETICS

Through a combination of lectures, problem solving, and laboratory exercises this course explores amino acid chemistry, the structures and functions of proteins, basic metabolism and energy conservation, the genetics of biochemical pathways, assortment and linkage of genes, the structure and replication of DNA, mutation, and repair, gene mapping, complementation and the structure and regulation of genes. Recommended prerequisites: BI 211 or CH 223 or equivalent.
Credits: 4 Lecture: 3 Lab: 3

## BI 231, 232, 233

HUMAN ANATOMY AND PHYSIOLOGY I, II, III
Covers body organization, cells, tissues, skin, bones, muscle and nerve impulses. For students in nursing and other preprofessional health programs. Should be taken in sequence. Recommended prerequisite: knowledge of chemistry.

## Credits: 4 Lecture: 3 Lab: 3

## BI 234 <br> MICROBIOLOGY

Introduces microorganisms, especially bacteria and viruses which cause serious infectious diseases, and introduces the study of those diseases. Designed especially for students in nursing, and other pre-professional health programs.

## Credits: 4 Lecture: 3 Lab: 3

## BI 280

CO-OP WORK EXPERIENCE BIOLOGY
Credits: 1 to 4

## Bl 288

SPECIAL STUDIES: BIOLOGY
Credits: 1 to 4

## BI 299

SELECTED TOPICS: BIOLOGY
Credits: 1 to 5

## BOT 203

## GENERAL BOTANY

Surveys flowering plant families by identification of local flora and the use of taxonomic keys. Studies floral morphology, history and development of classification, and systematics. Recommended prerequisite: BI 103 or BI 212 or instructor approval. Credits: 4 Lecture: 3 Lab: 3

## ENVS 210 <br> ENVIRONMENTAL RESOURCES

Introduction to environmental resources and issues that affect Oregon and the world. Covers scientific basis for dealing with environmental resources and introduces application of solutions within social framework of our society. Intended to foster awareness, stimulate discussion, and encourage critical analysis of environmental problems.
Credits: 4 Lecture: 3 Lab: 2

## BUSINESS ADMINISTRATION

## BA 56 <br> COST ACCOUNTING

Introduces cost accounting concepts, applications, and techniques employed in the accumulation and reporting of manufacturing cost data. Job order costing, process costing, and standard costing systems are examined, with special emphasis on how each system accounts for materials, labor and factory overhead. Recommended prerequisite: BA 112 or BA 212.
Credits: 3 Lecture: 3

## BA 80 WORKING INTERNSHIP

Provides college credit for student employment in fields pertaining to business curriculum. Credit is given based upon a total workload of 35 hours and completion of learning objectives. Learning experience coordinated with student's supervisor and teacher. This course is designed for students entering the workforce or a particular industry. May not be repeated for credit. Instructor approval required.
Credits: 1 Lecture: . 3 Other: 3.5

## BA 81 <br> PUBLIC RELATIONS

Illustrates history and theory of public relations (PR). Describes interactions of PR with other marketing promotion activities. Examines basic uses of media and provides experience in creating news releases and public announcements. Recommended prerequisite: BA 223.
Credits: 3 Lecture: 3

## BA 101 <br> INTRODUCTION TO BUSINESS

Provides basic understanding of components of business. Introduces economic and legal environments affecting business. Includes discussions on management, marketing and finance.
Credits: 4 Lecture: 4

## BA 104 <br> BUSINESS MATH

Designed to equip students with how 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. Recommended prerequisite: MTH 20.
Credits: 3 Lecture: 3

## BA 105

## MATH FOR BUSINESS DECISIONS

Course is designed to develop mathematical analytical skills in performing the daily tasks of a manager or salesperson. Focus includes: strengthening the understanding and use of business terminology in regards to financial information; developing spreadsheets skills in evaluating the costing, pricing, and financing strategies of products and services; and developing skills in evaluating financial and investment decisions. Recommended prerequisites: CIS 131 and either BA 104 or MTH 65.
Credits: 4 Lecture: 3 Lab: 2

## BA 111

## APPLIED ACCOUNTING I

Course is 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. Recommended prerequisite: MTH 60.
Credits: 3 Lecture: 3

## BA 112

## APPLIED ACCOUNTING II

Course is a continuation of Applied Accounting I. It provides a detailed study of the mechanical and theoretical aspects of the bookkeeping and accounting process as it relates to a merchandising business. Recommended prerequisite: BA 111.
Credits: 3 Lecture: 3

## BA 113 <br> APPLIED ACCOUNTING III

Course is a continuation of Applied Accounting II. It provides students with an in-depth, more detailed background of specific areas of accounting so that they will be able to effectively deal with most accounting situations as they relate to all business forms. Recommended prerequisite: BA 112.
Credits: 3 Lecture: 3

## BA 150

## THE BUSINESS OF MASSAGE

Designed specifically for massage therapy students to answer the many questions involved in turning their skill and knowledge into a successful career and business. Presents basic tenets of business entrepreneurship. Covers identifying trends, target markets, analyzing competition, location analysis, distribution,
financing businesses, legal issues, management of small businesses, and writing a business plan.
Credits: 3 Lecture: 3

## BA 156

## BUSINESS ECONOMICS

Examines principles involved with and dependent upon American economic system. Covers laws of supply and demand, pricing policy, differences between economic systems and business organizations, money and monetary policy, Keynesian vs. supply side economics and global economics.

## Credits: 3 Lecture: 3

## 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 prerequisite: BA 112 or BA 212.

## Credits: 3 Lecture: 3

## BA 178

## CUSTOMER SERVICE

Introduces concepts of basic customer service. Covers how to develop and establish a customer service vision. Examines how to understand customer expectations before, during and after service delivery. Reviews tenets of developing, managing and evaluating service strategies.

## Credits: 3 Lecture: 3

## BA 180

## CO-OP WORK EXPERIENCE

Cooperative work experience is a learning strategy designed to enhance a student's knowledge, personal development, professional development, and professional preparation by integrating academic study with practical experience. Student completes on-the-job training in an office environment. BA 180 is designed for Level I and Level II students participating in AAS business or office administration program. Emphasis will be placed on management, marketing, accounting, and operational concepts covered in Introduction to Business and/or Level II classes. Recommended pre- or corequisite: BA 101 and instructor approval.
Credits: 1 to 3

## BA 188 <br> SPECIAL STUDIES: BUSINESS

Engages students with projects from local businesses in the areas of accounting, marketing, management and operations. Recommended prerequisite includes completion of most Level I and Level II classes from the AAS degree. Instructor approval required. Credits: 1 to 3

## BA 199 <br> 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. Instructor approval required.
Credits: 1 to 5

## BA 203

## GLOBAL BUSINESS

Prepares students for better understanding of many facets of dealing with foreign entities. Surveys institutions, environments, forces and problems involved with the conduct of global trade. Examines trade organizations, monetary systems, government relations, language and custom barriers, and future trends. Recommended prerequisite: BA 223. May be taught with MIC designation.
Credits: 3 Lecture: 3

## 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 prerequisite: BA 101.

## Credits: 4 Lecture: 4

## BA 207 <br> 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 is used extensively as the instructional method. Recommended prerequisite: BA 206.

## Credits: 4 Lecture: 4

## BA 209 <br> BUSINESS ETHICS

Explores current issues in business ethics from the owner, employee, and consumer viewpoints. Ethical theories are reviewed and cases are used to evaluate conflicts existing between business profits, the legal environment, and morality. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

## BA 211 <br> 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 prerequisite: MTH 65.
Credits: 3 Lecture: 3

## 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 prerequisite: BA 211.

## Credits: 3 Lecture: 3

## BA 213 <br> MANAGERIAL ACCOUNTING

Introduces managerial accounting theory, including cost-volumeprofit analysis, product costing, budgeting, capital investing, and cost management in manufacturing and service organizations. Recommended prerequisite: BA 212.
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 nonbusiness majors and no previous accounting is required.
Recommended prerequisite: MTH 65.
Credits: 3 Lecture: 3

## 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 222 <br> BUSINESS FINANCE

Targets role of financial management in business and provides understanding of the effect of finance on business decisions. Covers financial forecasting, capital budgeting and risk, financial institutions, securities markets, the investment process and
working capital management. Recommended prerequisites: BA 104 and either BA 113 or BA 212.

## Credits: 3 Lecture: 3

## BA 223 <br> 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 prerequisite: BA 101.

## Credits: 4 Lecture: 4

## BA 224 <br> 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 prerequisite: BA 206.
Credits: 4 Lecture: 4

## BA 226 <br> 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 form 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 prerequisite: 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 prerequisite: BA 111 or BA 211.
Credits: 3 Lecture: 1 Lab: 3

## 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 prerequisites: CIS 131 and BA 111 or BA 211.
Credits: 3 Lecture: 2 Lab: 2

## BA 238 <br> SELLING AND NEGOTIATION

Covers role of personal selling in the firm's marketing mix. Emphasizes creating value and the techniques used for building buyer relationships during the selling process. Also emphasizes customer service, handling complaints and sales force management techniques. Recommended prerequisite: BA 223.
Credits: 4 Lecture: 4

## BA 239

## MARKETING PRINCIPLES II

Previously titled BA 239 Advertising. Develops understanding of the principles and techniques necessary to develop 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 prerequisite: 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 prerequisite: BA 223.

## Credits: 4 Lecture: 4

## BA 250 <br> ENTREPRENEURSHIP

Covers basic tenets of business entrepreneurship. Instruction covers identifying trends, target markets, analyzing competition, location analysis, distribution, financing businesses, and legal and management issues. Recommended prerequisites: WR 121, BA 223 , BA 111 or BA 211 , and basic computer skills.

## 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. May be repeated once. Instructor approval required.

## Credits: 1 to 6

## BA 285 <br> 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 prerequisite: WR 121.
Credits: 3 Lecture: 3

## BA 286 <br> 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 prerequisite: BA 101.
Credits: 4 Lecture: 4

## BA 290

BUSINESS SEMINAR
Tests student's knowledge of all facets of business curriculum. While assessing outcomes from the business administration program, this capstone course provides practice in decision making and problem solving. Involves competing in a sophisticated computer simulation. Special projects may be included. Students should complete management, marketing and accounting course work prior to enrolling in this seminar.

## Credits: 3 Lecture: 3

## CAREER/LIFE PLANNING

## HD 110 <br> CAREER PLANNING

Helps students increase their self-understanding and make decisions about their educational goals and career plans. Through group discussion, lectures and several tests, students explore their own interests, skills and values, and learn to approach career planning as a lifelong process.
Credits: 2 Lecture: 2

## CASCADE CULINARY INSTITUTE

## CCI 21 <br> HOT FOOD PRODUCTION I

Introduces procedures and techniques of commercial food production. Principles underlying the selection, composition and preparation of major food products are presented. Students participate in baking, roasting, broiling, grilling, etc. of basic food items such as fish, poultry, meat, breads and desserts. Instructor approval required.
Credits: 4 Lecture: 2 Lab: 4

## CCI 22 <br> HOT FOOD PRODUCTION II

Preparation of breakfast fare, egg cookery, simple desserts with emphasis on correct technique; identification of basic stocks and sauces; effects of heat on foods, cooking methods; the art of seasonings and flavorings; and developing an understanding of recipes combined with correct use of weights and measures and scaling techniques. Prerequisite: CCI 21 with grade of C or better. Credits: 4 Lecture: 2 Lab: 4

## CCI 23 <br> HOT FOOD PRODUCTION III

Continuation of fundamentals of food preparation learned in Hot Food Preparation II. Includes more complex production of stocks and sauces, with an understanding of their uses and place in everyday food service operations; production of vegetables, starches, fish and lunch entrees; and developing an understanding of the techniques of grilling, frying, broiling and sautéing. Prerequisite: CCI 22 with grade of C or better.

## Credits: 4 Lecture: 2 Lab: 4

## CCI 41

BAKING I
Students learn fundamentals of baking science, terminology, ingredients, weights and measures, formula conversions and storage; preparation of yeast goods, pies, cakes, cookies and quick breads; and use and care of equipment. Instructor approval required.
Credits: 4 Lecture: 2 Lab: 4

## CCI 42

## BAKING II

Continued learning in the theory and production of more complex yeast products; production of desserts for the lunch operation; how to make torte and cake fillings, frostings and icings; and how to work with chocolate, tempering, molding and decorating. Also, students gain understanding of how to bake and cool cakes according to different altitude adjustments. Prerequisite: CCI 41 with grade of C or better.

## Credits: 4 Lecture: 2 Lab: 4

## CCI 43

## BAKING III

Teaches production of classical tortes and cakes, plated desserts, Danish dough, puff pastry and brioche dough, sourdoughs, croissant dough and pate, butter creams, pastry creams, meringues and different cake methods. Prerequisite: CCI 42 with grade of C or better. Credits: 4 Lecture: 2 Lab: 4

## CCI 51 <br> GARDEMANGER I

Teaches basic principles of gardemanger, applying them to the pantry area and salad stations and how they relate with other kitchen operations. Focuses on plate presentation and simple garnishes; product knowledge and identification; preparation of
salads and salad dressings: preparing of dressings by type, recipes and techniques; and sandwich breads and fillings. Instructor approval required.
Credits: 4 Lecture: 2 Lab: 4

## CCI 52 <br> GARDEMANGER II

Continuation of principles learned in Gardemanger I. Focuses on complex garnishes, artistic presentations, buffet displays and introduces hors d'oeuvres. Teaches cold food presentation and appearance, cold platter presentation along with hands-on experience with lunch production. Prerequisite: CCI 51 with grade of C or better.
Credits: 4 Lecture: 2 Lab: 4

## CCI 53 <br> GARDEMANGER III

Teaches advanced methods for garnishes, ornamental pates, terrines and galantines; preparations of basic forcemeat, aspics and Chad-froid; tableside cold preparations; specialty leaf salads, fruit and vegetable; basic vinaigrette, mayonnaise, pesto and cold sauces; salt dough statues; garnishes both edible and decorative. Prerequisite: CCI 52 with grade of C or better.

## Credits: 4 Lecture: 2 Lab: 4

## CCI 61 <br> DINING ROOM SERVICE I

Hands-on table setting for differing meal periods and for differing menus according to types of service used in various food service operations. Teaches importance of relationship between the kitchen and service staff; positions and responsibilities of dining room personnel; correct handling of guest checks, review of differing guest check systems from manual to computerized along with assets and liabilities of such systems; requirements for staffing the dining room for lunch operation. Instructor approval required.
Credits: 3 Lecture: 1 Lab: 4

## CCI 62 <br> DINING ROOM SERVICE II

Teaches American, French and Russian service; table-side cooking techniques; appetizer, salad, entree, dessert, carving; includes plating and serving; different types of champagnes, wines and beers; basic service techniques; special dinner setups with six courses or more; and buffet setups of $100,500,1,000$ people. Prerequisite: CCI 61 with grade of C or better.
Credits: 3 Lecture: 1 Lab: 4

## CCI 63

## DINING ROOM MANAGEMENT

Students gain proficiency in running a fine dining room. The students rotate and assume responsibilities of headwaiter, sommelier, tableside captain, maitre d'hotel. Prerequisite: CCI 62 with grade of C or better.
Credits: 3 Lecture: 1 Lab: 4

## CCI 71 <br> BASIC SANITATION

Helps students practice skills that result in serving safe and healthy food. Two thrusts of this course are learning what causes food-borne illness and how to prevent food-borne illness. Class standards based upon National Restaurant Association Education Foundation ServSafe Certification program and meets state food code requirements for food handler training and certification.

## Credits: 2 Lecture: 2

## CCI 81 <br> FOOD SERVICE NUTRITION

Focuses on nutrition as it relates to the body, as well as to food preparation and diet planning. Basic nutrients covered include carbohydrates, fats and proteins, vitamins and minerals. Special diet modifications are discussed in relation to menu preparation.

## Credits: 2 Lecture: 2

## CCI 91 <br> FOOD SERVICE CONTROLS

Students completing this class should be able to use mathematical tools to operationally and financially control kitchens. Students apply basic skills of using fractions, decimals, multiplication and division to calculate ratios, expand/contract recipes, price menu items, manage inventory, calculate food and beverage cost percentages, read income statements and determine food service operation efficiency and profitability. Prerequisite: MTH 20.
Credits: 3 Lecture: 3

## CCI 93 <br> WINE AND BEVERAGES

Combines an understanding of the origin and production of spirits, wines, beers, and ales with how they are to be served. Discusses how alcoholic beverages should be priced, purchased, inventoried, and poured. Students will be exposed to mixology, glass wear, and the equipment that is customary to beverage operations. Beverage operations analysis for profitability is covered. Legal aspects to alcoholic beverage service will also be discussed including how to minimize legal exposure and proper methods of service control. Instructor approval required.

## Credits: 3 Lecture: 3

## CCI 107

## CULINARY SUPERVISION

Introductory course in first-line supervision (team leader, shift supervisor, kitchen manager, or sous chef). Includes topics on work management, problem solving, running meetings, effective delegation, business communications, and how to lead effective teams. Course focuses on both business and human relations view points of supervision practices.

## Credits: 3 Lecture: 3

## CCI 280 <br> CO-OP WORK EXPERIENCE CULINARY

Enhances student's knowledge, personal development, professional development, and professional preparation by integrating academic study with practical experience. On-the-job training in a restaurant or food service environment. Instructor approval required.
Credits: 6 Other: 30

## CHEMISTRY

## CH 104, 105, 106 <br> INTRODUCTION TO CHEMISTRY I, II, III

Introduces basic principles of general chemistry, including atomic theory, chemical formulas and equations, bonding, stoichiometry, acid/base chemistry, and solutions. Supporting laboratory work included. Recommended prerequisite: year of high school algebra or MTH 60 equivalent. Not designed for science majors.
Credits: 4 Lecture: 3 Lab: 3

## CH 188 <br> SPECIAL STUDIES: CHEMISTRY <br> Credits: 1 to 4

## CH 221, 222, 223

## GENERAL CHEMISTRY I, II, III

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. Recommended prerequisite: MTH 95 or equivalent. High school chemistry recommended.

## Credits: 4 Lecture: 3 Lab: 3

## CH 241, 242, 243

ORGANIC CHEMISTRY I, II, III
Explores bonding, structure, nomenclature, properties, syntheses and reactions of the major classes of organic molecules. Includes isomerism, stereochemistry, SN1, 2, E1 and 2 mechanisms. Supporting laboratory work is included. Recommended prerequisite: CH 106 or CH 223, or equivalent.
Credits: 5 Lecture: 4 Lab: 3

## CH 288

SPECIAL STUDIES: CHEMISTRY
Credits: 1 to 4

## COMPOSITE MANUFACTURING TECHNOLOGY

## CMT 101

## INTRODUCTION TO COMPOSITES

Introduces students to the fundamental principles of composite materials and definition of terms used in the composites industry. Basic math, physics and chemistry are introduced for developing an understanding of composite technology. Basic polymer and composite information such as; material types and forms, processes design considerations, inspection, repair and testing will be introduced. Fabrication skills such as; prepreg lay-up, vacuum bagging, wet lay-up and gel coat application will be introduced. Tooling, tool fabrication techniques, use of mold release will also be investigated.

## Credits: 4 Lecture: 4

## CMT 102

## COMPOSITE MATERIALS/PROCESS

Provides increased depth and breadth of topics covered in CMT 101. Course will describe the various families of materials and the types and variations of materials within these families. The process used to select a material for a particular application and manufacturing scenario will be presented. The usage of math and science skills in solving composites related problems will be presented. Advanced usage of engineering and shop drawings to communicate design and fabrication information will be presented. Recommended prerequisite: CMT 101.
Credits: 4 Lecture: 4

## CMT 103 <br> APPLIED COMPOSITE TECHNOLOGY

This is a culminating course to demonstrate the bridge between theory and practice in the application of composites manufacturing technology and prepare the student for the practicum portion of the course. The emphasis in this course is to reinforce the fundamental concepts learned in CMT 101 and CMT 102 and create a detailed operational plan to be executed in the practicum. Recommended prerequisites: CMT 101, CMT 102.
Credits: 4 Lecture: 2 Other: 6

## CMT 110 <br> COMPOSITES OCCUPATIONAL TOPICS

Presents a survey of the composites industry and career options available to students. Examples of how composite materials are used and the reasons why will be presented. Regulations addressing environmental impact, safe handling of materials, general safety rules and procedures and management of facilities will be addressed. An introduction to the safe and effective use of shop tools and power tools for processing composite materials, shop aids and tooling will be given. General concepts of business principles and cost estimating and bid preparation will be introduced along with an emphasis on the importance of strong work ethics and becoming a craftsman in the trade of composites.
Computer skills directly applied to the composites industry will
be discussed. Field trips, visits to local composites manufacturers, demonstrations, guest lectures and some student activities will be included. Recommended prerequisite: completion or concurrent enrollment in CMT 101.
Credits: 4 Lecture: 3 Lab: 3

## CMT 120

## COMPOSITES FABRICATION

Focuses on the skills and concepts needed to fabricate composite structures. The course will emphasize the development of hands-on skills to perform at the level of composites craftsman. A comprehensive survey of needed skills and demonstration of those techniques will be presented. Students will have the opportunity to practice these techniques and demonstrate their ability to perform. Recommended prerequisites: CMT 101, CMT 110, MTH 20.
Credits: 4 Lecture: 3 Lab: 3

## CMT 130 <br> COMPOSITES PRACTICUM I

Provides the student the opportunity to review, refine and demonstrate hands-on composite fabrication skills conducted in an industry setting. An evaluation of learned skills will be co-evaluated between student and instructor to identify any skill areas that need remedial training. Course will provide one hour of lecture content and 12 hours of lab content per week. Course is designed to finalize the Composites Manufacturing Technology Certificate program and prepare the student for the transition into the workplace. A final project will be used to demonstrate comprehensive knowledge of fundamental concepts and execution of required skills. Recommended prerequisites: CMT 101, CMT 102, CMT 110, CMT 120, MTH 20 and the completion or co-enrollment in CMT 103 is required.
Credits: 7 Lecture: 2 Other: 15

## COMPUTER \& INFORMATION SYSTEMS

See Business Administration and Office Administration for other types of computer courses.

## CIS 10 <br> 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. Pass/No pass grading.

## Credits: 1 Lecture: 1 Lab: 1

## CIS 70 <br> INTRODUCTION TO COMPUTERS: WINDOWS

Students will gain confidence in the use of personal computers and the Windows XP operating system. Topics include fundamental computer terminology, introductory use of a
graphics 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 e-mail.
Credits: 2 Lecture: 1 Lab: 2

## CIS 75 <br> BEGINNING EXCEL

Uses Microsoft Excel for Windows to efficiently create simple spreadsheets for business including editing, formatting and printing. Use formulas and functions to calculate typical business solutions, create charts and use database features. Prerequisite: keyboarding skills and computer experience.

## Credits: 2 Lecture: 1 Lab: 2

## CIS 99 <br> SELECTED TOPICS: COMPUTER AND INFORMATION SYSTEMS Credits: 1 to 4

## CIS 120

## COMPUTER CONCEPTS I

Includes computer terminology, hardware and software basics, and the impact of computers on society. Students gain hands-on experience using electronic mail, Web browsers, word processing, spreadsheets and presentation graphics software. Recommended prerequisites: keyboarding, CIS 70 or equivalent computer skills.
Credits: 4 Lecture: 3 Lab: 2

## CIS 121

## COMPUTER CONCEPTS II

Explores the skills necessary for a systems analyst, consultant or project manager that works 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 prerequisite: CIS 120 or CIS 131.

## Credits: 4 Lecture: 3 Lab: 2

## CIS 122

## COMPUTER CONCEPTS III

Introduction to computer programming for those with little or no programming experience. Provides a strong, fundamental understanding of Visual Basic for Applications, a programming language used in the Microsoft Office applications as well as several nonMicrosoft software products. Uses Excel VBA as programming environment and 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 prerequisites: CIS 120 or CIS 131.
Credits: 4 Lecture: 3 Lab: 2

## CIS 125A1 <br> AUTOCAD I

First course in a three-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 pre- or corequisite: CIS 120.
Credits: 3 Lecture: 2 Lab: 3

## CIS 125A2 <br> AUTOCAD II

Second course in a three-term sequence covering intermediate AutoCAD commands including dimension styles, templates, attribute blocks, attribute extraction, external references, object linking/ embedding and advanced drawing setup. Work will be completed with AutoCAD. Recommended prerequisite: CIS 125A1.
Credits: 3 Lecture: 2 Lab: 3

## CIS 125A3

## AUTOCAD III

Third course in a three-term sequence covering advanced AutoCAD commands including User Coordinate System, 3D wireframe, surface, solid modeling, 3D rendering and presentation. Work will be completed with AutoCAD.
Recommended prerequisite: CIS 125A2.
Credits: 3 Lecture: 2 Lab: 3

## CIS 125DB <br> DATABASE THEORY/SQL

Course allows students to take a serious look at database design and development that involves both art and engineering. Students will look at user requirements and then translate those user requirements into effective logical database designs. Then the students will transform those logical designs into physical database designs that essentially mirror the user requirements in the form of a database schema. Students are exposed to normal form theory, first normal through third normal form. Once the design cycle is completed, the course continues by exposing the students to a data manipulation language called SQL (Standard Query Language). The SQL language is essentially used to test and evaluate the database design process by manipulating the test data used in the design phase. Students will get an in-depth exposure to the following SQL commands: SELECT, UPDATE, DELETE, CREATE, TABLE, INSERT, ALTER TABLE and DATA VIEWS. Recommended prerequisite: CIS 131 or CIS 120.
Credits: 4 Lecture: 3 Lab: 2

## CIS 125G

## INTRODUCTION TO WEB GRAPHICS

Covers development of typical Web images including buttons, rollovers and animations. Includes use of digital palettes, tools and a variety of techniques to create images and modify their
size, appearance and resolution. Also covers techniques to maintain detail during file compression. Focuses on imageediting software to manipulate graphic images and prepare them for publication on the World Wide Web. Recommended prerequisites: CIS 120 or CIS 131 or instructor approval. Credits: 4 Lecture: 3 Lab: 2

## CIS $125 S$ <br> INTERMEDIATE SPREADSHEETS

Covers intermediate and advanced features of Excel 2003 such as lists, PivotTables, working with multiple worksheets, templates, macros, What-if-Analysis, data tables, advanced formulas, Goal Seek, Solver, consolidating and importing data, and basic concepts of using VBA. Students will apply these Excel features to create and revise business worksheets. Prepares students for the Excel Expert Microsoft Office Specialist certification exam.
Recommended prerequisites: CIS 120 or CIS 131.

## Credits: 4 Lecture: 3 Lab: 2

## CIS 125WD

## INTERMEDIATE WORD PROCESSING

Uses intermediate and advanced features of Word 2003 including merge, sort, document assembly, section breaks, headers/footers, columns, graphics, macros including VBA, customizing templates, tables, and multi-page documents. Prepares students for the Word Expert Microsoft Office Specialist certification exam. Recommended prerequisite: CIS 120 or CIS 131.
Credits: 4 Lecture: 3 Lab: 2

## CIS 131

SOFTWARE APPLICATIONS
Introduction to beginning and intermediate features of applications software (word processing, spreadsheet, presentation) used to solve and analyze business problems. Recommended prerequisites: keyboarding, CIS 70 or equivalent computer skills and MTH 60 or MTH 85.
Credits: 4 Lecture: 3 Lab: 2

## CIS 135A1

## CAD FOR ARCHITECTURAL DRAFTING I

Introduces fundamental aspects of architectural drafting. Covers drafting of residential and light commercial buildings, sections and elevations, schedules, design layouts, details, and working drawings. Recommended pre- or corequisite: CIS 125A1.
Credits: 3 Lecture: 2 Lab: 3

## CIS 135A2 <br> CAD FOR ARCHITECTURAL DRAFTING II

Continues study of learning and applying architectural drafting theory. Focuses on a complete set of drawing plans related to residential and light commercial design, culminating in a set of working drawings suitable for construction. Recommended prerequisite: CIS 135A1.
Credits: 3 Lecture: 2 Lab: 3

## CIS 135CA <br> CUSTOMIZING AUTOCAD

Examines customization of the AutoCAD menu including tool buttons, pull-down menus. Students create user-defined profiles, linetypes, scripts, Sheet Sets and Tool Palettes and study CAD Standards and integrated file management techniques. Recommended prerequisites: CIS 140, CIS 125A2.
Credits: 3 Lecture: 2 Lab: 3

## CIS 135CD

## CAD FOR CIVIL DRAFTING

Introduces civil drafting applications using civil, mapping, and survey products. Drawings will be developed to include plats, related civil infrastructure, public utilities, contours, profiles and roads. Recommended pre- or corequisites: CIS 125A2, AutoCAD 2.
Credits: 3 Lecture: 2 Lab: 3

## CIS 135CP <br> CAD FOR PRESENTATION

Explores professional portfolio components including design layout, project consideration, resume development, work relations, electronic portfolios, and client presentation. Each student will complete a professionally designed portfolio. Recommended pre- or corequisites: CIS 125A3, AutoCAD III.
Credits: 3 Lecture: 2 Lab: 3

## CIS 135DB <br> ADVANCED DATABASE

Students take a look at designing robust relational database applications using Microsoft Access; the students learn many intricate details of table design, attribute types, default values, primary keys, foreign keys and indexes for optimizing query performance. The query component of the course covers the following query types: SELECT, SELECT GROUPING, SELECT PARAMETERS QUERIES, CROSS TABULATION QUERIES, UPDATE and DELETE queries. All query types are taught in conjunction with String and Date manipulation functions. Course proceeds with Access Forms and Access Reports. The course wraps up with ACCESS MACROS, and Switchboards, putting together a complete Access application that utilizes TABLE DESIGN, QUERY, REPORTS, FORMS, MACROS, and then ties it all together with the use of a Switchboard. Recommended prerequisite: CIS 125DB.
Credits: 4 Lecture: 3 Lab: 2

## CIS 135MD

## CAD FOR MECHANICAL DRAFTING

Introduces mechanical drafting through parametric 3Ddesign tools for assembly-centered modeling and collaborative engineering. Develops fundamental knowledge in the areas of part and assembly modeling, using adaptive features, utilizing work groups, surfacing basics, data management and layout presentation. Recommended pre- or corequisite: CIS 125A1.
Credits: 3 Lecture: 2 Lab: 3

## CIS 140 <br> OPERATING SYSTEMS

This course is for anyone who owns a computer or is interested in a job supporting microcomputers as well as those seeking the vendor neutral CompTIA A+ Operating System certification. Useful for PC hobbyists wishing to transition their skills to the workforce. It introduces the software skill set required of an entry-level computer technician, including operating system fundamentals, software installation and configuration and troubleshooting. Recommended prerequisite: CIS 120 or CIS 131.
Credits: 4 Lecture: 3 Lab: 2

## CIS 145

## MICRO COMPUTER SERVICE

Course reviews the skills and knowledge associated with the CompTIA's A+ Core Hardware Exam's objectives. Completion of the course preps the student for an entry-level position, Technical Support Specialist, supporting personal computer hardware and software. Work on monitors, keyboards, printers and mice may also be done. Recommended prerequisite: CIS 120 or CIS 131.
Credits: 4 Lecture: 3 Lab: 2

## CIS 151C

## INTERNETWORKING

First of a three-course sequence for preparation of the Cisco Certified Network Associate (CCNA) certification exam. "Internetworking I" implements Cisco's online semester 1 curriculum developed by Cisco Systems experts. Covers OSI models, LANs, cabling, cabling tools, topologies, networking devices, IP addressing, network standards and various protocols. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term. Recommended prerequisites: CIS 70, MTH 20 or COMPASS score equivalent, or field experience. Credits: 4 Lecture: 3 Lab: 3

## CIS 152C

## ROUTER CONFIGURATION

Second of a three-course sequence for the preparation of the Cisco Certified Network Associate (CCNA) certification exam. "Router Configuration" implements Cisco's online semester 2 curriculum developed by Cisco Systems experts. Topics include commands used for configuring and monitoring a Cisco 2600 series router. Also included are commands used to secure a LAN. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term. Recommended prerequisite: CIS 151C.
Credits: 4 Lecture: 3 Lab: 3

## CIS 154C

## VLAN AND WAN TECHNOLOGIES

Third of three-course sequence for the preparation of the Cisco Certified Network Associate (CCNA) certification exam. VLAN and WAN technologies implement Cisco's online semester 3 and semester 4 curriculum developed by Cisco Systems experts.

Topics include LAN switches, VLAN, LAN and WAN design, routing protocols and WAN protocols. The lecture/lab environment allows the student the opportunity to practice skills learned throughout the term. Recommended prerequisite: CIS 152C.
Credits: 4 Lecture: 3 Lab: 3

## CIS 160

COMPUTER SCIENCE ORIENTATION
Gives a broad overview of the discipline of computer science. Students will learn about the foundations of computer science such as problem solving and algorithms, programming concepts and computer hardware. Students will also research different careers available in the computer science field and reflect on some of the influences computers have had and will continue to have on society. Students will also have the opportunity to write a few programs in a very low-level and a very high-level language. Strongly recommend some familiarity with programming concepts.
Credits: 3 Lecture: 2 Lab: 2

CIS 161
COMPUTER SCIENCE I
Examines 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. Appropriate for computer science/math/science. Recommended prerequisites: MTH 111 and CIS 160 or previous experience or instructor approval.

## Credits: 4 Lecture: 3 Lab: 3

## CIS 162 <br> COMPUTER SCIENCE II

Continuation of CIS 161. Emphasizes data structures, algorithm analysis and software engineering methods. Recommended preparation: CIS 161 or instructor's permission.
Credits: 4 Lecture: 3 Lab: 3

## CIS 178 <br> INTERNET IN DEPTH

Introduces the Internet and the World Wide Web. Covers browser and e-mail basics, searching the Web, information resources on the Web, and downloading and storing data. Includes mass communication and real-time communication on the Internet and how to secure use of the Internet. Explores a wide variety of Internet protocols and examines how the Internet works. Also covers Web portals, electronic commerce, and how to create and publish a basic Web site. Recommended prerequisites: CIS 120 or CIS 131 or instructor approval.
Credits: 4 Lecture: 3 Lab: 2

## CIS 179

NETWORKING ESSENTIALS
Introduces current network technologies for small local area networks (LANs) and wide area networks (WANs), and the Internet. Introduces hardware, software, terminology,
components, design, and connections of a network as well as topologies and protocols for LANs and WANs. Provides information necessary to pass the CompTIA Network+ (c) exam. Also provides information for those who support or administer networks. Recommended prerequisites: CIS 120 or CIS 131 and CIS 140.
Credits: 4 Lecture: 3 Lab: 2

## CIS 195 <br> WEB DEVELOPMENTI

Explores the use of development tools, HTML/XHTML and CSS to create valid Web sites for a variety of topics. Along with the current markup language, cascading style sheets (CSS) will be used to format Web pages for different media types. Topics include site planning, design, navigation, usability and publishing. Recommended prerequisites: CIS 120 or CIS 131 or instructor approval. Credits: 4 Lecture: 3 Lab: 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 prerequisites: CIS 120 and CIS 131 or instructor approval.
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. Recommended prerequisite: instructor approval.
Credits: 1 to 7

## CIS 235

INFORMATION TECHNOLOGY IN BUSINESS
Uses advanced software (Word 2003, Excel 2003, PowerPoint 2003 and Access 2003) to solve and analyze business problems using integration of the applications in a business environment. Follow-up course to CIS 131 Software Applications and is required for students transferring to the OSU Business Department. Recommended prerequisite: CIS 131.
Credits: 4 Lecture: 3 Lab: 2

## CIS 279AD

WINDOWS 2000 ACTIVE DIRECTORY SERVICES
Introduces students to Microsoft Windows 2000 Active Directory and prepares them to plan, configure, and administer an active directory infrastructure. Provides the information necessary to pass the Microsoft Certification exam 70-217, Implementing and Administering a Microsoft Windows 2000 Directory Services Infrastructure. Recommended prerequisites: CIS 120 or CIS 131, CIS 140, CIS 179 or instructor approval. Credits: 4 Lecture: 3 Lab: 3

## CIS 279NE <br> MANAGING A WINDOWS 2003 NETWORK ENVIRONMENT

This course is for anyone who wants to learn how to install, configure, administer and support primary services in the Windows Server 2003 operating system as well as those seeking Microsoft certification 70-290. Recommended prerequisites: CIS 120, CIS 140 or instructor approval.
Credits: 4 Lecture: 3 Lab: 3

## CIS 279NI

## WINDOWS 2003 NETWORK INFRASTRUCTURE ADMINISTRATION

This course is for anyone who wants to learn how to configure, manage and troubleshoot a Windows 2003 network infrastructure as well as those seeking Microsoft certification 70291. Key concepts covered are DHCP, DNS, RRAS and SUS. Recommended prerequisites: CIS 120 or CIS 131 or CIS 140, CIS 179 and CIS 279NE or CIS 279XP or instructor approval.
Credits: 4 Lecture: 3 Lab: 3

## CIS 2795

## WINDOWS 2000 SERVER

Introduces the Microsoft Windows 2000 Advanced Server. Provides the information necessary to pass the Microsoft Certification exam 70-215, Installing, Configuring, and Administering Microsoft Windows 2000 Server. Course is intended for those who support or administer Microsoft Windows 2000 Server or who are on the Microsoft Certified Systems Administrator or Engineer certification tracks.
Recommended prerequisites: CIS 120 or CIS 131, CIS 140 WN and CIS 179 or instructor approval.
Credits: 4 Lecture: 3 Lab: 3

## CIS 279XP

## WINDOWS XP PROFESSIONAL

This course is for anyone who wants to learn how to install, configure, customize and troubleshoot Microsoft Windows XP Professional as well as those seeking Microsoft certification 70290. Recommended prerequisites: CIS 120 or CIS 131, CIS 140 or instructor approval.
Credits: 4 Lecture: 3 Lab: 3

## CIS 280 <br> CO-OP WORK EXPERIENCE CIS

A learning strategy designed to enhance a student's knowledge, personal development, professional development and professional preparation by integrating academic study with practical experience. Student completes on-the-job training in a computer environment. Students complete a minimum of 33 clock hours of work for each credit hour earned. Recommended prerequisite: instructor approval.

## Credits: 1 to 3

## CIS 295 <br> WEB DEVELOPMENT II

Expands on existing HTML/XHTML/CSS skills and explores the process of making Web sites, particularly e-commerce sites for clients. Students will practice site planning, development, content management and client relations as they create, document and present a single Web site project. Topics include search engine optimization, usability testing, server-side scripting (PHP) and dynamic content (MySQL). Recommended prerequisite: CIS 195 or instructor approval.
Credits: 4 Lecture: 3 Lab: 2

## CRIMINAL JUSTICE

CJ 100
SURVEY OF CRIMINAL JUSTICE SYSTEM
Introductory survey of the functional components of the U.S. criminal justice system. Includes law enforcement, the courts and corrections. Recommended pre- or corequisite: WR 121.
Credits: 3 Lecture: 3

## CJ 101

## INTRODUCTION TO CRIMINOLOGY

Interdisciplinary approach to theoretical perspectives on the causes, treatment and prevention of crime. May be taught with a WIC designation. Recommended pre- or corequisite: WR 121.
Credits: 4 Lecture: 4

## CJ 110 <br> INTRODUCTION TO 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. Recommended pre- or corequisite: WR 121.

## Credits: 3 Lecture: 3

## CJ 120 <br> INTRODUCTION TO 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. Recommended pre- or corequisites: WR 121, CJ 100 or instructor approval.

## Credits: 3 Lecture: 3

## CJ 188 <br> SPECIAL STUDIES: CRIMINAL JUSTICE

Instructor approval required.
Credits: 1 to 12

## CJ 199 <br> SPECIAL TOPICS: CRIMINAL JUSTICE

Presents selected topics of study in criminal justice offered on a temporary or experimental basis. Instructor approval required.
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. Recommended pre- or corequisite: WR 121.

## Credits: 3 Lecture: 3

## CJ 207

## SEMINAR IN CRIMINAL JUSTICE

Examines current issues, questions and procedures within the criminal justice system. By taking political ideologies into account, the class will rate effectiveness of various crime-control policies throughout the system, which policies work (make sense) and which policies have not worked (are nonsense). Recommended pre- or corequisite: WR 121.

## Credits: 3 Lecture: 3

## CJ 210 <br> 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. Recommended prerequisites: WR 121, CJ 100, CJ 110 or instructor approval.

## 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. Recommended prerequisites: WR 121 and CJ 210.
Credits: 3 Lecture: 3

## CJ 220 <br> INTRODUCTION TO SUBSTANTIVE LAW

Distinguishes the basic concepts of substantive law from those of 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. Recommended pre- or corequisites: WR 121 and CJ 100 or instructor approval.

## Credits: 3 Lecture: 3

## CJ 222 <br> 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. Recommended prerequisites: WR 121 and CJ 120 or instructor approval.
Credits: 3 Lecture: 3

## CJ 230

## INTRODUCTION TO 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. Recommended prerequisites: WR 121 and CJ 201. Credits: 3 Lecture: 3

## CJ 243 <br> 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. Recommended pre- or corequisite: WR 121.
Credits: 3 Lecture: 3

## 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. Recommended pre- or corequisite: WR 121.
Credits: 4 Lecture: 4

## CJ 280 <br> 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. Credit given based on total workload of 99 hours per term. Learning experience will be coordinated with student's supervisor. Permission of co-op work experience coordinator required prior to registration. May be repeated once. Students must pass a criminal history background check. Recommended prerequisites: sophomore standing and a minimum of 12 credit hours completed in criminal justice courses.
Credits: 1 to 3

## DANCE

Dance courses will not be offered during 2007-08.

## DENTAL ASSISTING

## DA 110

## BASIC DENTAL ASSISTING

General overview of the dental assisting profession through lecture, discussions, demonstrations, laboratory activities and onsite 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 the Oregon Board of Dentistry and the Centers for Disease Control and Prevention will be implemented. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 115, DA 125, DA 145.

## Credits: 4 Lecture: 2 Lab: 4

## DA 115 <br> DENTAL SCIENCE

Introduces the student to the following areas of study: basic anatomy and physiology, basic head and neck anatomy, dental embryology, oral histology, anatomy of the face and oral cavity, and tooth morphology. Also includes an introduction to the study of oral pathology. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 110, DA 125, DA 145.
Credits: 4 Lecture: 4

## 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 the expanded functions of coronal polishing, suture removal and pit and fissure sealants as mandated by the Oregon Board of Dentistry. Prerequisite: DA 110. Corequisites: DA 130, DA 134, DA 160, 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, cross-contamination and hazard control. Also covers OSHA standards of hazard communication and blood borne pathogens. The management of material safety data sheets and labeling of hazardous material will be implemented. After successful completion of this course, the student will be eligible to take the Dental Assisting National Board (DANB) Infection Control Exam (ICE). Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 110, DA 115, DA 145.
Credits: 3 Lecture: 3

## DA 130 <br> DENTAL MATERIALS I

Covers lecture and laboratory experience in alginate impression materials, impressions and impression trays, diagnostic casts, pouring study models, trimming diagnostic casts, occlusal bite registrations and bleach tray fabrication on a vacuum former. Also covers tofflemire matrix placement, the armamentarium for amalgam and composite, and assisting with the placement of amalgam and composite on dexter. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 120, DA 134, DA 160, DA 181, DA 190.
Credits: 3 Lecture: 2 Lab: 3

## DA 131 <br> DENTAL MATERIALS II

Provides a fundamental knowledge of the materials commonly used in dental practice. Lectures cover physical, chemical and manipulative characteristics of final impression materials, cements, bases, cavity liners, cavity varnishes, waxes, composites, metals and resins. Additionally explores the indications and contraindications of each. Laboratory portion prepares students to correctly manipulate all of these materials. Students will acquire the skills necessary to fabricate custom impression trays on preliminary casts which will be used for final impressions for crowns, bridges and dentures; to clean and polish removable appliances and prostheses; and to fabricate acrylic, polycarbonate and preformed aluminum provisional restorations. Various types of laboratory fabricated fixed prosthodontics, their indications and contraindications, will be reviewed. Prerequisite: DA 130. Corequisites: DA 135, DA 150, DA 151.
Credits: 3 Lecture: 2 Lab: 3

## DA 134 <br> DENTAL RADIOLOGY I

Introduces dental radiology for the dental auxiliary. Includes basic principles of radiography, the history of radiation and an introduction to the physics of radiation. Also covers biological effects of radiation for both the safety and comfort of the patient and the operator. Introduces the radiographic unit and dental Xray film. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 120, DA 130, DA 160, DA 181, DA 190.
Credits: 2 Lecture: 2

## DA 135

DENTAL RADIOLOGY II
Continuation of DA 134. Furthers the student's knowledge of dental radiology. Covers the relationship of dental anatomy and facial structure to the exposure and mounting of dental films. Includes instruction in the various types of film available to the dental professional. The student will perform exposure and processing techniques to a determined level of competency on manikins and then to a determined level of competency on patients. Prerequisite: DA 134. Corequisites: DA 131, DA 150, DA 151. Credits: 3 Lecture: 2 Lab: 3

## DA 145 <br> PREVENTIVE DENTISTRY

Covers the components of preventive dentistry including oral hygiene education, plaque control, fluoride and dietary considerations for the dental patient. Includes ergonomics, dentistry for the special patient and the dental specialties of pediatric dentistry and orthodontics. Also includes the exploration of dental public health programs. Prerequisite: entrance into the Dental Assisting program. Corequisites: DA 110, DA 115, DA 125.

## Credits: 3 Lecture: 3

## DA 150 <br> INTRODUCTION 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, relevant 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. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 131, DA 135, DA 151.

## Credits: 3 Lecture: 3

## DA 151 <br> 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. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 131, DA 135, DA 150.

## Credits: 1 Lecture: 1

## DA 160 <br> ORAL MEDICINE

Introduces students to diagnosis, treatment and pharmacology used in the practice of dentistry. Also includes additional information on oral pathology and the dental assistant's role in dealing with dental emergencies in the dental office. Students completing this course will be capable of recognizing, reacting to, and treating the most common medical emergencies in the dental practice. Emphasis will be placed on prevention of such emergencies. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 120, DA 130, DA 134, DA 181, DA 190.

## Credits: 3 Lecture: 3

## DA 181 <br> DENTAL SEMINARI

Seminar discussions on various aspects of winter term practicums in local dental offices. Guest speakers representing dental specialties and alternative dental employment possibilities will also be scheduled. Students will share work-related experiences with the instructor and their peers. Addresses employment opportunities, completing job applications, and interviewing skills. Prerequisite: entrance into the Dental Assisting program or instructor approval. Corequisites: DA 120, DA 130, DA 134, DA 160, 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 also 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. Prerequisite: entrance into the Dental Assisting program or instructor approval.
Credits: 1 Lecture: 1

## DA 190 <br> DENTAL ASSISTING PRACTICUM I

A supervised, unpaid learning experience which takes place on site at a prearranged clinical facility. 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. Prerequisite: entrance into the Dental Assisting program or instructor approval and DA 110, DA 115, DA 125. Corequisites: DA 120, DA 130, DA 134, DA 160, DA 181.
Credits: 1 to 5

## DA 191 <br> DENTAL ASSISTING PRACTICUM II

A supervised, unpaid learning experience which takes place on site at a prearranged clinical facility. 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. Prerequisite: entrance into the Dental Assisting program or instructor approval and DA 190.

## Credits: 5 to 10

## DA 199

SELECTED TOPICS: DENTAL ASSISTING
Credits: 4

## DEVELOPMENTAL STUDIES

See Mathematics, Reading and Writing.

## DIETARY MANAGEMENT

For students in the Dietary Management Program only.

## DM 111 <br> PRACTICUM: CULINARY SUPERVISION

Practical application of concepts presented in Culinary Supervision. Includes work experience and completion of a notebook. Corequisite: CCI 107 Culinary Supervision.
Credits: 1 Other: 3

## DM 121 <br> PRACTICUM: SANITATION

Practical application of concepts presented in Basic Sanitation. Includes work experience and completion of a notebook. Corequisite: CCI 71 Basic Sanitation.
Credits: 1 Other: 3

## DM 131 <br> PRACTICUM: FOOD SERVICE CONTROLS

Practical application of concepts presented in Food Service Controls. Includes work experience and completion of a notebook. Corequisite: CCI 91 Food Service Controls.
Credits: 1 Other: 3

## DM 210 <br> NUTRITION THERAPY

In-depth study of common diseases and the specific diets used in their treatment. Class format is based on case studies, with nutrition assessment including reviewing laboratory data, developing care plans and discussing recommended diet modifications.
Credits: 2 Lecture: 2

## DM 211 <br> PRACTICUM: NUTRITION THERAPY

Practical application of concepts presented in Nutrition Therapy. Includes work experience, attendance at patient care conferences and completion of a notebook. Corequisite:
DM 210 Nutrition Therapy.
Credits: 1 Other: 3

## DM 221

## PRACTICUM: FOOD SERVICE NUTRITION

Practical application of concepts presented in Foodservice Nutrition. Includes work experience, attendance at patient care conferences and completion of a notebook. Corequisite: CCI 81.
Credits: 1 Other: 3

## DRAFTING TECHNOLOGY/ COMPUTER AIDED DRAFTING AND DESIGN

For Drafting Technology/Computer Aided Drafting and Design Courses, see Computer and Information Systems.

## EARLY CHILDHOOD EDUCATION

## ED 140

## INTRODUCTION TO ECE

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; explores 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. Recommended pre- or corequisite: COMPASS scores: reading 84-100, writing 71-100 or WR 121. Credits: 4 Lecture: 30 ther: 3

## ED 150 <br> ENVIRONMENTS \& CURRICULUM IN ECE

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 prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 121 and ED 140.

## Credits: 4 Lecture: 3 Other: 3

## ED 151

## OBSERVATION \& GUIDANCE IN ECE 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 prerequisite: COMPASS scores: reading 84-100, writing 71-100 or WR 121, ED 140 and ED 150.
Credits: 4 Lecture: 3 0ther: 3

## ED 172

## LANGUAGE AND LITERACY IN EARLY CHILDHOOD EDUCATION

Covers language development and literacy 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 prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 121.
Credits: 3 Lecture: 2 Other: 3

## ED 173

MOVEMENT, MUSIC AND 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 prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 121.
Credits: 3 Lecture: 2 Other: 3

## ED 174 <br> 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 prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 121.
Credits: 3 Lecture: 2 0ther: 3

## ED 188

SPECIAL STUDIES: PRACTICUM
Credits: 1 to 3

## ED 199

SELECTED TOPICS: EARLY CHILDHOOD EDUCATION
Credits: 1 to 3

## ED 250 <br> ADVANCED CURRICULUM DEVELOPMENT \& TEACHING METHODS IN ECE

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 prerequisites: WR 121, ED 172, ED 173 and ED 174.
Credits: 4 Lecture: 3 Other: 3

## ED 261

## EARLY CHILDHOOD EDUCATION PRACTICUM I

Students participate in a weekly 50 -minute seminar and six hours of practicum work in an ECE setting, outside of student's work place. Students select, with their COCC practicum supervisor, an appropriate pre-kindergarten or early primary (K-3) practicum placement. All ECE courses required for an Early Childhood Education AAS degree need to be successfully completed before taking ED 261.
Credits: 3 Lecture: 10 ther: 6

## ED 262

## EARLY CHILDHOOD EDUCATION PRACTICUM II

Students participate in a weekly 50 -minute seminar and six hours of practicum work in an ECE setting, outside of the student's work place. Students select, with their COCC practicum supervisor, an appropriate pre-kindergarten or early primary (K-3) practicum placement. All ECE courses required for an Early Childhood Education AAS degree need to be successfully completed before taking ED 262.
Credits: 3 Lecture: 10 ther: 6

## ED 269 <br> EXCEPTIONAL CHILDREN IN EARLY CHILDHOOD EDUCATION

Acquaints students with the exceptional child and his/her family. Local resources 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 prerequisite: WR 121.
Credits: 3 Lecture: 2 Other: 3

## ED 299 <br> SELECTED TOPICS: EARLY CHILDHOOD EDUCATION

Credits: 1 to 3

## ECONOMICS

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EC 188
SPECIAL STUDIES: ECONOMICS
Credits: }1\mathrm{ to 3
EC }19
SELECTED TOPICS: ECONOMICS
Credits: }
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## EC 201 <br> MICROECONOMICS

Presents theoretical analysis of the market system in capitalism and analyzes how the market operates under various degrees of competition. Includes supply, demand, price determination, production, monopoly power, allocation of resources and distribution of income and environmental economics. Recommended pre- or corequisites: WR 121 and MTH 65.
Credits: 4 Lecture: 4

## EC 202

## MACROECONOMICS

Analyzes our national economy as whole and basic subdivisions of the economy: business, households and government. Also looks at the international economy. Includes unemployment, inflation, economic growth, fiscal, monetary and supplyside policies, money, banking and international economics. Recommended pre- or corequisites: WR 121 and MTH 65. Credits: 4 Lecture: 4

## EDUCATION

## 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 prerequisites: WR 121 and LIB 127.
Credits: 3 Lecture: 3

## ED 210 <br> PRACTICUM IN TEACHING

Acquaints potential educators with roles and responsibilities of teachers at elementary and secondary levels. Students 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 prerequisites: WR 121, LIB 127 and ED 200 or instructor approval.
Credits: 3 Lecture: 1 Other: 6

## ED 216 <br> PURPOSE, STRUCTURE AND FUNCTION OF EDUCATION IN A DEMOCRACY

Analyses the system of education in a democratic society--its past, present, and future. Introduces the historical, social, philosophical, political, legal and economic foundations of education in Oregon, the United States, and other countries to provide a framework from which to analyze contemporary educational issues in various schools, communities, and workplaces. Recommended prerequisites: WR 121 and LIB 127. 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 prerequisites: WR 121 and LIB 127.

## Credits: 3 Lecture: 3

## ED 253 <br> 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, selfreflection on implications of how learning occurs, and the impact of these issues on the development and delivery of instruction.
Credits: 3 Lecture: 3

## EMERGENCY MEDICAL SERVICES

## EMT 151

## EMERGENCY MEDICAL TECHNICIAN BASIC PART A

Follows the approved Oregon EMS Division and National Registry of EMT. After completion of the two-term (140-hour) program, candidate will be eligible for Oregon DHS EMS testing at National Registry EMT Basic level. Mandatory prerequisites: must meet requirement of enrollment regarding entrance testing and vaccination records. Only students who successfully pass EMT Basic Part A are allowed to enroll in EMT Basic Part B.
Credits: 5 Lecture: 4 Lab: 2.2

## EMT 152 <br> EMERGENCY MEDICAL TECHNICIAN BASIC PART B

Follows the approved Oregon Department of Human ServicesEMS and National Registry of EMTs curriculum for EMT Basic. Upon successful completion of the two-term (140 hour) program, candidate will be eligible for Oregon EMS testing at National Registry EMT basic level. Mandatory prerequisites: successful completion of EMT 151 (grade of 75 percent and 80 percent attendance); students must maintain current immunizations and hold current American Heart Association CPR card.
Credits: 5 Lecture: 4 Lab: 2.2

## EMT 165 <br> EMERGENCY MEDICAL TECHNICIAN-INTERMEDIATE PART A

Covers theory and practical applications including responsibilities delegated to the Oregon EMT-1 by the Department of Health for the state of Oregon. Incorporates discussion, didactic written demonstration, and practical demonstration with applications for the following: roles and responsibilities, ethics, HIPPA, patient assessment--medical and traumatic, oxygenation, ventilation, airway adjuncts, shock management, intravenous and intraosseous therapy, basic EKG monitoring and, when applicable, defibrillation and/or proper pharmacology medication interventions, and proper EMT-Intermediate protocols. Upon successful completion of the two-term course ( 76 hour didactic with 44 hours clinical skills program), the candidate will be eligible for the Oregon DHS EMS testing at an Oregon EMT Intermediate level at an approved Oregon site. Student must hold a current Oregon EMTB certification and show proof of current immunizations required by our accrediting agency, the DHS office. Additionally, a current NREMT-B or Oregon Basic plus CPR and AED certification must be on file prior to acceptance into the course. All students must meet all requirements of enrollment entrance testing and vaccination records. Only students who successfully pass EMT Intermediate Part A are allowed to enroll in EMT Intermediate Part B.
Credits: 4 Lecture: 3.8 Lab: 2.2

## EMT 166 EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE PART B

Covers theory and practical applications including responsibilities delegated to the Oregon EMT-1 by the Department of Health
for the state of Oregon. Incorporates discussion, didactic written demonstration, and practical demonstration with applications for the following: roles and responsibilities, ethics, HIPPA, patient assessment--medical and traumatic, oxygenation, ventilation, airway adjuncts, shock management, intravenous and intraosseous therapy, basic EKG monitoring and, when applicable, defibrillation and/or proper pharmacology medication interventions, and proper EMT-Intermediate protocols. Upon successful completion of the two-term course ( 76 hour didactic with 44 hours clinical skills program), the candidate will be eligible for the Oregon DHS EMS testing at an Oregon EMT Intermediate level at an approved Oregon site. Mandatory prerequisite: current immunizations required by our accrediting agency the Oregon DHS office. Additionally, a current NREMT-B or Oregon Basic plus CPR and AED certification must be on file prior to acceptance into the course. All students must meet all requirements of enrollment regarding entrance testing and vaccination records. Only students who successfully pass EMT Intermediate Part A ( 75 percent grade and 80 percent attendance) are allowed to enroll in EMT Intermediate Part B.
Credits: 4 Lecture: 3.8 Lab: 2.2

## EMT 170

## COMMUNICATION AND PATIENT TRANSPORTATION

Prepares candidate to safely operate an emergency vehicle in nonemergency and emergency responses. Includes all aspects of driving an emergency vehicle, road conditions and hazards, local and state laws pertaining to emergency vehicles, vehicle inspections, and safety considerations. Also covers the important components of an EMS communications system, the purpose of verbal communication of patient information to the hospital, standard use of mobile and portable transceivers, digital encoders, and ambulance intercoms, basic phone systems, universal access numbers (e.g. 911) enhanced systems, and the function of a dispatch center and the role of dispatchers. Mandatory requirement: Valid Oregon Drivers License.

## Credits: 3 Lecture: 2 Lab: 2

## EMT 175 <br> INTRODUCTION TO EMERGENCY SERVICES

Mandatory introductory course for all students seeking to enter either the structural fire or EMS degree programs. Includes a broad-based overview of the career, with emphasis on fire behavior, history of fire departments, organizational structure and terminology of contemporary structural fire and EMS agencies. Introduces various equipment and tools including hand tools, hose ladders and protective equipment used to combat fires and provide emergency medical care within the fire service. Also discusses other allied functions such as training, public education, prevention, investigation and inspections.

## Credits: 4 Lecture: 4

## EMT 188 <br> SPECIAL STUDIES: EMERGENCY MEDICAL TECHNICIAN <br> Credits: 5

## EMT 195 <br> 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

## Credits: 5

## EMT 280

## EMT-PARAMEDIC CO-OP WORK EXPERIENCE

The CWE program is a significant element of the EMS Paramedic coursework. Students may take this field internship in a variety of locations. This requires the students to work with an EMS agency, responding as a member of the EMS team on emergency responses, while performing skills under the direct supervision of a paramedic field preceptor. In addition to emergency response, shift responsibilities and other related non-emergency response duties are included. Shifts may be up to 24 hours in length and require the student to stay overnight. This is a pass/no pass portion of the program requiring successful completion of the predetermined objectives provided to the student upon placement. Instructor approval required and enrollment in the two-year paramedic program.
Credits: 7

## EMT 288 <br> SPECIAL STUDIES: EMERGENCY MEDICAL TECHNICIAN Credits: 5

## EMT 290 <br> EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 1

These courses make up the core of the paramedic course requirements. Includes $300+$ hours of didactic, 240 hours of clinical and 250+ hours of field internship listed as "co-op work experience." This rigorous program follows the DOT National Registry curriculum, and successful candidates will be eligible for testing at the National Registry EMT paramedic level. Course will include required weekend course work, and a high degree of dedication from the student. Note: entrance into the EMT paramedic program at COCC is a selective process, and students entering must meet AAS EMS degree requirements as required by the Oregon Human Services EMS administrative rules. Candidates successfully completing EMT basic certification exams will be eligible for enrollment in the EMT paramedic portion of the program if the aforementioned selective admission and AAS degree requirements have been met. Mandatory prerequisites: proof of current immunizations, current Oregon EMT-B/1 certification and acceptance into the second-year paramedic program. Concurrent enrollment in EMT 290 (lab). Credits: 8 Lecture: 6 Lab: 6

## EMT 299 <br> SELECTED TOPICS: EMERGENCY MEDICAL TECHNICIAN <br> Credits: 5

## ENGINEERING AND ENGINEERING TECHNOLOGY

See Manufacturing, Computer and Information Systems, and Forest Resource Technology/Forestry for other Engineering technology courses.

## ENGR 188 <br> SPECIAL PROJECTS

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 201

## ELECTRICAL FUNDAMENTALS

Studies electrical theory laws and circuit analysis techniques in direct current resistive circuits and in alternating current circuits containing resistance, capacitance, and inductance. Also explores circuit modeling, covers characteristics of operational amplifiers, use of laboratory instrumentation, and how to report experimental results. For engineering transfer students. Recommended prerequisites: MTH 252, PH 202/212 or concurrent registration.

## Credits: 3 Lecture: 2 Lab: 3

## ENGR 211

STATICS
Analyzes forces induced in structures and machines by various types of loading. Recommended prerequisites: MTH 251 and PH 201/211.
Credits: 4 Lecture: 3 Lab: 2

## ENGR 212 <br> DYNAMICS

Studies kinematics, Newton's law of motion, and work-energy and impulse-momentum relationships as applied to engineering systems. Recommended prerequisites: ENGR 211 and MTH 252.
Credits: 4 Lecture: 3 Lab: 2

## 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 prerequisites: MTH 252, ENGR 211.
Credits: 4 Lecture: 3 Lab: 2

## GE 101 <br> ENGINEERING ORIENTATION

Provides orientation to concepts and methods of engineering.
Credits: 3 Lecture: 2 Lab: 2

## GE 102 <br> 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 prerequisite: MTH 112.
Credits: 3 Lecture: 2 Lab: 2
ENGLISH

See Literature or Writing.

## EXERCISE SCIENCE

See Health and Human Performance.
FILM ARTS
See Humanities.
FIRE SCIENCE

See Structural Fire Science or Wildland Fire and Fuels Management.

## FISHERIES AND WILDLIFE

See Forest Technology and Forestry.

## FOREIGN LANGUAGES

## FR 101, 102, 103

## 1ST YEAR FRENCH I, II, III

Designed for beginners. Emphasizes active communication in French. Develops students' basic skills in listening, reading, writing, and speaking. Successful completion of this sequence prepares students for entry into second-year level at COCC or any other university. Should be taken in sequence.

## Credits: 4 Lecture: 4

## FR 199

SELECTED TOPICS: FRENCH
Credits: 1 to 4

FR 201, 202, 203
2ND YEAR FRENCH I, II, III
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. Recommended prerequisite: FR 101, 102, 103 or equivalent. Should be taken in sequence.

## Credits: 4 Lecture: 4

## FR 211, 212, 213

## FRENCH CONVERSATION/CULTURE I, II, 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. Counts only as an elective. Recommended prerequisite: FR 203, equivalent or instructor approval.

## Credits: 3 Lecture: 3

## GER 101, 102, 103

## 1ST YEAR GERMAN I, II, III

Designed for the beginner. Emphasizes active communication in German. Develops students' basic skills in listening, reading, writing and speaking. Successful completion of this sequence prepares students for entry into second-year level at COCC or any other university. Should be taken in sequence.
Credits: 4 Lecture: 4

GER 188
SPECIAL STUDIES: GERMAN
Credits: 1 to 4

## GER 201, 202, 203

2ND YEAR GERMAN I, II, III
Continues work of First Year German, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Should be taken in sequence. Recommended prerequisites: GER 101, 102, 103 or equivalent. Offered every other year.

## Credits: 4 Lecture: 4

## GER 211, 212, 213

## GERMAN CONVERSATION/CULTURE I, II, III

Intended for students who wish to maintain and continue mastering fluency in the acquisition of German. Excellent option for nondegree-seeking students. Counts only as elective. Recommended prerequisite: GER 203 or instructor approval.
Credits: 3 Lecture: 3

## GER 299

SPECIAL STUDIES: GERMAN
Credits: 1 to 4

IT 101, 102, 103
1ST YEAR ITALIAN I, II, III
Designed for the beginner. Emphasizes active communication in Italian. Develops students' basic skills in listening, reading, writing and speaking. Successful completion of this sequence prepares students for entry into second-year level at COCC or at any other university. Should be taken in sequence.
Credits: 4 Lecture: 4

## IT 199 <br> SELECTED TOPICS: ITALIAN <br> Credits: 4

IT 201, 202, 203
2ND YEAR ITALIAN I, II, III
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. Recommended prerequisite: IT 103 or equivalent. Should be taken in sequence. Offered every other year.
Credits: 4 Lecture: 4

## IT 299 <br> SELECTED TOPICS: ITALIAN <br> Credits: 4

SPAN 101 is designed for students who have minimal or no Spanish language experience. Students who have prior experience with the Spanish language (in the home, in a Spanish class, or living in a Span-ish-speaking country) should take the Spanish Placement Test to help determine which Spanish class is most appropriate. The test takes 5-20 minutes and is available at bttp://www.cocc.edulkpt. During the first class of each term, instructors will require verification that students with some Spanish language experience have taken the placement test.

SPAN 101, 102, 103
1ST YEAR SPANISH I, II, III
Begins the development of reading, writing, listening and speaking skills. Focuses on the concepts of pronunciation, gender, descriptions possessives, verb tenses, numbers, question words, time, weather, demonstratives, verbs and vocabulary which include the following categories: alphabet, calendar, clothing, people, greetings, school items, body, family and activities. This class is for beginners only. Advanced students are strongly discouraged from taking this as a review class. Students with prior Spanish experience should take the Spanish Placement Test which is available at http://www.cocc.edu/spt.
Credits: 4 Lecture: 4

SPAN 188
SPECIAL STUDIES: SPANISH
Credits: 1 to 4

SPAN 199
SELECTED TOPICS: SPANISH
Credits: 4

SPAN 201, 202, 203
2ND YEAR SPANISH I, II, III
Reviews Spanish grammar, develops conversational skills and exposes students to some elements of Hispanic culture. Should be taken in sequence. Recommended prerequisites: SPAN 101, 102, 103 or equivalent.

## Credits: 4 Lecture: 4

## SPAN 211, 212, 213 <br> SPANISH CONVERSATION/CULTURE I, II, III

Designed for students who wish to continue mastering fluency in the speaking of Spanish. Objective is to study various Spanishspeaking cultures. Taught exclusively in Spanish and some student participation is required. Does not meet baccalaureate degree language requirements. Recommended pre- or corequisite: SPAN 203 or instructor approval.
Credits: 3 Lecture: 3

## SPAN 288

SPECIAL STUDIES: SPANISH
Credits: 1 to 4

## SPAN 299 <br> SELECTED TOPICS: SPANISH <br> Credits: 1 to 4

## FOREST RESOURCE TECHNOLOGY/FORESTRY

## FE 210A <br> 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 clinometer reading.
Credits: 3 Lecture: 2 Lab: 3.6

## FE 210B <br> FOREST SURVEYING

Studies basic surveying techniques and equipment emphasizing traversing, differential leveling, profiling, GPS mapping and basic coordinate geometry. Recommended prerequisites:
FE 210A or instructor approval.
Credits: 3 Lecture: 2 Lab: 3.6

## FOR 100 <br> FORESTRY PROGRAM ORIENTATION

Provides the student entering the forest resources technology program an orientation to the nuances of the forestry program. The course is not intended to provide insight to the forestry profession, but help forestry program students be more successful in their academic endeavors as a COCC student in the forestry program. Course is required for all forest resource technology program students and highly recommended for wildland fire students.
Credits: 1 Lecture: 1

## FOR 105

## FOREST SPORTS

Provides skills practice to include bucking, chopping, climbing, choker setting, and dendrology in preparation for regional and state forestry competitions. No prior forest sports experience required.
Credits: 1 Lab: 3

## FOR 110 <br> WILDLAND FIRE SCIENCE I

Course focuses on the effects of Wildland Fire Policy, current fire suppression strategies and tactics; weather, topography, fuel models and how each interact to affect fire behavior. Additional topics include the wildland fire environment as it relates to situational awareness and personal safety. This class is an overview of modern wildland firefighting with an emphasis on understanding and applying fireline safety. This course cannot be challenged, but will be waived for those with proof of wildland fire single resource status.

## Credits: 2 Lecture: 1 Lab: 4

## FOR 111 <br> FORESTRY PERSPECTIVES

An 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. Course also provides overview of state, regional and local employment opportunities.
Credits: 4 Lecture: 3 Lab: 4

## FOR 130

## CHAINSAW USE AND MAINTENANCE

Covers basic tree falling, bucking and limbing techniques. Equipment safety, use, maintenance and repairs of saws is also covered. Designed for inexperienced or novice chainsaw operators or can be used as refresher course for experienced saw operators.
Credits: 2 Lecture: 1.6 Lab: 2.4

## 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
Credits: 1 to 3

## FOR 195WC

## WILDERNESS CONCEPT

Introduction to concept of wilderness and management principles and issues associated with applying that concept to National Wilderness Preservation System units with specific emphasis on the Three Sisters Wilderness area.
Credits: 1 Lecture: 1

## FOR 195WI <br> WILDERNESS INTERNSHIP

Summer internship comprising minimum of 72 hours of individually scheduled, supervised, volunteer wilderness ranger and wilderness information specialist instruction and service in Three Sisters Wilderness. Prerequisites: FOR 195WC and instructor approval. Credits: 2 Lab: 7.2

## 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. Prerequisite: instructor approval. Maximum of three credits may be applied to degree.

## Credits: 1 to 3

## FOR 202

## FOREST ENTOMOLOGY/PATHOLOGY

Course 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.

## Credits: 3 Lecture: 2 Lab: 4

## FOR 203

## APPLIED FOREST ECOLOGY

Course 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.
Credits: 3 Lecture: 2 Lab: 4

## FOR 205

## SILVICULTURE AND HARVESTING PROCESSES

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 processess and intermediate operations (thinnings, 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.

## Credits: 5 Lecture: 4 Lab: 6

## FOR 208 <br> SOIL AND WATERSHED PROCESS

Course 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 <br> 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: 4

## FOR 211

FIRST LINE SUPERVISION
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 <br> 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.
Credits: 3 Lecture: 2 Lab: 4

## FOR 220A

## 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.
Prerequisite: FE 210B.
Credits: 3 Lecture: 1.5 Lab: 6

FOR 220B
RESOURCE MEASUREMENT
Students learn fundamentals of measuring and quantifying natural resources including cruising and scaling timber,
quantifying wildlife and fisheries habitat, measuring and estimating forage production for wildlife and livestock, and sampling wildlife populations. Also introduces basic statistical concepts and their applications in resource management. Recommended prerequisite: MTH 85. Concurrent enrollment in MTH 86 recommended. Instructor approval required.
Credits: 4 Lecture: 3 Lab: 4

## FOR 220C <br> 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. Prerequisite: FOR 220A.
Credits: 4 Lecture: 3 Lab: 4

## FOR 240A <br> FOREST ECOLOGY

Course is designed to provide students with an overview of basic plant structure and function and to introduce 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: 4

## 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 prerequisite: FOR 240A.
Credits: 3 Lecture: 2 Lab: 4

## FOR 241A <br> DENDROLOGYI

Identification, classification and distribution of plant communities (tree, shrub, forb and grass) found within Oregon and major North American plant communities. Four-day field trip required.
Credits: 3 Lecture: 1.5 Lab: 6

## FOR 241B

## DENDROLOGY II

Covers identification, classification and distribution of plant communities (tree, shrub, forb and grass) found within Oregon and major North American plant communities. Four-day field trip required.
Credits: $\mathbf{3}$ Lecture: 1.5 Lab: 6

## FOR 251 <br> 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 with focus on the forest and range.
Credits: 3 Lecture: 2 Lab: 4

## FOR 255 <br> 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. Prerequisite: WR 121.

## Credits: 3 Lecture: 2 Lab: 4

## FOR 262

## URBAN FORESTRY

An examination of the role and values of trees and other vegetation in the urban environment. Draws on traditional forest management concepts to describe successful urban forestry programs, including public participation, funding and the production of human benefits. Covers the role and duties of an urban forester. Credits: 3 Lecture: 2 Lab: 3

## FOR 299

SELECTED TOPICS: FORESTRY
Credits: 1 to 4

## FP 210 <br> WOOD TECHNOLOGY AND UTILIZATION

Introduces manufacturing and use of forest products, including lumber, plywood, composition board, pulp, paper and other products. Lab work focuses on visiting manufacturing facilities and the identification of woods of different species.
Credits: 4 Lecture: 3 Lab: 4

## FW 199

## SPECIAL STUDIES: FISH/WILDLIFE

Provides students with hands-on field experience and aids students in acquiring experience with may meet basic qualification standards required by federal agencies. Content and credit earned by mutual agreement between instructor and student and detailed in written agreement. Prerequisite: instructor approval. Maximum of three credits may be applied to degree.

## Credits: 1 to 3

## FW 218 <br> SURVEY OF NORTHWEST WILDLIFE

Introduces mammal and bird systematics, and surveys the ecological, economical, and social importance of selected bird and mammal species in the Pacific Northwest with an emphasis on identification and their basic life history. Labs emphasize survey techniques and identification of bird and mammals. Prerequisites: BI 102 or BI 213 or FOR 241A or instructor approval.
Credits: 3 Lecture: 2 Lab: 4

## FW 251 <br> PRINCIPLES 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. Prerequisite: WR 121.
Credits: 3 Lecture: 3

## GENERAL SCIENCE

## GS 104 <br> 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 prerequisite: one year of high school algebra or equivalent or concurrent enrollment in MTH 60.
Credits: 4 Lecture: 3 Lab: 2

## 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 prerequisite: one year of high school algebra or equivalent or concurrent enrollment in MTH 60.

## Credits: 4 Lecture: 3 Lab: 2

## GS 106

PHYSICAL SCIENCE: GEOLOGY
Study of physical characteristics of, and processes within, solid Earth. Principal topics include minerals, earthquakes, plate tectonics, igneous activity, sedimentary and metamorphic processes, glaciation and the measurement of geologic time. Recommended prerequisite: one year of high school algebra or equivalent or concurrent enrollment in MTH 60.

## Credits: 4 Lecture: 3 Lab: 2

## GS 107

## PHYSICAL SCIENCE: ASTRONOMY

Introduction to astronomy including solar system, stellar systems and cosmology. Some individual observing may be required.

Recommended prerequisite: one year of high school algebra or equivalent or concurrent enrollment in MTH 60.
Credits: 4 Lecture: 3 Lab: 2

## GS 108 <br> PHYSICAL SCIENCE: OCEANOGRAPHY

Survey course that includes topics from four main areas of oceanography: geological (ocean basins and coasts, their composition and variation, and how they formed); physical (tides and currents, their patterns and the forces which cause them); chemical (sea water); and biological (life forms, habitat and pollution). Recommended prerequisite: one year of high school algebra or equivalent or concurrent enrollment in MTH 60. Required: one, day-long field trip. Credits: 4 Lecture: 3 Lab: 2

## GEOGRAPHIC INFORMATION SYSTEMS

## GEOG 191

CO-OP WORK EXPERIENCE GIS

## Credits: 1 to 3

## GEOG 211 <br> COMPUTER CARTOGRAPHY

Develops skills needed to produce maps using ArcGIS. Outlines cartographic principles and map use. Emphasis on mapping techniques that ensure efficient conversion of map into GIS format. Corequisite: FE 210B. Usually offered winter term. Credits: 3 Lecture: 3 Lab: 2

## GEOG 265

## GEOGRAPHIC INFORMATION SYSTEMS

Introduces students to principles and practice of GIS, while providing experience using ArcView and Spatial Analyst GIS software. Develops both theoretical understanding of GIS and experience in accessing GIS datasets. Students exposed to raster and vector GIS. Usually offered fall and winter terms.

## Credits: 4 Lecture: 4 Lab: 1

## GEOG 266

## ARC GIS

Provides working knowledge of ArcGIS. In addition, students undertake a GIS project including designing and developing a GIS database, performing spatial analysis, creating maps, and generating a report using the desktop products. Prior knowledge of Workstation ArcInfo GIS is not required. Usually offered fall term. Recommended prerequisite: GEOG 265.

## Credits: 5 Lecture: 4 Lab: 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. Usually offered spring term. Recommended prerequisite: GEOG 266.
Credits: 5 Lecture: 4 Lab: 2

## GEOG 273

## SPATIAL DATA COLLECTION

Provides the skills to collect location information for the purpose of integration with a Geographic Information System. Includes basic compass and pacing to proper utilization of Global Positioning System (GPS) receivers. Focuses on GPS data collection. Usually offered fall term. Recommended prerequisite: FE 210B or instructor approval.

## Credits: 5 Lecture: 4 Lab: 2

## GEOG 280

GIS PRACTICUM
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. Prior knowledge of GIS is required. Usually offered spring term.

## Credits: 5 Lecture: 4 Lab: 2

## GEOG 284 <br> GIS CUSTOMIZATION

Utilizes Visual Basic for Applications (VBA) to program the user interface for ArcGIS software. Emphasis is placed on creating customized applications. Usually offered winter term.
Credits: 4 Lecture: 4 Lab: 2

GEOG 285
DATA CONVERSION/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 enhances 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. Usually offered winter term. Recommended prerequisites: GEOG 266 and GEOG 267.
Credits: 5 Lecture: 4 Lab: 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 ERDAS Imagine software. Digital analysis is discussed and performed including preprocessing, image classification and image evaluation. Usually offered spring term. Limited to GIS majors. Recommended prerequisite: FOR 220A or instructor approval.

## Credits: 4 Lecture: 4 Lab: 2

## GEOG 287 <br> 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 GRID module of ArcInfo and Spatial Analyst Extension of ArcGIS to perform analysis of raster datasets. Usually offered spring term. Recommended prerequisite: GEOG 282 or instructor approval.

## Credits: 5 Lecture: 5 Lab: 1

## GEOGRAPHY

GEOG 105
PHYSICAL GEOGRAPHY
Looks at the physical world with a major focus on weather and climate, landforms, water resources and weathering processes.
Credits: 4 Lecture: 4

## GEOG 106 <br> ECONOMIC GEOGRAPHY

Introductory view on how economic activity varies across space. Besides covering locational theories for different economic sectors, course explores such issues as economic development, resource distribution, urbanization patterns, rural economics and coping with a changing world economy. May be taught with a WIC designation. Recommended prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 40, WR 65 or WR 95.

## 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, religion, folk music and population growth. May be taught with a MIC and WIC designation. Recommended prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 40,

## WR 65 or WR 95.

Credits: 4 Lecture: 4

## GEOG 190

## ENVIRONMENTAL GEOGRAPHY

Introductory view of the environment and how it is shaped by and shapes human activity. Includes famine, global warming, deforestation, biodiversity and land-use practices. May be taught with a WIC designation. Recommended prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 40, WR 65 or WR 95.

## Credits: 4 Lecture: 4

## GEOG 198 <br> 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 pre- or corequisite: 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).

## Credits: 1 to 4

## GEOG 201 <br> WORLD REGIONAL GEOGRAPHY I

Introductory course that explores more developed regions of the world: Anglo-America, Europe, the former Soviet Union, Japan and Australia/New Zealand. Includes population, urbanization, natural resources, physical environment, politics and culture. May be taught with a MIC and WIC designation. Recommended prerequisites: WR 121 and LIB 127.
Credits: 4 Lecture: 4

## GEOG 202 <br> WORLD REGIONAL GEOGRAPHY II

Introductory course that explores less developed regions of the world: Latin America, Middle East/North Africa, Sub-Saharan Africa, East, South and Southeast Asia. Includes population, urbanization, natural resources, physical environment, politics and culture. May be taught with a MIC and WIC designation. Recommended prerequisites: WR 121 and LIB 127.

## 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 prerequisites: WR 121 and LIB 127.
Credits: 3 Lecture: 3

## GEOG 209

WEATHER AND CLIMATE
Four major aspects: a study of weather elements, climate regions of the world, climate changes and applied climatology. Included are weather in the Pacific Northwest, climate and solar house design, and climate and health. Recommended prerequisites: WR 121 and LIB 127.
Credits: 3 Lecture: 3

## GEOG 212 <br> 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 prerequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 121 and LIB 127.
Credits: 3 Lecture: 3

## GEOG 213 <br> GEOGRAPHY OF PACIFIC NW

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 prerequisites: WR 121 and LIB 127.
Credits: 3 Lecture: 3

## GEOG 235

## LAND USE RESEARCH

Introduces students to techniques in land-use research. Classroom instruction focuses on planning and zoning. Students are involved in a Bend-area research project. Recommended prerequisites: WR 121 and LIB 127.
Credits: 3 Lecture: 1 Other: 6

## GEOG 240

GEOGRAPHY OF CENTRAL OREGON
Regional study of diversity of landscapes of Central Oregon with emphasis on natural environments, economy of the area, population growth and settlements. Recommended prerequisites: WR 121 and LIB 127.
Credits: 3 Lecture: 3

## GEOG 270

## CARTOGRAPHIC METHODS

Looks at the world of maps. How to design, interpret and critique many forms of maps. Also includes introductory view on how geographic information systems (ArcView) can be used to create and design maps. Required: working knowledge of a Windows-based computer.
Credits: 4 Lecture: 4

## 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, acid rain and ozone depletion, with particular emphasis on global (or "greenhouse") warming. Recommended prerequisites: WR 121 and LIB 127.
Credits: 3 Lecture: 3

GEOG 299
SELECTED TOPICS: GEOGRAPHY
Credits: 1 to 3

## GEOLOGY

Some courses are not offered during 2007-08.

## G 162 <br> REGIONAL GEOLOGY

Consists of field studies of selected areas with emphasis on relationship between rock type, structure and topography. Includes lectures, laboratory and equivalent of four hours of field study per week, usually on weekend field trips. Areas studied include Central Oregon (G 162 CO), Cascade Volcanoes (G 162 CV), Grand Canyon (G 162 GC), Oregon Coast (G 162 OC), Southeastern Oregon (G162 SE) and Glaciers of the Pacific Northwest (G 162 GL).
Credits: 3 Lecture: 1 Lab: 6
G 162 CO
GEOLOGY OF CENTRAL OREGON
Credits: 3 Lecture: 1 Lab: 6

## G 162CV

CASCADE VOLCANOES
Credits: 3 Lecture: 1 Lab: 6

## G 162NW

GEOLOGY PACIFIC NW
Credits: 3 Lecture: 1 Lab: 6
G 1620C
GEOLOGY OREGON COAST
Credits: 3 Lecture: 1 Lab: 6

## G 1620R

GEOLOGY OF OREGON
Credits: 3 Lecture: 1 Lab: 6

## G 199

SELECTED TOPICS: GEOLOGY
Credits: 1 to 6

## G 201, 202, 203

GEOLOGY I, II, III
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 232 <br> COASTAL OCEANOGRAPHY

Coastal ecology is used as the theme to develop an in-depth understanding of relationships among biology, geology and physio-chemical factors of coastal marine environments of the Pacific Northwest. Inter-discipline topics include 1) coastal environments (rocky shores, beaches, estuaries), biology of common coastal marine organisms, 2) geology of coasts and coastal sea floor structures and materials, sedimentation processes and regional plate tectonics 3) dynamics of ocean-land interface including effects of waves, tides and currents in modifying coastal environments and chemical properties of coastal ocean temperature, dissolved gases and pH . A significant aspect of this course is its focus on field sampling using modern oceanographic techniques. Required term project and weekend field trips.
Recommended prerequisite: one term of any science course.
Credits: 5 Lecture: 3 Lab: 3 Other: 1.5

## G 240

## LIMNOLOGY

Study of inland bodies of water, with emphasis on Central Oregon lakes. Covers theory, field observation and sampling methods, data processing and analysis. Includes geology (origin, morphology, volcanic and sedimentation processes), biology (fresh water biota and ecology) and physical-chemical properties (light, temperature, conductivity, pH , dissolved gases and dissolved solids, trophic levels, heat budget, mixing and stratification) of fresh water.
Credits: 4 Lecture: 3 Other: 3

## G 291

## ROCKS AND MINERALS

Studies identification, occurrence and origin of rocks and minerals, emphasizing most common materials of the Earth's crust and mineral resources of the Earth. Includes lectures, laboratory and field trips. Recommended prerequisite: GS 106 or G 201.
Credits: 3 Lecture: 2 Lab: 3

## HEALTH AND HUMAN PERFORMANCE:

 ACTIVITY CLASSESActivity and Health modules can be used for associate degree Health requirement to meet one credit in activity or health module.

## HHP 185AB <br> ADVANCED BASEBALL <br> Credits: 1 Lab: 3 <br> HHP 185BB <br> SNOWBOARDING I <br> Credits: 1 Lab: 3 <br> HHP 185BC <br> SNOWBOARDING II <br> Credits: 1 Lab: 3

## HHP 185BE <br> SNOWBOARDING III COMPETITIVE FREESTYLE RIDING

Focuses on freestyle techniques for advanced riders. Emphasis of instruction is on freestyle maneuvers, including straight airs, 180's, and straight airs with grabs, as well as etiquette when riding in the half-pipe, slope-style facilities and natural freestyle terrain.
Credits: 1 Lab: 3

## HHP 185BF

BASKETBALL
Credits: 1 Lab: 3

## HHP 185BJ <br> BRAZILIAN JIU-JITSU

This is a modified version of traditional Japanese Jujutsu and martial art sport that focuses on gaining a dominant position over your opponent. Students will learn proper techniques, using leverage, sparring and self-defense drills to gain self-confidence.
Credits: 1 Lab: 3

## HHP 185BL

BASEBALL
Credits: 1 Lab: 3

## HHP 185BS

## SWIMMING I: SWIM FIT \& TECH

Swim Fitness and Technique helps student feel safe and comfortable in the water for at least 10 minutes at a time, incorporating and refining swimming strokes.

## Credits: 1 Lab: 3

## HHP 185CT

## CIRCUIT TRAINING

General, Core. Traditional circuit training class for total body conditioning that includes interval training using various equipment and core circuit training using equipment that emphasizes core-area workout.

## Credits: 1 Lab: 3

HHP 185CY
CYCLING: ROAD, STUDIO, MOUNTAIN
Credits: 1 Lab: 3
HHP 185DA
AEROBIC DANCE I
Kickboxing.
Credits: 1 Lab: 3

## HHP 185DB

AEROBIC DANCE II-BENCH/STEP
Step bench, intervals. Traditional step bench and step class which has a combination of both cardio and strength exercises and routines. Credits: 1 Lab: 3

## HHP 185DC <br> AEROBIC DANCE III-HIP HOP

Course explains the growing awareness of hip hop as a mindbody dance style aerobic movement. Includes choreographed moves with each class and building upon each other as a sequenced routine.

## Credits: 1 Lab: 3

## HHP 185GL

## GOLF

Credits: 1 Lab: 3

HHP 185GM
GOLF ADVANCED
Credits: 1 Lab: 3
HHP 185JG
JOGGING
Credits: 1 Lab: 3

## HHP 185KA

## KI AIKIDO

Introduces the martial art of Aikido, a form of self-defense and non-fighting. It is based upon coordination of mind and body, not only in throwing, but also in the art of falling (ukemi).

## Credits: 1 Lab: 3

## HHP 185KB

## ADVANCED KI-AKIDO

Course will more closely explain the martial art of Aikido and its application in daily life. Basic concepts taught in beginning Ki Aikido will continue and are now an expectation. Recommended prerequisite: HHP 185KA.
Credits: 1 Lab: 3

## HHP 185PI <br> OUTDOOR PHOTOGRAPHY

Provides a hiking experience and introductory information on camera use and photographic composition in a variety of outdoor environments.

## Credits: 1 Lab: 3

HHP 185SA
SKI ALPINE I
Credits: 1 Lab: 3

## HHP 185SB

SKI ALPINE II
Credits: 1 Lab: 3
HHP 185SF
SOFTBALL
Credits: 1 Lab: 3

## HHP 185SH <br> STRETCH AND RELAXATION <br> Credits: 1 Lab: 3 <br> HHP 185SK <br> SKI CONDITIONING (NORDIC)

General, performance. Two levels of conditioning are offered including a general course for all types of groomed and off-track
Nordic skiing and a performance for improving fitness and technique for racing and groomed skiing.
Credits: 1 Lab: 3

## HHP 185SR

SOCCER
Outdoor/Indoor
Credits: 1 Lab: 3
HHP 185SS

## SOCCER ADVANCED

Course is geared toward students demonstrating a high skill level.
Recommended prerequisite: HHP 185SR.
Credits: 1 Lab: 3

## HHP 185ST

## PILATES

Familiarizes students with the awareness of core flexibility and strength, relative muscle groups and joint actions of the core. Provides Pilates vocabulary and training techniques, including specific stretching, as well as stretching for general health. Also, provides proper sequence form for stretching, the slide, exercise balls and weights.
Credits: 1 Lab: 3

## HHP 185SU

## PILATES-ALL LEVELS

Includes a brief review of Pilate's fundamentals or proper spine alignment, elongation, thoracic breath and core control. Class sequence of Pilates exercises with appropriate modifications for all fitness levels.
Credits: 1 Lab: 3

HHP 185TA
TENNIS I
Credits: 1 Lab: 3

HHP 185TB
TENNIS II
Should be able to demonstrate prior experience. Recommended prerequisite: HHP 185TA.
Credits: 1 Lab: 3

## HHP 185TF

TOTAL FITNESS
High intensity and very demanding class. Geared toward improving overall fitness.
Credits: 1 Lab: 3

## HHP 185TI <br> 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.

## Credits: 1 Lab: 3

HHP 185TJ
TAI CHI/QIGONG-INTERMEDIATE
Introduces Tai Chi Chaun Yang Style 48 form and several new Qigong exercises for continued health and relaxation through meditation in movement, at the intermediate level. Course encourages students to incorporate daily practice into their schedules and to practice together in study groups. Recommended prerequisite: HHP 185TI Beginning Tai Chi/Qigong.

## Credits: 1 Lab: 3

## HHP 185TK

## TAE KWON DO

Improves cardiovascular endurance, muscular strength and flexibility. Includes: self-defense, social, etiquette and cultural introduction of dojang.

## Credits: 1 Lab: 3

HHP 185VA
VOLLEYBALL (ADV)
Class is geared toward students demonstrating an advanced skill
level. Recommended prerequisite: HHP 185VB or HHP 195VC.
Credits: 1 Lab: 3

HHP 185VB
VOLLEYBALL (BEG)
Credits: 1 Lab: 3

HHP 185VC
VOLLEYBALL (INTERM)
Credits: 1 Lab: 3

HHP 185VD
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 Lab: 3

HHP 185WA
PROGRESSIVE WALKING
A support group class designed to prepare and progressively maintain the body at a target heart rate through walking.
Credits: 1 Lab: 3

## HHP 185WE <br> WATER EXERCISE

Introduces water aerobics which improves cardiovascular endurance, muscular strength and flexibility.

## Credits: 1 Lab: 3

## HHP 185WN

## WILDERNESS TRAINING

Introduces orienteering, beginning and intermediate wilderness skills, beginning and intermediate rock climbing, hiking and backpacking. Recommended prerequisite: beginning rock climbing class or instructor approval.

## Credits: 1 Lab: 3

HHP 185WT
WEIGHT TRAINING
Credits: 1 Lab: 3
HHP 185WW
WILDERNESS TRAINING: WATER
Rafting I; Rafting II; Kayaking I; Kayaking II.
Credits: 1 Lab: 3

## HHP 185YG

YOGA
Introduces the basic techniques of yoga incorporating a wide range of yoga styles including Ashtanga, Hatha, Vinyasa and Kunadlini.

## Credits: 1 Lab: 3

## HHP 185YH

YOGA-ALL LEVELS
Appropriate for all levels. Modification and additional variation in postures for students wanting a more challenging practice, using a blend of different yoga styles.
Credits: 1 Lab: 3
HHP 188
SPECIAL STUDIES
Credits: 1 to 6
HHP 199
SELECTED TOPICS: HEALTH AND HUMAN PERFORMANCE ACTIVITIES
Includes both introductory courses and activities.
Credits: 1 to 6

## HHP 299

SELECTED TOPICS: HHP
Health topics requiring advanced level of critical thinking, writing and/or other skills.
Credits: 1 to 3

## HHP 212 <br> CPR - AMERICAN HEART ASSOCIATION

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.
Credits: 1 Lecture: 1

## HHP 212A <br> CPR - AMERICAN HEART ASSOCIATION HEALTH CARE PROVIDERS

Basic Life Support Healthcare Providers course teaches the skills of CPR for victims of all ages (including ventilation with a barrier device, a bag-mask device, and oxygen), use of an automatic external defibrillator and relief of foreign body airway obstruction in responsive and nonresponsive victims. The course is designed for healthcare providers who care for patients in a wide variety of settings, both in and out of hospital.
Credits: 1 Lecture: 1

## HEALTH AND HUMAN PERFORMANCE: EXERCISE SCIENCE

## HHP 131 <br> INTRODUCTION TO EXERCISE/SPORT SCIENCE

Introduces students to the profession of exercise science including an overview of basic concepts and careers in exercise physiology, human movement sports psychology, sport sociology, 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.
Credits: 3 Lecture: 3

## 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 prerequisite: WR 123.
Credits: 3 Lecture: 3 Lab: 1

## HHP 260

## INTRODUCTION TO HUMAN MOVEMENT

Introduces the science of human movement (kinesiology). Explores anatomical elements such as muscle action and joint structure and function involved in gross motor movement.

Structural anatomy, primary movers of each joint and muscle utilization for specific sport action are emphasized.
Credits: 3 Lecture: 3

## HHP 261

## BASIC EXERCISE PHYSIOLOGY

Introduces physiological and biochemical responses of the pulmonary, cardiovascular, nervous and skeletal systems to exercise. Considerable emphasis is placed on physiological adaptations to aerobic and anaerobic training.
Credits: 3 Lecture: 3

## HHP 262 <br> TRAINING THEORY AND APPLICATIONS

Provides physiological knowledge surrounding cardiovascular training and physiologic mechanisms underlying improvement in strength and flexibility. Explores various testing techniques, training methods, application and periodization as related to physical training. Acts as a practical guide for understanding of individualized exercise prescription.
Credits: 3 Lecture: 3

## HHP 270 <br> 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 psychology of sport.
Credits: 3 Lecture: 3

## HEALTH AND HUMAN PERFORMANCE: HEALTH CLASSES

## HHP 220

INTRODUCTION TO EPIDEMIOLOGY
Combines fields of statistics, sociology, microbiology and other relevant sciences. Considered a fundamental science of public health and defined as the study of distribution and determinants of disease frequency in human populations, and the application of this science to the control of health problems. Topics covered include: history of epidemiology, study design (cohort and case control), and measure of disease frequency, prevalence and incidence. Recommended prerequisite: MTH 20.

## 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 prerequisite: WR 122.
Credits: 3 Lecture: 3

## HHP 242 <br> 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 prerequisite: WR 121.
Credits: 3 Lecture: 3

## HHP 248 <br> HEALTH PSYCHOLOGY

Examines the interrelationships between biological, social, psychological, intellectual, spiritual, emotional, cultural and environmental factors. Examines the influences that these factors have on individual behaviors related to promoting health, preventing illness and coping with illness. Also reviews education, research and counseling activities that promote health, prevent or treat illness, identify health risk factors and analyze the health-care system. Recommended prerequisite: WR 121. Credits: 3 Lecture: 3

## HHP 252 <br> FIRST AID AND CPR

Provides the knowledge and skills to respond to life threatening and non-life threatening emergencies, as citizen responders, in order to sustain life until medical help is available. Teaches skills to administer adult, child and infant CPR and first aid. Covers basic life support, bleeding, shock, burns, wounds, head, chest and extremity injuries, sudden illness, heat and cold disorders, and other environmental emergencies. Both conceptual information and practical application are included. Recommended preor corequisites: WR 75, WR 60 and/or WR 65 and MTH 20.
Credits: 3 Lecture: 3 Lab: 1

## HHP 252A <br> FIT/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 can earn first aid and CPR cards upon completion of course. Recommended pre- or corequisites: WR 75, WR 60 and/or WR 65 and MTH 20. Credits: 3 Lecture: 3 Lab: 1

## HHP 258

## PREVENTION OF CHRONIC DISEASE

Examines how lifestyle choices affect immunity and the development of chronic diseases. Disorders covered include cardiovascular diseases, cancer, chronic obstructive pulmonary diseases, diabetes, osteoporosis, autoimmune disorders, HIV and AIDS, depression and other prevalent chronic diseases. Lifestyle models of health behavior
change and alternative health-care options in managing chronic diseases will also be addressed. Recommended prerequisite: WR 123.

## Credits: 3 Lecture: 3

## HHP 266 <br> 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.

## Credits: 3 Lecture: 3

## HHP 280

## CO-OP WORK EXPERIENCE - HEALTH AND HUMAN PERFORMANCE

Provides practicums by the department and in conjunction with the community in recreation, youth sports, intramurals, strength and conditioning, fitness programming, exercise science, and health promotion. Students must be approved for enrollment by an HHP advisor before registering for this course.
Credits: 1 to 3

## HHP 291 <br> LIFEGUARD TRAINING

Provides awareness of common hazards associated with various types of aquatic facilities and develops knowledge and skills to eliminate or minimize such hazards. Course develops skills necessary to recognize a person in a distress or drowning situation and helps students understand the lifeguard/employer and lifeguard/ patron relationships. Provides explanations, demonstrations, practice and a review of the rescue skills essential for lifeguards.

## Credits: 2 Lecture: 1 Lab: 2

## HHP 292 <br> 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 <br> 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 pre- or corequisites: WR 121, MTH 20. Credits: 3 Lecture: 3

## HEALTH AND HUMAN PERFORMANCE: OUTDOOR LEADERSHIP

## HHP 194MA <br> MOUNTAINEERINGI

Introduces safe travel in the mountains. Course covers basics of outdoor clothing, nutrition, condition/fitness for mountain travel, snow camping, navigation, snow travel and environmental hazards, such as weather and avalanches.
Credits: 2 Lecture: 1 Lab: 3

## HHP 194MB <br> MOUNTAINEERING II

Course is designed to introduce the student to technical mountain travel with specific emphasis on rock, snow and ice anchors, glacier travel and crevasse rescue, and climbing steep snow and ice. Additional relevant topics may also be introduced (e.g., avalanche safety, high altitude mountaineering, etc.).

## Credits: 2 Lecture: 1 Lab: 3

## HHP 253

## WILDERNESS ADVANCED FIRST AID

Provides necessary knowledge and skills to care for an injured or suddenly ill person in a remote location. 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. Upon completion, students will receive Wilderness Advanced First Aid Card.
Credits: 3 Lecture: 3 Lab: 1

## HHP 255 <br> 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.
Credits: 3 Lecture: 2 Lab: 3

## HHP 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. 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. Recommended prerequisite: WR 123.
Credits: 3 Lecture: 2 Lab: 3

## HHP 273 <br> OUTDOOR RECREATION LEADERSHIP

Provides both theoretical and practical knowledge of groups in an outdoor setting. Topics are presented in lecture, discussed in various leadership scenarios, and then applied in group outings that the students plan and lead. Special emphasis is placed on group safety issues and risk assessment and risk management. Recommended prerequisite: WR 123.
Credits: 3 Lecture: 2 Lab: 3

## HHP 294CC <br> CHALLENGE COURSE PRACTICES

Course is designed to educate the student on the history, philosophy, principles, management and use of challenge courses (high and low). Course competencies will be fostered through experimental learning methodologies and practical experiences in challenge course environments. Risk management, maintenance, staff training, operational procedures, course construction and program planning will be emphasized. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 1.5 Lab: 4.5

## HHP 294RC <br> TEACHING ROCK CLIMBING

Introduces guiding in rock climbing. Students are instructed on the use of a variety of climbing equipment and techniques used for top-roped and lead climbing in guiding situations (does not teach beginning-level material except in how to teach such material to others). Course includes such areas as client care and welfare, managing a group setting, risk assessment and technical skills. Emphasizes group work, discussion and practical application. Although some time will be spent climbing, this is not an activity course; all aspects of the course teach the basic concepts of guiding clients in a variety of rock climbing situations. Note: does not certify or license student as guide in rock climbing. It only introduces the basic concepts of guiding rock climbing. Instructor approval required. Recommended prerequisite: WR 121.

## Credits: 3 Lecture: 1.5 Lab: 4.5

## HHP 294WG <br> WHITEWATER RAFT GUIDING

Instructs students in 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 learn how to guide paddle rafts, read whitewater, lead group trips and execute various whitewater rescue techniques. The majority of time is spent in the field, including overnight camping. A background in camping/outdoor living skills strongly recommended. NOTE: does not certify or license student as guide in whitewater rafting. It only introduces the basic concepts of raft guiding. Instructor approval required. Recommended prerequisites: WR 121, HHP 185WW.
Credits: 3 Lecture: 1.5 Lab: 4.5

## HEALTH INFORMATION TECHNOLOGY

## 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.
Credits: 3 Lecture: 3

## AH 112 <br> MEDICAL TERMINOLOGY II

Covers terminology pertaining to pharmacology, nervous, mental health, special senses (eye and ear), reproductive (male and female), obstetrics, digestive, urinary and endocrine systems. Includes standard abbreviations, anatomic, diagnostic, symptomatic and operative terms related to these body systems. Recommended prerequisite: AH 111.
Credits: 3 Lecture: 3

## HIT 103 <br> HEALTH INFORMATION SYSTEMS AND PROCEDURES

Provides an overview of health-care delivery system and health information field. Includes origin and uses of health records, admitting functions, filing and numbering systems, interdepartmental communication, computation of basic census data, micrograph concepts, and electronic data interchange. Lab will include application of health-care procedures via the AHIMA Web-based Virtual Lab. Offered fall term. Recommended prerequisite: MTH 10.
Credits: 5 Lecture: 4 Lab: 3

## HIT 104 <br> HEALTH DATA CONTENT/STRUCTURE

Utilization and application of health care data content (health record analysis) with special emphasis on mechanics of physician's orders, clinical lab tests, diagnostic and treatment modalities, pharmacology and an overview of applicable consent and confidentiality principles. Lab will include application of health-care procedures via the AHIMA Web-based Virtual Lab. Offered winter term. Enrollment limited to HIT majors.
Credits: 5 Lecture: 4 Lab: 3

## HIT 131A

## DOCUMENT MANAGEMENT AND TECHNOLOGY

This course provides specific fundamental experience in the identification and application of inpatient and outpatient records and reports. It is important to have strong skills in spelling, medical terminology, the English language, attention to detail, proofreading, quality editing and grammatical appropriateness. Offered spring term. Recommended prerequisite: HIT 104. Credits: 3 Lecture: 3

## HIT 131C <br> MEDICAL TRANSCRIPTION APPLICATIONS

Course provides training and practical experience in the transcription of various medical reports and is designed to instill accuracy and perfection. Students will spend 12 hours per week in lab. This time affords the opportunity to obtain entry-level transcription skills. Offered summer term. Required for Medical Transcription certificate. Recommended prerequisite: HIT 131A.
Credits: 4 Lab: 12

## HIT 180 <br> 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 spring term.
Credits: 2 Lecture: 2

## HIT 182

## INTRODUCTION TO MEDICAL CODING

Course explores the history, arrangement and application of ICD9CM and CPT coding systems. ICD9CM/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 payor requirements will be explored and applied including reporting of ICD-9-CM/CPT codes, inpatient and ambulatory reporting/billing. Offered spring term. Recommended pre- or corequisites: AH 111, AH 112, BI 121, BI 122, AH 113.
Credits: 4 Lecture: 4

## HIT 183

## HEALTH INFORMATION SEMINAR

Provides overview of health information technology program. Discusses the health information profession as a career, job application, assertiveness, vital statistics, human relations and other related health-care industry topics. Tour of a health-care facility. Offered fall term.
Credits: 1 Lab: 2

## HIT 193

## DIRECTED PRACTICE I

In the realm of health information management, this is a course in which students report to a health care facility and experience planned activities in the environment of the actual workplace. Provision for technical experiences is an integral component of curricula. Provides for application of classroom and laboratory objectives in supervised affiliation sites in Oregon, typically.

Performed under leadership of a registered health information administrator or accredited health information technician. Total of 160 clinical hours distributed in curriculum at various points of program completion. Instructor's permission is required. Offered summer term between the first and second year and summer term following graduation. Maximum of four credits applies to the health information technology degree. Prerequisite: completion of first-year HIT curriculum.
Credits: 3 Other: 9

## HIT 199 <br> SELECTED TOPICS: HEALTH INFORMATION TECHNOLOGY <br> Credits: 4

## HIT 201

## LEGAL ASPECT MEDICAL RECORDS

Emphasizes the legal system, hospital and staff liability, privacy, confidentiality and legal requirements affecting the control and release of health information and medical records. Offered fall term.
Credits: 4 Lecture: 4

## HIT 203 <br> HEALTHCARE DELIVERY AND TECHNOLOGY

Course provides analysis of the common terms and procedures related to the development and implementation of information systems. Specifically, networks and interfaces (in reference to the electronic health record), the personal health record (PHR), public health and other administrative applications/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. Offered winter term. Recommended prerequisite: first-year HIT coursework.
Credits: 2 Lecture: 2

## HIT 205

## INTRODUCTION TO MEDICAL RECORD ANALYSIS

Application of qualitative and quantitative analyses of health record based on accreditation standards, licensing and certifying agencies. The applications of accrediting standards are also covered. Offered fall term.
Credits: 3 Lecture: 3

## HIT 272

## HEALTH INFORMATION MANAGEMENT

Studies organization and management principles in order to develop effective skills in leadership, motivation and team-building techniques for the health care workplace. Covers computer concepts with emphasis on DRG grouping and encoding applications via AHIMA Virtual Lab Web-based software. Enrollment limited to second year HIT majors. Offered spring term.
Credits: 5 Lecture: 4 Lab: 2

## HIT 281 <br> 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, percentile and Z scores. Offered winter term.
Recommended prerequisite: MTH 20.
Credits: 3 Lecture: 2 Lab: 2

## HIT 282 <br> QUALITY IMPROVEMENT/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 is covered. Offered spring term. Prerequisite: HIT 283.

## Credits: 4 Lecture: 3 Lab: 2

## HIT 283

## CODING CLASSIFICATION

Places major emphasis on coding guidelines and application of codes for diseases and operations in the ICD-9-CM system. Offered winter term. Prerequisites: AH 111, AH 112, AH 113, HIT 104, BI 121 and BI 122 Anatomy and Function I and II (or BI 231, 232, 233).

## Credits: 6 Lecture: 3 Lab: 6

## HIT 284 <br> CLASSIFICATION AND REIMBURSEMENT SYSTEMS

Applies advanced coding principles with application based on legislative developments. Emphasizes merger of clinical and financial data for patient care reimbursement. Focuses on specialized coding pertinent to the Prospective Payment System including HCPCS coding. Explores alternate coding systems and extensive application of CPT coding system. Offered for secondyear program students and as skill upgrade. Strongly recommend ICD-9-CM coding skills. Offered spring term. Recommended prerequisite: MTH 20.
Credits: 4 Lecture: 4

## HIT 288 <br> SPECIAL STUDIES: HEALTH INFORMATION TECHNOLOGY Credits: 1 to 3

## HIT 293

## DIRECTED PRACTICE II

In the realm of health information management, this is a course in which students report to a health care facility and experience planned activities in the environment of the actual workplace. Provision for technical experiences is an integral component of
curricula. Provides for application of classroom and laboratory objectives in supervised affiliation sites in Oregon, typically. Performed under leadership of a registered health information or accredited health information technician. Total of 160 clinical hours distributed in curriculum at various points of program completion. Instructor's permission is required. Offered summer term between first and second year and summer term following graduation. Maximum of four credits applies to the health information technology degree.

## Credits: 3 Other: 9

## HIT 294

## RHIT EXAM PREPARATION

Course helps prepare students for the National RHIT
Examination. Students will review core curriculum identified by AHIMA as essential domains of learning and take practice exams to familiarize them with the types of questions and formats they will encounter when taking the national exam. Completion of the health information technology AAS degree required.

## Credits: 1 Lecture: 1

## HIT 296

## AMBULATORY DATA SYSTEMS

Focuses on electronic information systems in non-acute facilities with emphasis on professional medical billing. Course will focus on insurance, legal and regulatory conditions, coding systems, reimbursement issues, and filing claims utilizing electronic medical data systems. Recommended prerequisites: first year HIT coursework, MTH 20.
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. May be repeated once.
Credits: 1 Lecture: 1

HIT 299
SELECTED TOPICS: HIT
Credits: 4

## HISTORY

## HST 101 <br> HISTORY OF WESTERN CIVILIZATION

Surveys political, social and cultural changes from prehistoric times to the early Medieval period. Emphasizes the great civilizations of the ancient world, contributions of the Greeks and Romans and the establishment of early European civilization. Need not be taken in sequence. Recommended preor corequisite: WR 121.
Credits: 4 Lecture: 4

## HST 102 <br> HISTORY OF WESTERN CIVILIZATION

Surveys development of European civilization from the high Medieval period through the 1700 s. Focuses on 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. Need not be taken in sequence. Recommended pre- or corequisite: WR 121.

## Credits: 4 Lecture: 4

## HST 103 <br> HISTORY OF WESTERN CIVILIZATION

Explores western European civilization from French Revolution to present. Focuses on the establishment of nations, the Industrial Revolution, major wars of the 19th and 20th centuries, and social and cultural trends accompanying these events. Need not be taken in sequence. Recommended pre- or corequisite: WR 121.

## Credits: 4 Lecture: 4

## HST 104

## WORLD HISTORY

World civilizations and their historical interactions. Origins of civilizations in the Middle East, the Mediterranean area, Africa, China, Indian subcontinent and the Americas. Chronologically, covers the period from prehistory to the end of the classical era. Need not be taken in sequence. Recommended pre- or corequisite: WR 121.

## Credits: 4 Lecture: 4

## HST 105 <br> WORLD HISTORY

World civilizations and their historical interactions. Traces the post-classical through early modern period in Europe and China, the spread of Islamic empires in Africa, India and the Middle East as well as Western Europe's first worldwide expansion. Need not be taken in sequence. Recommended pre- or corequisite: WR 121.
Credits: 4 Lecture: 4

## HST 106

## WORLD HISTORY

World civilizations and their historical interactions. Impact of industrialization and imperialism in both a Western context and a non-Western context; the modern period of world history with a focus on WWI, WWII and postwar reordering of world civilizations. Need not be taken in sequence. Recommended pre- or corequisite: WR 121.

## Credits: 4 Lecture: 4

## HST 188

SPECIAL STUDIES: HISTORY
Credits: 1 to 3

## HST 199 <br> SELECTED TOPICS: HISTORY <br> Credits: 1 to 4

## HST 201 <br> HISTORY OF THE UNITED STATES

Surveys the development of America to the start of the Civil War. Examines the interaction of Native American nations with the culturally-diverse European settlers throughout the colonial period, Revolutionary War, and birth of a new nation. Recommended pre- or corequisite: WR 121.
Credits: 4 Lecture: 4

## HST 202 <br> HISTORY OF THE UNITED STATES

Examines the Civil War, rapid industrialization and the impact of immigration and cultural diversity on the emergence of the United States as a world power during the 20th century. Recommended pre- or corequisite: WR 121.

## Credits: 4 Lecture: 4

## HST 204

## HISTORY CIVIL WAR

Examines problems of the Civil War period including the contributions of political and military leadership, troop activity, women, civilians, Native Americans, African-Americans, technology and geography. Recommended pre- or corequisite: WR 121.
Credits: 4 Lecture: 4

## HST 207

## HISTORY AMERICAN WEST

Examines Native American tribal life, multicultural frontier tensions and settlement patterns tied to the use and commercial development of the West's unique assets. Recommended pre- or corequisite: WR 121.
Credits: 4 Lecture: 4

## HST 218

## NATIVE AMERICAN HISTORY

Examines patterns of conflict between European and American settlers and Native American populations which resulted in voluntary migration, forced settlement, wars and broken treaties. With the destruction of the immense buffalo herds and increasing demands for land, native populations struggled for survival on reservations during a period of shifting national Indian policy. Recommended pre- or corequisite: WR 121.
Credits: 4 Lecture: 4

## HST 225 <br> 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 pre- or corequisite: WR 121.

## Credits: 4 Lecture: 4

## HST 236

## WOMEN IN 20TH CENTURY EUROPEAN HISTORY

Offers students an introductory survey of European women's history in the 20th century and provides them with a basic understanding of how gender has been a factor in this historical context. Recommended pre- or corequisites: WR 121, LIB 127.
Credits: 4 Lecture: 4

## HST 242 <br> HISTORY OF THE PACIFIC NW

Overview of Native American societies of the Pacific Northwest, problems and patterns of white movement to the area, acquisition by the United States, the long road to statehood and the impact of this region on national politics. Recommended pre- or corequisite: 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 pre- or corequisite: 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 pre- or corequisite:
WR 121.
Credits: 4 Lecture: 4

## HST 270

## 20TH CENTURY EUROPEAN HISTORY

Introduces the intellectual, political and cultural history of 20th Century European history. Studies significant events in a European context, identifying the historical setting and significance of major occurrences in Europe, such as fascism, world war, communism and decolonization. Recommended pre- or corequisites: COMPASS scores: reading 84-100, writing 71-100 or WR 121 and LIB 127.
Credits: 4 Lecture: 4

## HST 280

CO-OP WORK EXPERIENCE HISTORY
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 pre- or corequisites: WR 121 and LIB 127.

## 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. May be taught with a MIC and WIC designation. Recommended prerequisites: WR 121 and LIB 127.
Credits: 4 Lecture: 3 0ther: 1

## 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. May be taught with a MIC and WIC designation. Recommended prerequisites: WR 121 and LIB 127.
Credits: 4 Lecture: 3 0ther: 1

## HST 299

SELECTED TOPICS: HISTORY
Credits: 1 to 3

## HOSPITALITY, TOURISM \& RECREATION

See Cascade Culinary Institute for culinary courses.

## HTRM 105

## FOOD SERVICE MANAGEMENT

Covers principles of managing a food service operation including concept development, site selection, how to develop an operational plan, how to develop and price a menu, principles of local food service marketing, how to estimate sales, developing an understanding of food costs and controls, and how to obtain funding for building a restaurant. Involves students in assessing service and determining service niches in the community. Students prepare detailed business plans for fictitious or actual operations. Credits: 4 Lecture: 4

## HTRM 106

LODGING MANAGEMENT
Covers principles of managing lodging operations. Explores current operational practices of lodging operations throughout the world. Discusses management functions related to front office, housekeeping, marketing, reservations, maintaining customer accounts, laws affecting lodging operations and typical service problems. Students will go on field trips to learn about different kinds of lodging operations throughout the state.
Credits: 3 Lecture: 3

## HTRM 188 <br> SPECIAL STUDIES: HOSPITALITY, TOURISM AND RECREATION <br> Credits: 1 to 3

## HUMAN DEVELOPMENT

See individual Human Development programs listed under Addictions Studies, Career/Life Planning, Job Search and Study Skills.

## HD 155 <br> MENTORING FOR OREGON LEADERSHIP INSTITUTE

The OLI offers high school students of Latino descent an opportunity to learn skills necessary to become effective leaders. Helps mentors learn skills required to promote lifelong learning and leadership. Teaches the mentoring process as well as intercultural skills and effective communication strategies. Pass/no pass.
Credits: 3 Lecture: 2 Lab: 2

## HD 188

SPECIAL STUDIES: HUMAN DEVELOPMENT
Credits: 1 to 3

## HD 190 <br> ASSERTIVE COMMUNICATION

Explores the influence of nonassertive communication on development of personal style and the importance of assertive behavior to effective relationships. Develops responsible assertive behavior in everyday life, emphasizing communication techniques which show respect for self and others.
Credits: 2 Lecture: 2

## HD 199

SELECTED TOPICS: HUMAN DEVELOPMENT
Credits: 1 to 4

## HD 299 <br> SELECTED TOPICS: HUMAN DEVELOPMENT <br> Credits: 1 to 6

## HUMANITIES/FILM

## FA 101

## INTRODUCTION TO FILM

Enhances student enjoyment and understanding of film through exploring the cinematic languages of acting, directing, cinematography and narrative.

## Credits: 3 Lecture: 2 Other: 2

## 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.
Credits: 4 Lecture: 4

## HUM 188

SPECIAL STUDIES: HUMANITIES
Credits: 1 to 4

## HUM 199

SELECTED TOPICS: HUMANITIES
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. May be taught with a MIC and/or WIC designation. Recommended prerequisite: placement in RD 117 and WR 121.

## Credits: 4 Lecture: 4

## HUM 211 <br> CULTURE AND LITERATURE OF AFRICA

Introductory study of representative oral arts, literature, film and related creative arts, in English or in translation, of subSaharan African peoples, examined in context of their histories and cultural traditions. May be taught with a MIC and/or WIC designation. Recommended prerequisite: placement in RD 117 and 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 prerequisite: placement in RD 117 and 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. May be taught with a MIC and/or WIC designation. Recommended prerequisite: placement in RD 117 and 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. May be
taught with a MIC and/or WIC designation. Recommended prerequisite: placement in RD 117 and WR 121.

## Credits: 4 Lecture: 4

## HUM 240 <br> NATIVE AMERICAN LITERATURE AND CULTURE

Introduction to traditional oral and contemporary Native American texts with an emphasis on cultural contexts and continuity. May be taught with a MIC and/or WIC designation. Recommended prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## HUM 256 <br> 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. May be taught with a MIC and/or WIC designation. Recommended prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## HUM 261 <br> POPULAR CULTURE: SCIENCE FICTION

Focuses on the significance of science, technology and the idea of the future as revealed in popular culture through fiction, film, music, comics and advertising. May be taught with a WIC designation. Recommended prerequisite: placement in WR 121 and RD 117.
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 fiction, film, song, art and advertising. May be taught with a WIC designation. Recommended prerequisite: placement in RD 117 and 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 fiction, film, television, comics and journalism. May be taught with a WIC designation.
Recommended prerequisite: placement in RD 117 and 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 fiction, film, advertising and journalism. May be taught with a WIC designation.
Recommended prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## HUM 265 <br> POPULAR CULTURE: NOIR FILM AND FICTION

Historical, thematic and technical study of film noir and related fiction as a subversive force in popular culture. May be taught with a WIC designation. Recommended prerequisite: placement in RD 117 and 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 travel memoirs, journalism, advertising, educational videos and feature films that critique touristic assumptions. May be taught with a WIC designation. Recommended prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## HUM 299

SELECTED TOPICS: HUMANITIES
Credits: 1 to 4

## JOB SEARCH

## HD 109

GETTING HIRED
Describes job application tools, develops job search skills necessary to gain employment, helps students identify marketable talents and develop confidence through role playing.
Credits: 2 Lecture: 2

## JOURNALISM

## J 188

SPECIAL STUDIES: JOURNALISM
Credits: 1 to 3

## J 199

SELECTED TOPICS: JOURNALISM
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. Recommended pre- or corequisite: J 216. Credits: 1 Lab: 3

## J 216 <br> REPORTING I

A beginning class in newswriting. Emphasis is placed on writing leads, developing the story and a sense for news. Character and communication of news, rights and responsibilities of journalists explored. Open to all students. Recommended prerequisites:
WR 121 or instructor approval.
Credits: 3 Lecture: 3

## J 217

## REPORTING II

A continuation of Reporting I with emphasis placed on comprehensive news story writing, covering speeches and meetings and interviewing. Recommended prerequisite: J 216 or instructor approval.

## Credits: 3 Lecture: 3

## J 280

JOURNALISM PRACTICUM
Credits: 1 to 3

## J 299

SELECTED TOPICS: JOURNALISM
Credits: 1 to 4

## LIBRARY

## LIB 127

INFORMATION RESEARCH SKILLS
Introduces the competencies and skills students need to locate, retrieve, evaluate, analyze and use information at the college level.
Credits: 2 Lecture: 2

LIB 199
SPECIAL TOPICS: LIBRARY
Credits: 1 to 3

## LITERATURE

See Humanities for additional courses.
ENG 104

## INTRODUCTION TO LITERATURE: FICTION

Explores human purposes, literary structures, cultural values and rich varieties of the short story and the novel. Close reading, interpretation and evaluation of selected works of fiction, with attention to authors' contexts, creative process, narrative elements (such as theme, character, plot, point of view, setting, symbol, and style) and reader responses. May be taught with WIC designation. Recommended prerequisite: placement in RD 117 and WR 121. Credits: 4 Lecture: 4

## ENG 105 <br> 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 prerequisite: placement in RD 117 and WR 121.

## Credits: 4 Lecture: 4

## ENG 106 <br> 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 prerequisite: placement in RD 117 and WR 121. Credits: 4 Lecture: 4

## ENG 107 <br> 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 prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## ENG 108

WESTERN WORLD LITERATURE: MIDDLE AGES
Survey of representative texts explores Middle Ages and Renaissance, up to the 18th century Enlightenment, including rise of Christianity, chivalry, and the vision quest. Need not be taken in sequence. Recommended prerequisite: placement in RD 117 and 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 prerequisite: placement in RD 117 and WR 121.

## Credits: 4 Lecture: 4

## ENG 140 <br> SHAKESPEARE REVIEW IN ASHLAND

Reading and critical analyses of plays by Shakespeare and other dramatists performed by the Oregon Shakespeare Festival and other theaters in Oregon. Required field trip(s) to view productions. May be repeated with different content.
Credits: 3 Lecture: 3

ENG 188
SPECIAL STUDIES: LITERATURE
Credits: 1 to 4

ENG 199
SELECTED TOPICS: LITERATURE
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 prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## ENG 202 <br> 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 prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## ENG 204 <br> SURVEY BRITISH LITERATURE I

Examines representative texts from the heroic age (Medieval) through the Enlightenment (18th century). Literary forms such as the folk epic, chivalric romance, morality play and folk ballad, lyric poetry, drama, the speculative essay, and the novel are studied. Explores relations between texts and their cultural and historic contexts. Need not be taken in sequence. Recommended prerequisite: placement in RD 117 and 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 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. May be taught with a WIC designation.
Recommended prerequisite: placement in RD 117 and WR 121.
Credits: 4 Lecture: 4

## ENG 221 <br> INTRODUCTION TO CHILDREN'S LITERATURE

Provides an overview of children's literature 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.
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. May be taught with WIC designation. Recommended prerequisite: placement in RD 117 and 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. May be taught with a WIC designation. Recommended prerequisite: placement in RD 117 and WR 121. Credits: 4 Lecture: 4

## ENG 260

## INTRODUCTION TO WOMEN WRITERS

Course taught in London or Florence in the OIEC study abroad program.
Credits: 3 Lecture: 3

## ENG 265

## FILM AS LITERATURE

Course taught in London or Florence in the OIEC study abroad program.
Credits: 3 Lecture: 3

## ENG 288

SPECIAL STUDIES: LITERATURE
Credits: 1 to 4

ENG 299
SELECTED TOPICS: LITERATURE
Credits: 1 to 4

## MANUFACTURING TECHNOLOGY

Department approval required to enroll in manufacturing courses. Prior to attending classes, students are required to attend a one-hour, free MATC orientation. Please contact the Manufacturing Applied Technology Center (MATC), (541) 504-2930.

## MATC ORIENTATION

All students must attend prior to starting course work. Provides students with the required information to participate in self-directed learning at MATC. Provides students with computer login procedures, lab checkout procedures and a list or student supplied tools.

## MET 160 <br> MATERIALS ENGINEERING

A continuation of quality assurance topics focused on materials testing. Includes shear, hardness, tensile and compression testing and other material analyzing techniques. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 101 <br> 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. Prerequisite: instructor approval.
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. Prerequisite: instructor approval.

## 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. Prerequisite: instructor approval.
Credits: 3 Lab: 9

## MFG 105

WELDING TECHNOLOGY II
Intermediary course focused on welding carbon steel plate in specific out-of-position setups. Includes continuing practice in GMAW and SMAW and interpretation of inspection standards related to weld quality. Prerequisite: instructor approval.
Credits: 3 Lab: 9

## MFG 107

## WELDING TECHNOLOGY III

Final course offered in the one-year certificate welding technology series. Includes welding practice utilizing electrodes F-1 through $\mathrm{F}-4$ in the SMAW process and introduction to gas tungsten arc welding and flux core arc welding. Prerequisite: instructor approval. Credits: 3 Lab: 9

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. Prerequisite: instructor approval.
Credits: 3 Lab: 9

## MFG 112

## MANUFACTURING PROCESSES II

Introduction to computer numerical control programming and operations including feed and speed calculations, drilling canned cycles, and development of necessary programming documentation. Continued milling machine and lathe practice. Prerequisite: instructor approval.
Credits: 3 Lab: 9

## MFG 114 <br> MANUFACTURING PROCESSES III

Final course in the one-year certificate manufacturing processes series. Continued student proficiency development in the operation of basic machine tools and computer numerical control operations. Prerequisite: instructor approval.
Credits: 3 Lab: 9

## MFG 115

## DESIGN PROCESSES I

Introduction to computer aided manufacturing. Includes interpretation and construction of technical drawings, technical sketching and CAD/CAM operations. Prerequisite: instructor approval.
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. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 117

DESIGN PROCESSES II
Concepts of precision part design using a CAD/CAM system. Includes process planning exercises, post processing to create computer numerical control data, and downloading to a tabletop computer numerical control milling machine and lathe. Prerequisite: instructor approval.
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 creating of operational hydraulic and pneumatic circuits. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 120

## FLUID POWER SYSTEMS II

Continuation of Fluid Power I course. Includes directional control valves, solenoid-operated valves, pressure and flow valves and the use of electronic sensors in hydraulic and pneumatic systems. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 133

QUALITY ASSURANCE
Introductory quality control course. Includes precision and semiprecision measuring, introduction to statistical process control, geometric dimensioning and tolerancing, and pneumatic gauging topics. Prerequisites: instructor approval.

## Credits: 2 Lab: 6

## MFG 153 <br> ROBOTIC PROGRAMMING I

Introductory robotics course. Includes pendant operation, programming simple robotic movements, classification of robots, degrees of freedom, applications and end effector designs.
Prerequisite: instructor approval.
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. Prerequisite: instructor approval.

## Credits: 1 to 3

## MFG 201 <br> 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. Prerequisite: instructor approval.
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. Prerequisite: instructor approval. Credits: 2 Lab: 6

## MFG 203

LAYOUT
Semi-precision and precision layout practices. Includes height gage operations, surface plate setups, bolt circle layout, and the use of hand and power tools to produce accurate workpiece profiles. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 205

DRILL PRESS
Drill press operations training. Includes safety, machine nomenclature, measuring and sharpening drills, machine setup, cutting tool selection, magnetic based drill, electric drill motor, and radial arm drill operations. Prerequisite: instructor approval.

## 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.
Credits: 2 Lab: 6

## MFG 208

## SURFACE GRINDING II

Continuation of MFG 206, Surface Grinding I, targeting NIMS certification requirements. Includes cutting fluid selections, grinding tool steels, attention to surface finishes and angular grinding operations. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 210

## VERTICAL MILLING

Vertical milling machine operations. Includes safety, work holding, table setups, power feeds, digital read out operation, cutter selections, climb and conventional cutting and spindle speed changes. Prerequisites: instructor approval.

## 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 setups, carbide insert and holders, and part running. Prerequisites: instructor approval.
Credits: 2 Lab: 6

## MFG 212

## HORIZONTAL MILLING

Horizontal milling machine operations. Includes safety, work holding, table setups, feed calculations, cutter selection, arbor changing, tool changing and spindle speed changes. Prerequisites: instructor approval.

## Credits: 2 Lab: 6

## MFG 213 <br> 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 setups and loading, carbide insert and holder selections, tool vectors, and part running. Prerequisites: instructor approval.

## Credits: 2 Lab: 6

## MFG 214

## LATHE OPERATOR I

Introductory manual lathe operations training. Includes safety, machine maintenance, quick-change tooling, chuck setups, compound taper cutting, general turning and drilling operations. Prerequisites: instructor approval.

## 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. Prerequisite: instructor approval.

## 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. Prerequisite: instructor approval.

## 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. Prerequisite: instructor approval.

## 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. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 236 <br> 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 $\mathrm{G} \& \mathrm{M}$ programming.
Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 237

DIGITAL METROLOGY
Digital measuring tool operations. Includes maintenance, zeroing, data transfers, cables, and measuring practice using digital gauges, micrometers, depth gage and height gage measuring tools. Prerequisite: instructor approval.

## Credits: 1 Lab: 3

## MFG 238

## OPTICAL COMPARATOR

Optical comparator operations. Includes operation of H-14 metrology controller, stage setup and fixturing, inspection of rectangular and round workpieces. Prerequisite: instructor approval.

## 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.
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. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 242

## PROGRAMMABLE LOGIC CONTROLLERS I

Introduction to programmable logic controller programming. Includes ladder logic, sealing circuits and event sequencing. Prerequisite: instructor approval.
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. Prerequisite: instructor approval.
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. Prerequisite: instructor approval.

## 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.

## Credits: 2 Lab: 6

## MFG 251 <br> ROBOTIC PROGRAMMING II

Introduction to robotic solutions used in FMS and CIM applications. Off-line MCL II programming, conveyors, loading systems, sensors and work cell layouts are introduced. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 253

## COMPUTER INTEGRATED MANUFACTURING I

Robotic operations focused on automated assembly processes. Includes robotic operations with fasteners, adhesives, point-topoint, variable point and point array programming techniques. Prerequisite: instructor approval.

## 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. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 255 <br> COMPUTER INTEGRATED MANUFACTURING II

Non-servo robotic and equipment programming focused on PLC interfacing to pneumatic equipment. Includes: I/O addressing, palletizing functions, world- and coordinate-based robotic motions. Prerequisite: instructor approval.
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 non-destructive inspection techniques that are utilized by welders and inspectors to interpret and monitor AWS quality standards. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 264 <br> AUTOMATED WELDING AND CUTTING

Cutting and welding steel shapes using numerically controlled processes. Includes cutting torch settings, setup, maintenance practices and plasma cutting exercises. Prerequisites: instructor approval.
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.

## Credits: 2 Lab: 6

## MFG 267

## OXYGEN-FUEL AND PLASMA CUTTING

Gas torch, air carbon arc, and plasma gas cutting. Includes torch setup and maintenance, flame setting, diagnostics, track torch operations, circle cutting and carbon arc scarfing practice. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 271

## SMAW I

Shielded metal arc welding. Includes machine setup, fillet and groove welds on plain carbon steel in all positions. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 272

## GMAW I

Gas metal arc welding. Includes machine setup for shortcircuiting and spray transfer on plain carbon steel. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 273

SMAW II
Shielded metal arc welding. Includes machine setup, groove welds on plain carbon steel plate, stainless steel plate, and pipe. Prerequisites: instructor approval.

## Credits: 2 Lab: 6

## MFG 274

GMAW II
Gas metal arc welding. Includes machine setup for groove welds on plain carbon steel pipe and plate and aluminum plate. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 275

## SMAW III

Shielded metal arc welding. Includes machine setup, groove welds on plain carbon steel to a limited plate thickness of 3/4" and pipe in all positions. Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 276

GMAW III
Gas metal arc welding. Includes machine setup, groove welds on plain carbon steel and stainless steel in all positions. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 280

## CO-OP WORK EXPERIENCE MANUFACTURING

Credit granted for applicable on-the-job work experience.
Minimum of 33 hours of work for each credit granted.
Prerequisite: instructor approval.

## 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. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 282

## FCAW I

Flux core arc welding. Includes machine setup for fillet and groove welds on plain carbon steel in all positions. Limited thickness to 3/4" plate. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 283

## GTAW II

Gas tungsten arc welding. Includes machine setup for fillet and groove welds on plain carbon steel, aluminum, stainless steel tubing and plate in all positions. Prerequisite: instructor approval.

## Credits: 2 Lab: 6

## MFG 284

FCAW II
Flux core arc welding. Includes machine setup for fillet and groove welds on pipe and plain carbon steel plate to a limited plate thickness to 3/4". Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 285

GTAW III
Gas tungsten arc welding. Includes machine setup, groove welds on plain carbon, aluminum and stainless steel pipe in all positions. Prerequisite: instructor approval.
Credits: 2 Lab: 6

MFG 286
FCAW III
Flux core arc welding. Includes machine setup and groove welds on plain carbon steel plate and pipe in limited positions to a plate thickness of less than 3/4". Prerequisite: instructor approval.
Credits: 2 Lab: 6

## MFG 287

## CNC PRESS BRAKE AND SHEARING

Course covers safety and operation of equipment utilized in parting, forming and fabricating sheet metal. Instructor approval required.

## 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. Instructor approval required. Credits: 3 Lab: 9

## MFG 289

## MATERIAL HANDLING-FORK LIFT SAFETY

Course 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. Instructor approval required.
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, setup, testing, grinding samples and evaluation. Prerequisite: instructor approval. 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, setup, testing and evaluation activities. Prerequisite: instructor approval. Credits: 1 Lab: 3

## MFG 292

## CERTIFICATION TEST PREPARATION AWS II

Testing materials preparation for Level Two Weld Certification Testing. Includes materials test sample preparation, setup, testing and evaluation activities. Prerequisite: instructor approval.
Credits: 1 Lab: 3

## MFG 293

## CERTIFICATION TEST PREPARATION NIMS II

Testing materials preparation for Level Two NIMS Certification Testing. Includes materials test workpiece preparation, setup, testing and evaluation activities. Prerequisite: instructor approval.

## Credits: 1 Lab: 3

## MFG 294 <br> CERTIFICATION TEST PREPARATION AWS III

Testing materials preparation for Level Three Weld Certification Testing. Includes materials test sample preparation, setup, testing, grinding samples and evaluation. Prerequisite: instructor approval. Credits: 1 Lab: 3

## MFG 295

## CERTIFICATION TEST PREPARATION NIMS III

Testing materials preparation for Level Three NIMS Certification Testing. Includes materials test workpiece preparation, setup, testing and evaluation activities. Prerequisite: instructor approval.
Credits: 1 Lab: 3

## MFG 296 <br> CERTIFICATION TEST PREPARATION SME

Testing materials preparation for Society of Manufacturing Engineers Certification Testing. Includes setup, testing and evaluation activities. Prerequisite: instructor approval.
Credits: 1 Lab: 3

## MFG 297

## CERTIFICATION TEST PREPARATION NAIT

Testing materials preparation for NAIT Certification Testing. Includes setup, testing and evaluation activities. Prerequisite: instructor approval.

## Credits: 1 Lab: 3

## MASSAGE THERAPY

## LMT 95

## INTRODUCTION TO A MASSAGE CAREER

Considering massage as a career? Each week of this course covers a different class that a LMT student experiences in the one-year certificate program.
Credits: 1 Lecture: . 5 Lab: 1.5

## LMT 113 KINESIOLOGY I

Basic study of the anatomy of the skeleton, connective tissues and movement of the body, the muscles of the trunk and related structures will be taught. It is the first course of a four-part sequence in Kinesiology.
Credits: 3 Lecture: 2 Lab: 3

## LMT 118

KINESIOLOGY II
Basic study of movement of skeletal muscles that include muscle origins, insertions, actions and the palpation of upper body muscles for a LMT education foundation. Recommended prerequisite: successful completion of LMT 113 (with a minimum grade of 75 percent).

## Credits: 4 Lecture: 3 Lab: 3

## LMT 124

KINESIOLOGY III
Basic study of movement of skeletal muscles that include origins, insertions, actions and the palpation of the lower body muscles for a LMT education foundation. Recommended prerequisite: successful completion of LMT 118 (with a minimum grade of 75 percent).
Credits: 3 Lecture: 2 Lab: 3

## LMT 128 <br> KINESIOLOGY IV

Covers muscle palpation skills of each muscle of the human body and knowledge of the nerve innervation for the major muscle groups. Recommended prerequisite: LMT 124.

## Credits: 3 Lecture: 2 Lab: 3

## LMT 140

PATHOLOGY
Studies basic mechanisms of disease processes and how disease and massage affect body systems. Basic medical terminology is reviewed. Recommended prerequisites: BI 121 and BI 122.

## Credits: 5 Lecture: 5

## LMT 145

MASSAGE I
Covers basic theory, physiological effects and practical applications of the seven basic Swedish massage techniques. Includes history of massage, proper use of tools, and body mechanics, and introduces the development of an entry level Swedish massage routine. Also introduces basic SOAP charting, chair massage, pregnancy massage, and working with diverse populations. Recommended prerequisite: LMT 113.

## Credits: 4 Lecture: 2.5 Lab: 4.5

## LMT 150

## MASSAGE II

Students progress to level two by learning how to do basic assessment of a client and how to design a treatment plan. SOAP charting is learned and practiced. Students also learn the theory
and practice of various modalities such as sports massage, deep tissue, trigger point therapy, muscle energy technique, and PNF stretching. Recommended prerequisites: BI 121, BI 122, LMT 145, LMT 113 and LMT 118.
Credits: 4 Lecture: 2.5 Lab: 4.5

## LMT 155

## EASTERN THEORY \& PRACTICE

Introduces basic principles and theory of Eastern massage modalities and the Chinese meridians as required for Oregon state licensing exams.
Credits: 3 Lecture: 2 Lab: 3

## LMT 160

## HYDROTHERAPY

Introduces the principles and techniques of the effects of water in its three forms: solid, liquid, and vapor while working within the massage therapy profession. Recommended prerequisites: BI 121, BI 122 or equivalent.

## Credits: 2 Lecture: 1 Lab: 3

## LMT 165

## MENTORSHIP

Takes massage students from the academia world of massage into real life experience of massage therapy. Reviews the Oregon State licensing exam applications. Helps students transition from school to the professional field of massage therapy.
Recommended prerequisites: BI 121, BI 122 or equivalent, LMT 145, LMT 150 and LMT 155.
Credits: 1 Lecture: 1

## LMT 170 <br> PROFESSIONAL ETHICS AND RULES

Introduces the boundaries, barriers, and professional ethics that a massage therapist needs to be aware of when practicing massage therapy. Reviews and discusses Oregon Administrative Rules and Statutes.
Credits: 2 Lecture: 2

## LMT 175

CLINICI
Students practice Swedish massage techniques on the general public while demonstrating professionalism, client intakes, SOAP charting, treatment plans, and universal sanitation and hygiene when working within the supervised student massage clinic. Recommended prerequisites: BI 121, BI 122, LMT 113, LMT 118, LMT 124, LMT 140, LMT 145, LMT 150, LMT 155, LMT 160, LMT 170 or equivalent.

## Credits: 2 Lecture: 1 Lab: 3

## LMT 180

CLINIC II
Students will demonstrate proper massage techniques within a clinical setting. Students perform health intakes, assess and design
a treatment plan, practice professionalism and integrate a variety of massage techniques while working with the general public in the school's supervised massage clinic. The focus will be to help the students prepare for the state licensing exam as required by the Oregon Board of Massage Therapists and prepare to work on their future clientele. Recommended prerequisite: LMT 175.
Credits: 3 Lecture: 1 Lab: 6

## LMT 199

SELECTED TOPICS: LICENSED MASSAGE THERAPY
Credits: 4

## LMT 210

## ADVANCED CLINIC

Internships with selected populations using appropriate massage techniques. Students will be supervised by the instructor if they are not licensed to practice massage therapy in Oregon. Students with an Oregon massage license must provide proof of liability insurance to the instructor at the first class meeting. Recommended prerequisite: one-year certificate or Oregon LMT license. Credits: 2 Lecture: 1 Other: 3

## LMT 215 <br> SPA ESSENTIALS WET TREATMENTS

Introduces spa concepts that focus on wet room treatments that are used in European and luxury spa facilities. Demonstrates spa protocols that include many of the most common wet room treatments including Vichy shower, whirlpool baths, sauna, paraffin therapy, aromatherapy, mud therapy, and masks. Also includes contraindications, hygiene, sanitation, and spa etiquette. Class meets at Sage Springs Spa in Sunriver. Recommended prerequisite: one-year LMT certificate or LMT license.
Credits: 3 Lecture: 2 Lab: 3

## LMT 225

## SPA ESSENTIALS DRY TREATMENTS

Introduces spa concepts that focus on dry room treatment that can be performed in a massage therapy practice without special equipment. Demonstrates spa protocols that include many of the most common dry room treatments including salt scrubs, body polishes, body wraps, and the latest spa dry room treatments. Also includes contraindications, hygiene, sanitation, and spa etiquette. Recommended prerequisite: one-year certificate or LMT license. Credits: 3 Lecture: 2 Lab: 3

## LMT 235

SPA ESSENTIALS HOT STONES
Introduces the proper use of both hot and cold stones in therapeutic massage sessions. Massage protocols for the body, face, hands and feet will be performed. Also includes contraindications, hygiene, sanitation, and spa etiquette. Recommended prerequisite: one-year LMT certificate or LMT license.
Credits: 3 Lecture: 2 Lab: 3

## LMT 240 <br> ADVANCED TREATMENT I

Advanced coursework focusing on the treatment of specific injuries that fall within the LMT scope of practice. Includes an exploration of muscular/skeletal/nervous systems and practice of massage treatment protocols for each addition. Recommended prerequisite: one-year LMT certificate or LMT license.
Credits: 5 Lecture: 4 Lab: 3

## LMT 250

## ADVANCED TREATMENT II

This is a beginning level cranio-sacral therapy course. Contents of the course include the Upledger CS1 class, covered in further depth and with additional topics. There will be an emphasis on learning relevant anatomy. Recommended prerequisite: one-year LMT certificate or licensed LMT or other health professional license.
Credits: 5 Lecture: 4 Lab: 3

## LMT 260 <br> ADVANCED TREATMENT III

Students will practice and demonstrate spa concepts that focus on wet room and dry treatments that are used in spa facilities. Class will demonstrate spa protocols that include many of the most common treatments: Vichy shower, steam baths, Jacuzzi, salt therapy, sugar scrubs, aromatherapy and reflexology. Contraindications of all modalities, hygiene, sanitation and spa etiquette will also be covered. Recommended prerequisite: one-year LMT certificate or LMT license. Estheticians and spa entrepreneurs may take the class with department approval.
Credits: 5 Lecture: 4 Lab: 3

## LMT 270 <br> CLINICAL ASSESSMENTS

Students will practice and demonstrate methods that assess range of motion, posture, and gait. They will show understanding of the medical pathology of referred pain not related to muscular/skeletal system and the LMT scope of practice assessment responsibilities in dealing with clients. Students will decipher when a client needs to be referred to other health-care providers. Recommended prerequisite: one-year LMT certificate or Oregon LMT license.
Credits: 4 Lecture: 3 Lab: 3

## LMT 280 <br> EFFECTIVE THINKING IN OFFICE DECISIONS

Prepares students to make appropriate decisions regarding course treatments and to assess the merits of specific products that they may be encouraged to use, endorse, or sell. Discusses research terminology, research methods, and the limitations of research, including the various ways products and treatments are marketed. Recommended prerequisite: one-year LMT certificate or Oregon LMT license.

## LMT 295 <br> INTEGRATED THERAPIES

Students will integrate their relaxation massage learned in LMT 145 with the modalities learned in their advanced courses. This integration will develop into the students' signature routine. A review of body mechanics and self-care will be covered to ensure a lasting massage career. Recommended prerequisite: Year One Certificate or LMT license.
Credits: 3 Lecture: 2 Lab: 3

LMT 299
SELECTED TOPICS: LMT
Credits: 7

## MATHEMATICS

## MTH 10 <br> 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 20

## 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 prerequisite: MTH 10 or equivalent.

## Credits: 4 Lecture: 4

## MTH 60

## ALGEBRA I

Introduction to algebra, integers, rational and real numbers, algebraic expressions, linear equations and inequalities in one and two variables, and systems of equations and inequalities.
Recommended prerequisite: MTH 20 or equivalent.
Credits: 4 Lecture: 4

## MTH 65

## ALGEBRA II

Continues development of manipulative algebra skills from MTH 60. Includes algebraic expressions and polynomials, factoring algebraic expressions, rational expressions, roots and radicals, and quadratic equations. Recommended prerequisite: MTH 60.
Credits: 4 Lecture: 4

## MTH 85 <br> 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, lines in the Cartesian plane, exponents, three-dimensional geometry, simultaneous equations and preparation for trigonometry. Real-world applications and analyzing data are emphasized. Recommended prerequisite: MTH 20 and/or MTH 60 equivalent.

## Credits: 4 Lecture: 4

## MTH 86 <br> 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 nonlinear 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 recommended. Recommended prerequisite: MTH 85 or equivalent.

## Credits: 4 Lecture: 4

## MTH 95 <br> INTERMEDIATE ALGEBRA

Provides the algebra foundation necessary to study college-level mathematics. Includes systems of equations and inequalities, functions, rational expressions and equations, roots, radicals, complex numbers, quadratic equations and inequalities.
Recommended prerequisite: MTH 65 or equivalent. Graphing calculator required. TI-83 recommended.

## Credits: 4 Lecture: 4

## MTH 95F <br> MATH FIT FOR INTERMEDIATE ALGEBRA

Helps students improve their success in a concurrent mathematics course. All presentations are designed as collaborative group activities. Course is graded pass/no pass. Concurrent enrollment in MTH 95 required.

## Credits: 1 Lab: 2

## MTH 105

## INTRODUCTION TO CONTEMPORARY MATHEMATICS

Introduces basic concepts of contemporary mathematics to students who are not planning further study of mathematics. Topics selected from: finite mathematics, probability, descriptive statistics and mathematical problem solving, examples of major
mathematical ideas and applications. Topic presentation includes group discovery activities and writing assignments. Major goal of the course is to capture the interest of the liberal arts major while stressing the importance of a working knowledge of math in today's society. Prerequisites: C or better in MTH 95 or MTH 95 equivalency met or COMPASS Algebra score of 83 or COMPASS College Algebra score of 41 or instructor approval. Credits: 4 Lecture: 4

## MTH 111 <br> 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. Recommended prerequisite: MTH 95 or equivalent. Graphing calculator required. TI-83 recommended.
Credits: 4 Lecture: 4

## MTH 111F

## MATH FIT FOR COLLEGE ALGEBRA

Helps students improve their success in a concurrent mathematics course. All presentations are designed as collaborative group activities. Course is graded pass/no pass. Concurrent enrollment in MTH 111 required.
Credits: 1 Lab: 2

## MTH 112 <br> 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. Recommended prerequisite: MTH 111 or equivalent. Graphing calculator required. TI-83 recommended.

## Credits: 4 Lecture: 4

## MTH 112F <br> MATH FIT FOR ELEMENTARY FUNCTIONS

Helps students improve their success in a concurrent mathematics course. All presentations are designed as collaborative group activities. Course is graded pass/no pass. Concurrent enrollment in MTH 112 required.
Credits: 1 Lab: 2

## 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. Recommended prerequisite: MTH 112 or equivalent. Graphing calculator required. TI-83 recommended.
Credits: 4 Lecture: 4

MTH 198
PRACTICUM IN MATHEMATICS
Credits: 2 Lecture: 1 Other: 3

## MTH 199 <br> SELECTED TOPICS: MATHEMATICS

Offers selected topics in mathematics for courses generally available only once. Topics and credits to be arranged.
Credits: 1 to 3

## MTH 211W <br> FUNDAMENTALS OF ELEMENTARY MATHEMATICS I-WIC

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 prerequisite: MTH 95 or equivalent.

## Credits: 4 Lecture: 4

## MTH 212W <br> FUNDAMENTALS OF ELEMENTARY MATHEMATICS II - WIC

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 prerequisite: MTH 211 or equivalent.
Credits: 4 Lecture: 4

## MTH 213W <br> FUNDAMENTALS OF ELEMENTARY MATHEMATICS III - WIC

Covers geometric shapes, measurement, congruence and similarity, and coordinate and transformational geometry. Third term of sequence for students planning to become elementary teachers but open to any student wanting to study the foundations of mathematics. Recommended prerequisite: MTH 211.
Credits: 4 Lecture: 4

## MTH 231

DISCRETE MATHEMATICS I
First of two courses designed to introduce concepts of mathematics applicable to the field of computer science. Topics in the course will examine in detail the applied, real-world and theoretical mathematical implications of the mathematical concepts of logic, sets, Boolean Algebra, mathematical induction, relations, functions and recursion. 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 prerequisite: MTH 111.
Credits: 4 Lecture: 4

## MTH 232

DISCRETE MATHEMATICS II
Second of two courses designed to introduce concepts of mathematics applicable to the field of computer science. Topics examine in detail the applied, real-world and theoretical mathematics implication of the mathematical functions including 1-1, inverse and composition, combinations, including counting rules and the multiplication principle; and graph theory, including paths, circuits, directed and undirected graphs, matrix representation of graphs, and trees. The symbolic, numerical and graphical representations of the mathematical concepts are expanded and explored. Emphasis on solving problems symbolically, numerically and graphically, and understanding connections among these methods in interpreting and analyzing results. Recommended prerequisite: MTH 231, equivalent course or competencies, or instructor approval.

## 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. Recommended prerequisite:
MTH 111. A graphing calculator is required. TI-83 recommended. Credits: 4 Lecture: 4

## MTH 243

## MATHEMATICS FOR MANAGEMENT/LIFE/SOCIAL SCIENCE

Introduces linear programming, probability and descriptive statistics for students majoring in business and social sciences. Includes graphical and algebraic techniques of solving linear programming problems, descriptive statistics, graphs of data, basic probability theory, random variables, and binomial and normal probability distributions. Recommended prerequisite: MTH 111 or instructor approval. A graphing calculator is required. TI-83 recommended.

## Credits: 4 Lecture: 4

## MTH 244

## INTRODUCTION TO METHODS OF PROBABILITY AND STATISTICS

Introduces methods of inferential statistical analysis. Includes sampling techniques, introduction to binomial and normal distributions, sampling distributions, the central limit theorem, confidence intervals, hypothesis testing for one and twosample data, and tests of association: linear regression and categorical analysis. Real-world data sets and group activities are
emphasized. Students will be introduced to and use a standard statistical software package. A graphing calculator is required. TI83 recommended. Basic computer skills (especially spreadsheet knowledge) are desirable. Prerequisites: C or better in MTH 243 or MTH 243 equivalency met or instructor approval.
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 maximumminimum 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 is recommended. Computer literacy recommended. Recommended prerequisites: MTH 112, MTH 113 or equivalent or instructor approval.
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, population dynamics and stochastic models. Topic presentation includes group discovery activities. Real applications, technical writing, group activities and group projects are emphasized. A graphing calculator is required. TI-83 recommended. Computer literacy recommended. Recommended prerequisite: 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 is recommended. Computer literacy recommended. Recommended prerequisite: MTH 252.

## Credits: 4 Lecture: 3 Lab: 3

## MTH 254 <br> VECTOR CALCULUS I

Introduces concepts of vector calculus to science and engineering students. Includes introduction to linear algebra, 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 is recommended. Computer skills required. Recommended prerequisite: MTH 253.
Credits: 4 Lecture: 3 Lab: 2

## 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 recommended. Basic computer skills required. Recommended prerequisite: MTH 254.
Credits: 4 Lecture: 3 Lab: 2

## 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 and applications appropriate for science and engineering; introduction to the Laplace transform and higher order equations; series solutions. A graphing calculator is required. TI-83 is recommended. Computer skills required. Recommended prerequisite: MTH 253.

## Credits: 4 Lecture: 3 Lab: 2

## MEDICAL ASSISTING

## MA 113 <br> INTRODUCTION TO MEDICAL ASSISTING

First of three classes which cover key competencies related to clinical responsibilities of the medical assistant as identified by the American Association of Medical Assistants. Fundamental principles include: medical aseptic technique; standard precautions for handling infectious and biohazardous material; preparing patients for and assisting with routine and specialty physical examinations; taking vital signs; performing patient interview and history; ensuring proper medical record documentation; and preparing and maintaining examination and treatment area. Math component includes basic skills review in preparation for understanding and calculating medication dosage. Corequisites: MA 125.
Credits: 2 Lecture: 1 Lab: 2

## MA 123 <br> MEDICAL ASSISTING BASIC PROCEDURES

Second of three classes which cover key competencies related to clinical responsibilities of the medical assistant as identified by the American Association of Medical Assistants. Basic principles include: surgical aseptic technique; preparing patient for and assisting with procedures, treatments and minor office surgery; post-operative patient care; preparing patient for, performing
and understanding purpose and significance of diagnostic testing (such as electrocardiogram) and screening; injections; and applying basic pharmacology principles to prepare and administer oral and parenteral medications. Math component includes understanding and applying methods of dosage calculation to prepare and administer medication as directed by physician. Prerequisite: MA 113 Introduction to Medical Assisting and MA 125 Medical Office Procedures I. Corequisite: MA 135.
Credits: 4 Lecture: 3 Lab: 3

## MA 125 <br> MEDICAL OFFICE PROCEDURES I

First of two classes which cover key competencies related to office practices and administrative responsibilities of the medical assistant as identified by the American Association of Medical Assistants. Includes maintaining professionalism and confidentiality. Also includes communication and acceptable written communication styles within the medical setting, telephone techniques, accurate medical record preparation, documentation and maintenance, legal concepts, scheduling and monitoring appointments, and maintenance and inventory of supplies and equipment. Must be admitted to the Medical Assisting Program to enroll. See advisor.

## Credits: 4 Lecture: 4

## MA 133 <br> MEDICAL ASSISTING ADVANCED PROCEDURES

Third of three classes which cover key competencies related to clinical responsibilities of the medical assistant as identified by the American Association of Medical Assistants. Advanced principles include: injections; phlebotomy; performing and understanding purpose and significance of microbiological diagnostic testing; maintaining certificates and accreditation; monitoring legislation related to current health care practices; and applying advanced pharmacology principles to understand purpose and significance of oral and parenteral medications. Math component includes applying methods of dosage calculation to prepare and administer medication as directed by physician. Prerequisites: MA 123 Medical Assisting Basic Procedures and MA 135 Medical Office Procedures II. Corequisites: MA 145.
Credits: 4 Lecture: 3 Lab: 3

## MA 135

## MEDICAL OFFICE PROCEDURES II

Second of two classes which cover key competencies related to office practices and administrative responsibilities of the medical assistant as identified by the American Association of Medical Assistants. Includes bookkeeping procedures and special accounting entries; an introduction to coding systems; insurance billing, procedures and regulations; medical transcription; and computer applications for office procedures. Prerequisites: MA 113 Introduction to Medical Assisting and MA 125 Medical Office Procedures I. Corequisites: MA 123.
Credits: 4 Lecture: 4

## MA 145 <br> COMPUTERIZED MEDICAL OFFICE PROCEDURES

Computers are an integral part of today's medical facilities. They are the method of choice for managing patient demographics; appointment scheduling; processing billing for insurance and patients; tracking accounts receivable aging and status; and generating reports related to practice finances. This course gives students training necessary to successfully complete these administrative tasks. Prerequisite: MA 123 Medical Assisting Basic Procedures and MA 135 Medical Office Procedures II. Corequisites: MA 133.
Credits: 1 Lab: 2

## MA 147 <br> MEDICAL ASSISTANT PRACTICUM I

The clinical practicum is a required, supervised, unpaid learning experience which takes place on site at a prearranged clinical facility. Provides students with the opportunity to perform clearly identified competencies within the clinical setting. Students must have a total of five clinical credits. Practicum work to earn clinical credits begins once all course work is completed. Each credit of practicum requires a minimum of 32 clock hours of work in the clinical setting for a total of 160 hours. Instructor approval required.
Credits: 5 Other: 16

MA 199
SELECTED TOPICS: MEDICAL ASSISTANT
Credits: 1 to 4

## MILITARY SCIENCE

## MS 101

## MILITARY SCIENCE I

Course focuses on a basic introduction to the military and Army leadership. Classes consist of lecture, class participation and writing assignments.
Credits: 1 Lecture: 1

## MS 102

## MILITARY SCIENCE II

Study of stress management, Army values and team building concepts. Topics also include introduction to Army tactics and time management.
Credits: 1 Lecture: 1

## MS 103

MILITARY SCIENCE III
Students develop problem solving and assertiveness skills, goal setting, active listening and decision-making skills. Topics also include an introduction to land navigation and map reading.
Credits: 1 Lecture: 1

## MS 180 <br> ARMY PHYSICAL FITNESS

The student will be familiarized with the Army Physical Fitness Program FM 21020 through an individual regimented fitness training program. Students will receive guidance on the proper fitness and nutrition to excel in a physically demanding environment as well as be given the opportunity to plan and implement their own total fitness program.

## Credits: 1 Lab: 2

## MS 201 <br> BASIC MILITARY SKILLS

Students will be introduced to actual patrol base operations, planning and organizing a patrol and establishing a defense. A continuing study of map reading, terrain analysis and navigational methods will be presented as well as a modern day look at terrorism and it's effects on the military.
Credits: 2 Lecture: 2

## MS 202

## LAND NAVIGATION

An introduction to Army briefing and writing techniques, team goals, stress management and advanced time management. Includes a study of Army battle drills and troop leading procedures. Teaches basic topographic map reading skills, land navigation using a lensatic compass, terrain association and practical exercises.

## Credits: 2 Lecture: 2

## MS 203 <br> LEADERSHIP AND MANAGEMENT

Introduces students to situational, adaptive and transformational leadership. A look into how Army values are used in consideration of others with a close, in-depth study of Operations Orders and taking military missions from concept to execution.

## Credits: 2 Lecture: 2

## MS 205 <br> OCS PHASE I

Intensive two week pre-commissioning phase held during summer term. Course is oriented on leader development and individual/small unit training and a physically and mentally demanding environment. Individual proficiency in land navigation and communications skills is evaluated. Each student is provided practical experience in a variety of leadership positions. Prerequisite: instructor approval.
Credits: 5 Lecture: 4 Lab: 3

## MS 299

SELECTED TOPICS: MILITARY SCIENCE
Credits: 4 Lecture: 4 Lab: 12 Other: 12

## MUSIC

## Music Theory and Literature

MUS 101

## MUSIC FUNDAMENTALS

Presents fundamentals of music, 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.

## Credits: 3 Lecture: 3

## MUS 111

## MUSIC THEORY IA

Harmony of the common-practice period with attention to part writing (the melodic aspects of music). An entrance placement exam will be given during the first class session. This sequence course should be taken by all students who intend to major or minor in music. Recommended prerequisite: MUS 101 or equivalent. Recommended corequisite: MUS 114.

## Credits: 3 Lecture: 3

## MUS 114

MUSICIANSHIP IA
Focuses on developing practical skills necessary for any musician. Builds aural acuity through drill and practice in ear training, sight singing and dictation. Keyboard (piano) exercises will be an important part of the work. Course is designed to be taken concurrently with MUS 111.
Credits: 2 Lecture: 2

MUS 199
SELECTED TOPICS: MUSIC
Credits: 1 to 3

## MUS 201 <br> UNDERSTANDING MUSIC

Introduces music and its literature. Encompasses the study of musical vocabulary, style, form, principal composers and the historical development of music from the Middle Ages through the 20th century. It is recommended that the sequence be taken in order: MUS 201, MUS 202 and MUS 203.
Credits: 3 Lecture: 3

## MUS 205 <br> INTRODUCTION TO JAZZ HISTORY

Covers the history of jazz. Styles and significant artists are studied in depth. No previous musical knowledge required. Not offered every year.
Credits: 3 Lecture: 3

## MUS 211

## MUSIC THEORY IIA

A continuation of common practice period harmony (Music Theory I) with stress on chromatic resources and style analysis including an introduction to harmonic practices of the 20th century. Recommended prerequisite: MUS 113. Recommended corequisite: MUS 214.

## Credits: 3 Lecture: 3

## MUS 214

## MUSICIANSHIP IIA

Focuses on developing practical skills necessary for any musician. Builds aural acuity through drill and practice in ear training, sight singing and dictation. Keyboard (piano) and computerized drill and exercises will be an important part of the work. Recommended prerequisite: MUS 116. Recommended corequisite: MUS 211.

## Credits: 2 Lecture: 2

## Music - Performance Ensembles

## 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. Not offered every year.

## 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. Instructor approval required. Not offered every year. Credits: 2 Lecture: 2

## MUP 114

## VOCAL ENSEMBLE

This is a select group of singers that focus on various jazz idioms: blues, funk, Latin, and straight-ahead. Enrollment is by audition. Recommended corequisite: MUS 197A College Choir.

## 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. Instructor approval required. Not offered every year.

## Credits: 2 Lecture: 2

## MUS 123 <br> 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. Not offered every year. Credits: 1 Other: 3

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. Not offered every year.
Credits: 20 Lecture: 2

## MUS 194

## BIG BAND JAZZ

Study and performance of music for large jazz band. May be repeated; no limit.
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.

## Credits: 1 Other: 3

## MUS 196

SYMPHONY
The study and performance of music for symphony orchestra. One major concert is presented each term. Instructor approval required. May be repeated; no limit.
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.
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 that are often performed off campus. May be repeated; no limit.

## Credits: 2 Lecture: 1 Lab: 3

## Music - Performance Studies

## *MUP 71 - 91, MUP 171-191, MUP 271-291 PRIVATE MUSIC LESSONS

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. May be repeated; no limit. Credits: 1 Other: . 5

## Music - Technique Classes

The following music instruction is offered in class format.
Credits: 2 Lab: 2
*MUS 131, 132, 133
Group Piano
*MUS 134, 135, 136
Group Voice
*MUS 137, 138, 139
Group Guitar

MUS 131
PIANO CLASS I
Teaches fundamentals of piano performance 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 137
CLASS GUITAR I
Teaches fundamentals of guitar performance in a class format. Credits: 2 Lecture: 2
*A maximum of 15 credits of CWE, Health and Human Performance activities, performance or studio arts courses may be applied toward an AAOT or AS degree. See electives, pages 38 and 40.

## NURSING

### 5.715 <br> CO-OP WORK EXPERIENCE NURSING I

Provides an opportunity for certified nursing assistants in the nursing program to obtain college credit while providing direct patient care in acute or long-term care facility. Prerequisites: admission to nursing program, status as a certified nursing assistant and departmental approval.
Credits: 1 to 4

### 5.716 <br> CO-OP WORK EXPERIENCE NURSING II

Licensed practical and graduate practical nurses can obtain college credit for providing direct patient care while employed in a long-term or acute-care facility. Prerequisites: enrollment in nursing program, LPN status and departmental approval.

## Credits: 1 to 4

## NUR 095

NURSING ASSISTANT
Covers basic nursing care and effective communication skills for adults in acute and long-term care facilities. Issues of confidentiality, patient rights and role of the nursing assistant are discussed. Lecture/ lab provides necessary content and skills to be eligible to sit for the Oregon State Board of Nursing certified nursing assistant examination. Clinic takes place in acute and long-term care facilities.
Credits: 7 Lecture: 3 Lab: 4.5 Other: 7.5

NUR 106
NURSING I
Introduces fundamental concepts of nursing practice including nursing process, critical thinking, therapeutic communication, grief, loss and cultural considerations. Students will have the opportunity to begin learning about patients with altered states of health. Lab skills focus on a core set of beginning level nursing skills. The clinical practicum provides students with the opportunity to apply knowledge and clinical skills to the adult client with basic nursing care needs. First term of the PN sequence and of the nursing program. Prerequisite: admission to nursing program and concurrent enrollment in NUR 260.
Credits: 9 Lecture: 4 Other: 15

## NUR 107

NURSING II
Introduces students to the knowledge and skills that are necessary in providing nursing care to individual patients experiencing an altered state of health. Students are also provided with the opportunity to learn concepts relating to the care of developing families. The clinical lab focuses on developing skills in the areas of intravenous therapy, complex wound management and nutritional therapies. The clinical practicum provides students with the opportunity to apply knowledge and clinical skills to the adult client with medical-surgical nursing needs. Second term of the PN sequence and the nursing program. Prerequisite: NUR 106.
Credits: 10 Lecture: 40 ther: 18

## 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 nursing are introduced. The ability to communicate effectively, therapeutically and professionally is emphasized. The clinical skills lab provides a capstone comprehensive assessment of
the students 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 contributions to and participation in nursing care delivery at the practical nurse level. Students also have the opportunity to provide care for the childbearing family. Final term of the PN sequence and the third term of the nursing program. Prerequisites: NUR 107 and concurrent enrollment in NUR 261 required.
Credits: 9 Lecture: 4 Other: 15

## NUR 110 <br> LPN RE-ENTRY PRACTICUM

Reviews LPN theory and skills and includes 160 precepted clinical hours to allow the practical nurse with lapsed license to re-enter the work force.
Credits: 4 Other: 16

## NUR 188

SPECIAL STUDIES: NURSING I

## Credits: 1 to 8

## NUR 199

## SELECTED TOPICS: NURSING I

Allows first-year nursing students to pursue a special content area in nursing. Special study arrangements must be made through the nursing program coordinator.
Credits: 1 to 8

## NUR 206 <br> 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 their significant others. Clinical skills lab focuses on the development of higher level intravenous medication and fluid therapy skills. 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. Prerequisite: completion of the first year nursing program or PN license and other advance placement requirements. Credits: 11 Lecture: 6 Other: 15

## NUR 207

## NURSING V

Focuses on the concepts of community-based nursing care of individuals and significant others, care of the critically ill client, as well as maternal child care of the child-bearing family. The nursing curriculum continues to expand on the role of the RN and to promote critical thinking and clinical decision making. Students further develop their skills in patient teaching, client
care planning and patient care management skills. Clinical skills lab provides students with opportunities to simulate the care of complex, acutely ill patients. The clinical practicum focuses on applying the nursing process to provide and direct holistic, individualized patient care. Students are provided additional experiences in community-based, critical care and mother-baby clinical settings. Fifth term of the nursing program, second term of the RN sequence of the program.

## Credits: 10 Lecture: 5 Other: 15

## NUR 208 <br> NURSING VI

Focuses on refining clinical decision making skills related to the complex healthcare needs of clients across the lifespan in a variety of healthcare settings. The holistic, individualized needs of the individual and family are the focus for collaborative care management decisions. Theoretical concepts of quality nursing care, legal and ethical issues, leadership and management of care; and nursing care of patients with life-threatening conditions are addressed in relation to clinical practice. Students participate in a four week full time preceptorship experience focusing on managing groups of patients or individual partners 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. Prerequisite: NUR 207.
Credits: 9 Lecture: 4 Other: 15

## NUR 210

## RN RE-ENTRY PRACTICUM

Reviews RN theory and skills and includes 160 precepted clinical hours to allow the RN with a lapsed license to re-enter the work force.
Credits: 4 Other: 16

## NUR 216

## NURSING CRITICAL CARE

Basic intensive care course for graduate and registered nurses.
Includes nursing care, methods of monitoring and discussion of pathologic conditions commonly encountered in the ICU.

## Credits: 3 Lecture: 3

## NUR 218

## BASIC EKG

Basic three-lead electrocardiograph interpretation. Open to allied health and nursing students.
Credits: 1 Lecture: 1

## NUR 260 <br> PHARMACOLOGY I

Prepares the student to become familiar with the major drug classifications and develop a working knowledge of pharmacological principles. Students will transfer the concepts of safe patient medication administration to the clinical setting. Corequisite: NUR 106.
Credits: 2 Lecture: 2

## NUR 261 <br> PHARMACOLOGY II

Prepares students to critically think about medications prescribed to promote wellness and treat acute and chronic illnesses.
Students will apply knowledge and clinical skills in the safe delivery of medications in the patient care setting. Prerequisite: NUR 260. Corequisite: NUR 108.

## Credits: 2 Lecture: 2

NUR 288
SPECIAL STUDIES: NURSING
Credits: 1 to 4

## NUR 299

## SELECTED TOPICS: NURSING

Allows second-year nursing students to pursue a special content area in nursing. Special study arrangements must be made through the nursing program coordinator.
Credits: 1 to 3

## NUTRITION

## DM 210 <br> NUTRITION THERAPY

In-depth study of common diseases and the specific diets used in their treatment. Class format is based on case studies, with nutrition assessment including reviewing laboratory data, developing care plans and discussing recommended diet modifications.
Credits: 2 Lecture: 2

## FN 225

HUMAN NUTRITION
In-depth introduction to 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.

## Credits: 4 Lecture: 4

## OFFICE ADMINISTRATION

## 0 O 045

## TEN KEY BY TOUCH

Studies 10-key touch method and builds speed and accuracy through intensive drills. Applies skill to typical business projects. Credits: 1 Lecture: . 5 Lab: 1

## OA 116 <br> OFFICE SYSTEMS AND PROCEDURES

Introduces and applies typical office policies and procedures including the opportunities available and roles served by the office worker: performing reception duties, handling office supplies, processing incoming and outgoing mail, organizing
work and work environment, setting priorities, managing time, applying ergonomic and safety principles, developing proofreading skills, using the telephone and other telecommunication methods, handling financial matters, conducting business research, developing an individualized job search strategy, setting priorities, and working effectively with others. Prerequisite: keyboarding and basic knowledge of MS Word features.
Credits: 4 Lecture: 4 Lab: 1

## OA 121 <br> KEYBOARDING

Studies the method of keystroking, emphasizing proper techniques, speed and accuracy development, and basic formatting of letters, and reports. Students who have prior keyboarding instruction may choose Keyboard Refresher.

## Credits: 3 Lecture: 2 Lab: 2

## OA 180 <br> CO-OP WORK EXPERIENCE OFFICE ADMINISTRATION

Designed to address specific office practice skills and theory covered in OA 116. Knowledge of office practices and skills developed on the job will be assessed through written work with the instructor. Learning experience must be coordinated with student's supervisor. Main idea is to either learn psychomotor or cognitive skills on the job or apply traditional classroom learning in a real-life environment. Instructor approval required.
Credits: 3 0ther: 10

## OA 188

SPECIAL STUDIES: OFFICE ADMINISTRATION
Credits: 1 to 3

OA 199
SELECTED TOPICS: OFFICE ADMINISTRATION
Credits: 1 to 3

## OA 280 <br> CO-OP WORK EXPERIENCE OFFICE ADMINISTRATION

Enhances a student's knowledge, personal development, professional development and professional preparation by integrating academic study with practical experience. In addition to completing on-the-job training in an office situation, students will discuss work attitudes, work ethics and other human relations topics as they relate to successful employment in an office environment. Faculty coordinator will work with the student to arrange a suitable work site; however, it is ultimately the responsibility of the student to obtain an appropriate position. Instructor approval required.

## Credits: 1 to 3

## OUTDOOR LEADERSHIP

[^3]
## 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
Credits: 1 to 3

## PHL 201 <br> 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 pre- or corequisite: 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 pre- or corequisite: 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 pre- or corequisite: WR 121.
Credits: 3 Lecture: 3

## PHYSICAL EDUCATION

See Health and Human Performance

## PHYSICAL SCIENCE

## See General Science

## 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 corequisite: MTH 111.
Credits: 5 Lecture: 3 Lab: 3 Other: 1

## PH 202 <br> 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 corequisite: MTH 112.
Credits: 5 Lecture: 3 Lab: 3 Other: 1

## 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: 3 Lab: 3 Other: 1

## 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 prerequisite: MTH 251.
Credits: 5 Lecture: 3 Lab: 3 Other: 1

## PH 212 <br> 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 prerequisites: MTH 252 and PH 211.

## Credits: 5 Lecture: 3 Lab: 3 Other: 1

## PH 213 <br> 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 prerequisites: MTH 253 and PH 212.

## Credits: 5 Lecture: 3 Lab: 3 Other: 1

## PH 299 <br> SELECTED TOPICS: PHYSICS <br> Credits: 1 to 4

## POLITICAL SCIENCE

## PS 188

SPECIAL STUDIES: POLITICAL SCIENCE
Credits: 1 to 3

## PS 198 <br> CO-OP WORK EXPERIENCE POLITICAL SCIENCE INTERNSHIP <br> Credits: 1 to 15

## PS 199

SELECTED TOPICS: POLITICAL SCIENCE
Credits: 1 to 4

## PS 201 <br> INTRODUCTION TO US GOVERNMENT AND POLITICS

Examines the Constitution with its separation of powers, limited authority and guarantee of individual liberty. Includes English heritage, the colonial experience and the American Revolution,
which shaped the charter of American government. Includes the process of self government through public opinion and elections. Recommended prerequisite: WR 121.
Credits: 4 Lecture: 4

## PS 204

## INTRODUCTION TO COMPARATIVE POLITICS

Surveys the field of comparative politics through in-depth analyses of countries in Western Europe, the former Soviet bloc, and the developing world. The first part of the course is structured around the history of liberal democracy and its challengers: fascism and communism. The next part of the course turns to the politics of development. Recommended prerequisite: 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 prerequisite: 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 treatments. Introduces the issue of political obligation with the trial of Socrates in ancient Greece. The notion of toleration and its limits is explored in the era of the Glorious Revolution. Covers the two most central issues of political theory: justice and democracy. Recommended prerequisite: WR 121. Credits: 4 Lecture: 4

## PS 280

CO-OP WORK EXPERIENCE POLITICAL SCIENCE
Credits: 1 to 3

## PS 299

SELECTED TOPICS: POLITICAL SCIENCE
Credits: 4 Lecture: 4 Lab: 12 Other: 12

## PSYCHOLOGY

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PSY }18
SPECIAL STUDIES: PSYCHOLOGY
Credits: }1\mathrm{ to 3
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## PSY 199

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SELECTED TOPICS: PSYCHOLOGY
Credits: 1 to 4
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## PSY 201 <br> 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. Recommended prerequisite: WR 121.

## 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; and social psychology. Recommended prerequisites: WR 121 and LIB 127. Credits: 4 Lecture: 4

## PSY 207

## APPLIED PSYCHOLOGY

Introduces psychology to professional-technical students by focusing on practical applications of psychological principles. Includes perceiving, learning, thinking, problem solving, motivation, emotions, individual development, identifying problem behavior, coping resources, group dynamics and communicating. This course is considered a human relations component.

## Credits: 3 Lecture: 3

## PSY 214 <br> 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. Recommended prerequisites: WR 121, LIB 127 and PSY 201 or PSY 202.
Credits: 4 Lecture: 4

## PSY 215 <br> 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. This course is considered a human relations component. Recommended prerequisites: WR 121, PSY 201 or PSY 202.

## Credits: 4 Lecture: 4

## PSY 216

SOCIAL PSYCHOLOGY
Surveys influence of psychological processes on groups and influence of culture, society and groups on individuals. Includes
analysis and exploration of social 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 prerequisites:
WR 121, LIB 127, 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 plus treatment strategies are covered for major forms of psychopathology. Recommended prerequisites: WR 121, LIB 127, and PSY 201 or PSY 202.

## 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 pre- or corequisites: WR 121.

## Credits: 4 Lecture: 4

## PSY 235

HUMAN DEVELOPMENT: CHILD
Covers major principles and theories of human development throughout the life span applied to prenatal, infant, and child development. Addresses physical, cognitive and socio-emotional development during these ages. Recommended prerequisites: WR 121, LIB 127, and PSY 201 or PSY 202.

## Credits: 3 Lecture: 3

## PSY 236

HUMAN DEVELOPMENT: ADULT
Covers major principles and theories of life span development applied to adolescence, adult development and aging. Addresses physical, cognitive and socio-emotional development during these ages. Recommended prerequisite: WR 121, LIB 127, and PSY 201, PSY 202 or PSY 235.
Credits: 3 Lecture: 3

## PSY 280

CO-OP WORK EXPERIENCE PSYCHOLOGY
Credits: 1 to 4

## PSY 299

SELECTED TOPICS: PSYCHOLOGY
Credits: 1 to 3

## READING

## RD 99 <br> SELECTED TOPICS: READING <br> Credits: 1 to 4

## RD 117 <br> 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. Recommended prerequisite: COMPASS scores: reading 84-100, writing 71-100 or instructor approval.
Credits: 3 Lecture: 3

## RD 199

SELECTED TOPICS: READING
Credits: 1 to 3

## SOCIOLOGY

## SOC 141

## FILM \& SOCIETY: RACE, GENDER, AND CLASS

Course 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.

## 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
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. May be taught with a WIC designation. This course is considered a human relations component.
Recommended prerequisite: WR 121.
Credits: 4 Lecture: 4

SOC 206

## SOCIAL PSYCHOLOGY

Explores social effects of personality formation, relationship between social and individual well-being, and current social/ psychological issues. Recommended prerequisites: WR 121, LIB 127, PSY 201 or 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. May be taught with a WIC designation. Recommended prerequisites: WR 121, SOC 201 or instructor approval.
Credits: 4 Lecture: 4

## SOC 212 <br> RACE, CLASS, ETHNICITY

Analyzes social classes and socioeconomic strata and their race, class and gender with political and economic systems. Critically examines and evaluates the major theories of class. Includes an examination of North American racial and ethnic groups with emphasis on interaction within the social system. May be taught with a MIC and WIC designation. Recommended prerequisites: WR 121, LIB 127, SOC 201 or instructor approval.

## Credits: 4 Lecture: 4

## SOC 215

## SOCIAL ISSUES

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 prerequisites: WR 121, SOC 201 or instructor approval.
Credits: 4 Lecture: 4

## SOC 250 <br> 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 prerequisite: WR 121.
Credits: 4 Lecture: 4

## SOC 299

SELECTED TOPICS: SOCIOLOGY
Credits: 1 to 4

## SPEECH

## SP 111 <br> 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: 3 Lecture: 3

## SP 115 <br> INTRODUCTION TO INTERCULTURAL COMMUNICATION

Explores the impact of cultural differences in communication styles and social values and their impact on work, family, legal and economic systems. May be offered with a MIC designation.
Credits: 3 Lecture: 3

## SP 188

SPECIAL STUDIES: SPEECH
Credits: 1 to 3

## SP 199

SELECTED TOPICS: SPEECH
Credits: 1 to 3

## SP 218 <br> 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 leadership style, conflict resolution and role playing in the small group situation. The emphasis will be on task-oriented, decision-making groups.
Credits: 3 Lecture: 3

## SP 220 <br> 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 241

MEDIA, COMMUNICATION, SOCIETY
Analyzes the social and cultural impact of media, including broadcast, print, film, and computer-mediated communication. Also examines careers in selected areas of media. Taught once every two years. Recommended prerequisite: WR 121.

## 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. This one-credit course is currently available on request and is accepted by some Oregon universities in place of one credit of SP 218, Interpersonal Communication.

## 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 and is accepted by some Oregon universities in place of one credit of SP 218, Interpersonal Communication.
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. This one-credit course is currently available on request and is accepted by some Oregon universities in place of one credit of SP 218, Interpersonal Communication.

## 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. This one-credit course is currently available on request and is accepted by some Oregon universities in place of one credit of SP 218, Interpersonal Communication.
Credits: 1 Lecture: 1

## SP 270 <br> 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 longterm love relationships. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

## SP 280

CO-OP WORK EXPERIENCE SPEECH INTERNSHIP
Credits: 1 to 3

## SP 299 <br> 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

### 9.399 <br> SELECTED TOPICS: FIRE

Credits: 1 to 3

## SFS 101 <br> INTRODUCTION TO EMERGENCY SERVICES

Mandatory introductory course for all students seeking to enter either the structural fire or EMS degree programs. Includes a broad-based overview of the career, with emphasis on fire behavior, history of fire departments, organizational structure and terminology of contemporary structural fire and EMS agencies. Introduces various equipment and tools including hand tools, hose, ladders and protective equipment used to combat fires and provide emergency medical care within the fire service. Allied functions such as training, public education, prevention, investigation and inspections are discussed. Note: SFS 101 and EMT 175 are interchangeable and are both recognized in the dual degree program as being the same course. Recommended corequisite: WR 121.
Credits: 4 Lecture: 4

## SFS 102

## FIRE SERVICE SAFETY AND SURVIVAL

National Fire Academy course in safety taught in a weekend format. Discusses causes of firefighter and paramedic injury and death with emphasis on changing attitudes associated with unsafe acts. Explores the role of physical fitness, stress, critiques and lessons learned. Students view several videotapes of incidents and formulate plans to improve operational safety.

## Credits: 2 Lecture: 2

## SFS 110 <br> 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 prerequisites: SFS 101, SFS 102. Recommended corequisite: WR 121.
Credits: 3 Lecture: 3

## SFS 111

## WATER DISTRIBUTION SYSTEMS

Studies sources of water supply including methods of measuring, pumping and storing water. Fire flow requirements are calculated and various system types are reviewed. Hydrant maintenance, construction and testing are discussed. Students are exposed to a variety of local systems and analyze each delivery system considering fire flow requirements. Rural and static sources of water are also discussed.
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 to develop an effective public education campaign for delivery. Audience type and message content is carefully analyzed. Recommended corequisites: 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 prerequisites: SFS 101, SFS 102. Recommended corequisite: WR 121.
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 prerequisites: SFS 101, SFS 102. Recommended corequisite: WR 121. Credits: 1 Lecture: 1

## SFS 130 <br> INTERFACE FIRE OPERATIONS

Introduces operations and procedures of wildland firefighting in the urban interface. Emphasizes personnel safety, fire fuels and their environment, incident organization, fire behavior and tactical operations. Size-up, air operations, engine and dozer operations are explored. Intensive lab allows for practical application of hand-line construction, mobile attack, hose lays and structural protection strategies. NWCG S-130/S190 certifications issued upon completion of course. Recommended prerequisites: SFS 101, SFS 102. Recommended corequisite: WR 121.

## Credits: 3 Lecture: 3 Lab: 1

## SFS 210 <br> 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. SFS 210 is a technical elective. Recommended prerequisites: SFS 101, SFS 102. Recommended corequisite: WR 121.
Credits: 3 Lecture: 3

## SFS 211 <br> FIRE TACTICS AND STRATEGIES

Studies suppression, control, and extinguishment methods. Identifies procedures of size up, approach, attack, ventilation, overhaul and exposure protection. Studies strategy (the plan) and tactics (the how) of structural firefighting. Unusual fire behavior and changing fire conditions reviewed through case study and classroom exercises. Students practice skills learned on computer. Recommended prerequisites: SFS 101, SFS 102. Recommended corequisite: WR 121.
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 prerequisites: SFS 101, SFS 102, WR 121.
Credits: 3 Lecture: 3

## SFS 230 <br> 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. Note: EMT Basic certification and second year status is required. Structural fire science coordinator approval required. Recommended corequisites: WR 121, SFS 101 and SFS 102.

## Credits: 4 Lecture: 3.7 Lab: 1

## SFS 232

## FIRE SERVICE HYDRAULICS

Studies the hydraulic laws and formulas as applied to fire service. Emphasizes basic hydraulic computations necessary for the safe and efficient delivery of water at a fire scene. "Rule of thumb" calculations, mental math and use of discharge tables enable the student to correctly apply the concepts learned. Emphasizes complicated pumping operations and underwriter requirements for pumps and accessories. Reserved for second year students who are affiliated with a fire service organization. Structural fire science coordinator approval required. Recommended Corequisites: WR 121, SFS 101, SFS 102, MTH 85.
Credits: 3 Lecture: 3

## SFS 233 <br> FIRE SERVICE ENTRANCE EXAMS

Introduces and prepares student for processes and procedures of testing for employment in a structural fire agency. Also beneficial for career personnel preparing for promotional examinations within their agency. Tests students in oral and written communication skills, offering strategies to improve weak areas. Students practice oral interview procedures, reading comprehension, concentration and memory. Several diagnostic tests evaluate mechanical ability, comprehension, basic chemistry and basic physics. SFS 233 is a technical elective. Recommended prerequisites: SFS 101, SFS 102. Recommended corequisite: WR 121.
Credits: 3 Lecture: 3

## SFS 234

## SPEC STUDIES: STRUCTURE FIRE

Provides opportunity for structural fire science students with exceptional background or need to continue a course beyond normal program content. Course content and credit earned will be by mutual agreement between student and coordinator and shall be detailed in a written agreement. Prerequisite: sophomore standing and consent of structural fire coordinator.

## Credits: 2 to 3

## SFS 283

## CAPSTONE FOR FIRE SCIENCE

Structural fire science encourages practical application of concepts learned in the curriculum and applies it to "real world" fire service situations. Two initial classes establish parameters and processes to be used in completing the capstone project. Final project encourages exploration and expansion of particular area of the structural fire science curriculum. Project is presented to
a panel of three area fire service professionals and the instructor. Prerequisites: completion of first year and structural fire science coordinator approval required.
Credits: 1 Lecture: 1

## SFS 288

SPECIAL STUDIES:STRUCTURE FIRE

## Credits: 1 to 3

## STUDY SKILLS

## HD 100CL <br> INTRODUCTION TO COLLEGE LIFE

Focuses on information and strategies to help students succeed at Central Oregon Community College. It is designed to give new students a broad overview of college basics, campus resources, critical thinking, decision-making, diversity and other important components needed to be a successful college student.
Credits: 1 Lecture: 1

## HD 100PM <br> PROCRASTINATION AND MOTIVATION

Course is designed to help students become more successful. The ability to understand and control both procrastination and motivation will give students the opportunity to take more control of their lives. Explores the reasons why students procrastinate and how they can decrease their procrastination. Specific tools will be developed and the importance of motivation in reaching goals will be discussed.

## Credits: 1 Lecture: 1

## HD 100SC

## SUCCESS IN THE CLASSROOM

Designed to help students acquire the essential skills needed for academic success. Topics include: listening and note taking, textbook and article reading and study, learning styles, concentration and memory strategies, active learning, planning and giving oral presentations and effective use of college resources.

## Credits: 1 Lecture: 1

## HD 100TM

## TIME MANAGEMENT

Students will learn techniques for managing their time. They will explore their goals and values and learn how to make plans accordingly, complete weekly, monthly and long-term schedules, use to-do lists, prioritize and study more effectively.

## Credits: 1 Lecture: 1

## HD 100TT

## TEST TAKING

Designed to help students who feel challenged when confronted with test or assessment materials in a course. The objective of this module is to reach a better understanding of the test-taking
process, from preparation and studying through receiving results and follow-up visits with an instructor. Will also help students learn to deal with test anxiety.
Credits: 1 Lecture: 1
HD 101
STUDY STRATEGIES
Focuses on building study skills (e.g., note taking, test taking, time management, reading textbooks, memory, concentration), building college knowledge and devising effective individual strategies for college success.
Credits: 3 Lecture: 3

## THEATER ARTS

## TA 141

ACTING I
Acquaints students with fundamental principles of acting. In-class performance in both comic and serious modes 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. Recommended prerequisite: satisfactory completion of TA 141 or instructor approval.

## Credits: 3 Lecture: 3

## TA 143

ACTING III
Further in-depth character study and scene work. May be repeated for credit. Attendance is mandatory. Recommended prerequisite: successful completion of 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. Prerequisite: instructor approval through audition or interview. Not offered 2007-2008.

## Credits: 1 to 3

## TA 200 <br> INTRODUCTION TO THEATER

Introduces student to the world of theatre. Combines overview of historical facts and theory with contemporary practice. Explores career options in theatrical production. Not offered 2007-2008.
Credits: 3 Lecture: 3

## TA 207 <br> 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. May be repeated once for credit. Not offered 2007-2008.

## Credits: 3 Lecture: 3

TA 280
CO-OP WORK EXPERIENCE THEATER
Not offered 2007-2008.

## Credits: 1 to 3

## WILDLAND FIRE/FUELS MANAGEMENT

## WF 100

## I-100 AND I-200 INCIDENT COMMAND SYSTEMS

Addresses the Incident Command Systems (ICS) organization, basic terminology, common responsibilities and principles. Provides a foundation upon which entry-level personnel can function appropriately in the performance of incident-related duties.
Credits: 3 Lecture: 3

## WF 101 <br> S-130, S-190 FIREFIGHTER TRAINING, INTRO TO FIRE BEHAVIOR

Course trains new firefighters in basic firefighting skills and the basic fire behavior factors that will aid them in safe and effective control of wildland fires. Human performance issues are addressed and how those issues impact fireline job performance. Course also addresses human performance content as it relates to the individual, including situation awareness, communication, decision making, risk management and teamwork skills. Desired outcome of this course is improved awareness of human performance issues on the fireline so that individual firefighters can integrate more effectively into teams/crews working in dynamic, high risk environments.
Credits: 3 Lecture: 3

## WF 102

## S-131 AND S-134

Course is designed to meet training needs of both advanced firefighter/squad boss (FFT1) and incident commander type 5 (ICT5). Course is interactive and contains several exercises and group and class exercises. Topics include fireline reference materials, documenting activities, fireline communications, tactics, and safety. Students will be involved in designing their own safety program. Small groups will discuss and develop the L, C, E. and S, creating a list of performance standards. Students will work together to produce and edit a contract, based on consensus which guides performance.
Credits: 2 Lecture: 2

## WF 131

## S-131 ADVANCED FIREFIGHTER TRAINING

Trains students who wish to become qualified in the first-level supervision position of advanced firefighter/squad boss (FFT1). This is intended for an individual who: has the ability or desire to become a first level supervisor; is a potential squad boss; may be in the position of being a first responder to initial attack fires and responsible for five or fewer personnel. Recommended prerequisite: WF 100, WF 101.

## Credits: 2 Lecture: 2

## WF 134

S-134 LOOKOUTS, COMMUNICATIONS, ESCAPE ROUTES, SAFETY ZONES
Engages students in the process of designing their own safety program. Small groups discuss and develop the L, C, E, and S, creating a list of performance standards. Based on consensus, Contracts to guide performance are produced and edited.
Recommended preparation: WF 100, WF 101.
Credits: 2 Lecture: 2

## WF 180

## L-180 HUMAN FACTORS ON THE FIRELINE

Establishes an awareness of human performance issues and how those issues can impact fireline job performance. Addresses human performance content that relates to the individual, including situation awareness, communication, decision making, risk management and teamwork skills. Improves awareness of human performance issues on the fireline so that individual firefighters can integrate more effectively into teams/crews working in dynamic, high-risk environments. Recommended prerequisites: WF 101, WF 100.
Credits: 1 Lecture: 1

## WF 188

SPECIAL STUDIES: WILDLAND FIRE

## Credits: 1 to 4

## WF 199 <br> SELECTED TOPICS: WILDLAND FIRE <br> 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 203 <br> S-203 INTRODUCTION TO INCIDENT INFORMATION

Provides students with the knowledge and skills they need to serve as type 3 information officers (IOF3). Touches on virtually all aspects of establishing and maintaining an incident information operation, 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

Students will learn how to obtain and use information to determine the probable cause of a wildland fire. Includes obtaining pertinent information when traveling to a fire, locating and securing the probable ignition location, identifying witnesses, documenting any findings, evidence collecting, identifying laws, regulations, and related court procedures associated with administrative, civil, and criminal litigation processes.

## Credits: 3 Lecture: 3

## WF 211

## S-211 PORTABLE PUMPS

Provides practical knowledge and application skills of portable pump operations. Recommended prerequisite: WF 100, WF 101.

## Credits: 2 Lecture: 2

## WF 212

## S-212 WILDFIRE POWER SAWS

Provides training in the use of power saws and techniques. Covers the duties and responsibilities of the power saw operator; parts and maintenance of the chain saw; application; safety and evaluation. Recommended prerequisites: WR 131, WF 134.

## Credits: 3 Lecture: 2 Lab: 4

## WF 215

## S-215 FIRE OPERATIONS IN THE URBAN INTERFACE

Covers size-up, initial strategy and action plan, structure triage, tactics, action plan assessment, public relations and follow-up, and safety. Recommended prerequisites: WF 100, WF 101.

## Credits: 3 Lecture: 3

## 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.

## 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: 2 Lecture: 2

## WF 232

## S-232 DOZER BOSS

Skill course designed to produce proficiency in the performance of all duties associated with the single dozer boss (DOZB).
Primary considerations are tactical use and safety precautions required to establish and maintain an effective dozer operation.
Credits: 2 Lecture: 2

## WF 234

## S-234 IGNITION OPERATIONS

Entry level course providing training in the functional roles and responsibilities connected with firing operations. Course covers planning, ignition procedures and techniques, and equipment applicable to wildland and prescribed fire. It also addresses the role of ignition specialist or firing boss as the organization manages escalation from a non-complex to a complex fire situation. NOTE: Course is not intended to qualify or certify any personnel in the use or transport of any firing device. It is to provide the potential firing boss a description of available equipment and the requirements specific to each such device.
Credits: 3 Lecture: 3

## 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 day long field trip.

## Credits: 2 Lecture: 2

## WF 245

## S-245 DISPLAY PROCESSOR

Designed to provide the skills necessary for a student to perform as a display processor (DPRO) (map maker) on a wildland fire. Course covers the information that needs to be displayed, maps that need to be produced, techniques and symbols used in producing maps, and a discussion on emerging technology.
Credits: 1 Lecture: 1

## WF 260 <br> S-260 INTERAGENCY INCIDENT BUSINESS MANAGEMENT

Covers the following incident business management practices: rules of conduct for incident assignments, recruitment of casuals, pay provisions, timekeeping, commissary, travel compensation
for injury, acquisition of equipment, supplies, services, property management, types and the necessity of cooperation agreements, reporting, investigating, documenting accidents and claims.
Concurrent enrollment in WF 100, WF 101.

## 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 prerequisites: WR 131, WF 134.

## Credits: 3 Lecture: 3

## WF 281

## L-281 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 288

SPECIAL STUDIES: WILDLAND FIRE
Credits: 1 to 4

## WF 290

## S-290 INTERMEDIATE WILDFIRE BEHAVIOR

Meets training requirements to work in the operations section of the Incident Command system. Instructs firefighters how to recognize the numerous factors relating to fuels, topography and weather which affect fire behavior. Recommended prerequisites: WR 131, WF 260, WF 134.

## Credits: 3 Lecture: 2 Lab: 4

## WF 291 <br> I-300 INTERMEDIATE ICS

Provides greater description and detail of the Incident Command Systems (ICS) organization and operations, including application of essential principles and description of air operations.
Credits: 3 Lecture: 3

## WF 292

## RX-300 PRESCRIBE BURN BOSS

Designed to prepare the student for the use of fire to accomplish resource objectives by evaluation and implementation of a prescribed fire. Development of a burn plan is the primary product of this course which includes: developing resource management objectives; safety and monitoring; operational criteria; legal liabilities; use of fire and fire effects; smoke management and prescription design.
Credits: 4 Lecture: 4

## 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

Designed to meet 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

Designed to prepare 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 exercise areas will be added.

## Credits: 3 Lecture: 3

## WF 296

## S-336 SUPPRESSION TACTICS

Designed to meet training requirements in the Operations Section of the Incident Command System. Examples, simulations, and exercises in this course are specific to wildland fire suppression.
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

Course is designed to develop knowledge and skills required for effective fire behavior prediction. Introduces fire behavior calculations by manual methods, using nomograms. Student will gain an understanding of the determinants of fire behavior through studying input (wind, slope, fuels, and fuel moisture). Students also learn how to interpret fire behavior output. Local and regional environmental differences are stressed.

## Credits: 2 Lecture: 2

## WF 299 <br> SELECTED TOPICS: WILDLAND FIRE <br> Credits: 1 to 4

## WRITING

## WR 60

## RHETORIC AND CRITICAL THINKING 1

First course in a two-course series of instruction in developmental writing and reading. The writing process is examined from invention to final draft. Students read, analyze, and evaluate texts of varying lengths that show each stage of the process. Short narratives and expository essays will be composed. Recommended prerequisites: COMPASS scores: reading 16-60 and/or writing 16-99.
Credits: 4 Lecture: 4

## WR 65

## RHETORIC AND CRITICAL THINKING 2

Second course in a two-course series of instruction in developmental writing and reading. Students will study one long text and shorter selections from varying points of view representing the three major academic disciplines of humanities, science, and social science. Mirroring the reading and writing skills used in college, students read and write about the primary ways of thinking across the disciplines. Recommended prerequisites: COMPASS scores: reading 61-83 and/or writing $42-70$ or grade "C" or higher in WR 60.
Credits: 4 Lecture: 4

## WR 75

## BASIC WRITING I

Emphasizes advanced paragraph structure and development and simple essay structures, including some work on addressing specific audiences for specific purposes. Provides extensive practice in developing and organizing fully developed paragraphs and short essays. Recommended prerequisites: ASSET Reading score 43-53 and ASSET Writing score 36-42.

## Credits: 3 Lecture: 3

## WR 95

## 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 95 is an optional course in the developmental writing sequence for students who need or want additional preparation for WR 121.
Credits: 3 Lecture: 3

## WR 99 <br> SELECTED TOPICS: WRITING <br> Credits: 1 to 4

## WR 121

## ENGLISH COMPOSITION

Introduces students to college writing: how to use experience, observation and critical reading to discover and support ideas. Students learn to organize an essay around a thesis, to use suitable patterns of development, to support ideas clearly, to revise to suit purpose and audience and to edit for college-level style. Timed writing in class is a major component. Prerequisites: COMPASS scores: reading 84-100, writing 71-100; or grade of "C" or higher in WR 65 or WR 75 or WR 95; or demonstrated equivalency and instructor approval.

## Credits: 3 Lecture: 3

## WR 122

## ENGLISH COMPOSITION

Using critical reading, observation or investigation to explore topics in depth, students learn to incorporate, accommodate or refute other voices, use evidence and persuasion and follow patterns of reasoning to support their positions. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

## WR 123

## ENGLISH COMPOSITION

Stresses skills necessary to produce college research papers. Students learn to focus a topic; to practice critical reading; to evaluate sources and incorporate them into their writing; and to formally organize, format and document their final revisions. Recommended prerequisites: WR 122, LIB 127.
Credits: 3 Lecture: 3
WR 188
SPECIAL STUDIES: WRITING
Credits: 1 to 3

## WR 199

## SELECTED TOPICS: WRITING

Credits: 1 to 3

## WR 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 jargon-free style. Includes instruction in formatting techniques, document design, graphics, research strategies and documentation, as well as practice in the collaborative skills required for workplace writing. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

## WR 227 <br> TECHNICAL WRITING

Prepares students to write technical or professional correspondence and reports. This course includes instruction in formatting techniques, document design, graphics, research strategies and documentation, as well as practice in the collaborative skills required for workplace writing. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

## WR 240 <br> INTRODUCTION TO CREATIVE WRITING: NONFICTION

Introduces students to writing creative nonfiction, adapting the personal essay to multiple purposes, such as science or nature writing, travel writing, memoir, biography, and journalistic essay. Prose craft exercises, critical reading of published authors and responding constructively to other student work are essential learning processes. Recommended prerequisite: WR 121.
Credits: 4 Lecture: 4

## WR 241 <br> 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 prerequisite: WR 121.

## Credits: 4 Lecture: 4

## WR 242 <br> 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 prerequisite: 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 prerequisite: WR 121.

## Credits: 4 Lecture: 4

## WR 299

SELECTED TOPICS: WRITING
Credits: 1 to 3

## BOARD OF DIRECTORS

## DONALD V. REEDER (Zone 1)

Madras, term expires 2009
JOYCE L. GARRETT (Zone 2)
Prineville, term expires 2009

## ANTHONY DORSCH (Zone 3)

Redmond, term expires 2009
RON FOERSTER (Zone 4)
Bend, term expires 2009

## CONNIE LEE (Zone 5)

Bend, term expires 2007
DANA L. BRATTON (Zone 6)
Bend, term expires 2007
JOHN OVERBAY (Zone 7)
Sunriver, term expires 2007

## PRESIDENT

## JAMES E. MIDDLETON

## President

B.A. in European Literature and Thought, 1969, University of Iowa; M.A. in English Literature, 1973, University of Leeds; M.A., Educational Specialist in Community College Teaching English, 1976, University of Iowa; D.A. in English Language and Literature, 1983, University of Michigan. At COCC since 2004.

## VICE PRESIDENTS

## JAMES R. JONES <br> Vice President and Chief Financial Officer

B.S. in Business Administration, 1974, Oregon State University; C.P.A., 1981; M.B.A., 1992, Oregon State University. At COCC since 1985.

## MATTHEW J. MCCOY

## Vice President for Institutional Advancement

B.A. in Political Science, 1982, University of Arizona; J.D. College of Law, University of Arizona, 1986. At COCC since 1998.

## KATHY WALSH

## Vice President for Instruction

B.A. in English, University of Maryland, 1969; M.A. in English, San Diego State University, 1973; M.A. in Reading, San Diego State University, 1975; Ph.D. in English Language and Literature, University of Virginia, 1990. At COCC since 1990.

## DEANS

## MARY JEANNE KUHAR

Instructional Dean
B.S. in Biology, 1979, West Virginia Wesleyan College; M.D., 1983, University of Pittsburgh School of Medicine. At COCC since 1998.

## ALICIA MOORE

## Interim Dean of Student Services

B.A. in Speech Communication/Spanish, 1991, Willamette University; M.S. in College Administration, 1995, Colorado State University. At COCC since 1997.

## CAROL P. MOOREHEAD

## Dean for Continuing Education and Extended Learning

A.A., Green River Community College, 1975; B.A. in Education, 1977, Evergreen State College; M.Ed. in Adult Education, 1985, Oregon State University. At COCC since 1989.

## ROSS TOMLIN

## Instructional Dean

B.A. in Forestry, 1975, Stephen F. Austin State University; M.S. in Forestry, 1980, Stephen F. Austin State University; Ed.D., 2003, University of LaVerne. At COCC since 2004.

## PRESIDENTS EMERITI

## ROBERT L. BARBER

A.B. in Economics, 1966, Cornell University; M.A. in Education, 1973, State University of New York at Albany; Ph.D. in Education Administration, 1980, University of Connecticut. At COCC from 1990 to 2004.

## FREDERICK H. BOYLE

B.A. in English, 1955, Western State College; M.Ed. in Mathematics and Physics, 1958, Harvard University; Ed.D. in Junior College Administration, 1965, University of Florida. At COCC from 1967 to 1990.

## VICE PRESIDENT EMERITUS

## LOUIS BARTELS QUEARY

B.A. in Rhetoric, 1968, University of California at Berkeley; M.A. in Rhetoric, 1970, University of California at Berkeley; Ph.D. in Rhetoric, 1973, University of California at Berkeley. At COCC from 1979 to 2002.

## DEAN EMERITUS

## DONALD LAWS

B.S. in Political Science-History, 1969, Portland State University; M.A. in Political Science, 1971, Portland State University. At COCC from 1972 to 1997.

## FACULTY

## CORA AGATUCCI

## Professor of English

B.A. in English, 1977, San Diego State University; M.A. in Literature, 1979, University of California, San Diego; Ph.D. in Literature, 1987, University of California, San Diego. At COCC since 1988.

## THOMAS J. BARRY

## Assistant Professor II of Sociology

B.A. in Communication Studies, 1989, University of Kansas; M.A. in Speech Communication, 1992, California State University; M.S.W., 1995, University of Kansas; Ph.D. In Sociology, Kansas State University, 2006. At COCC since 2004.

## ARTHUR N. BENEFIEL

## Professor of Forest Technology

A.S. in Forestry, 1977, Mt. Hood Community College; B.S. in Forest Resources (Forest Management), 1983, University of Washington; M.F.R. in Forest Resources, 1984, University of Washington. At COCC since 1988.

## STEVEN BIDLAKE

## Associate Professor of English

B.A. in English, 1975, Western Washington University; M.A. in English, 1977, University of Oregon; Ph.D. in English, 1987, University of Washington. At COCC since 1992.

## RONALD W. BOLDENOW

## Associate Professor of Forest Resources Technology

B.S. in Biology, 1978, Calvin College; M.S. in Forestry, 1987, Humboldt State University; Ph.D. in Wildland Resource Science, 1996, University of California, Berkeley. At COCC since 1999.

## JON BOUKNIGHT

## Associate Professor of Speech and Writing

B.A. in English, 1982, University of California, Berkeley; M.A. in English, 1987, University of New Mexico; Ph.D. in Speech Communication, 1994, University of Washington. At COCC since 1998.

## THOMAS M. CARROLL <br> Professor of Economics

B.S. in Economics, 1970, University of Idaho; M.S. in Agricultural and Resources Economics, 1980, Oregon State University. At COCC since 1980.

## PETER DICKINSON CASEY

## Professor of Computer and Information Systems

B.A. in Secondary Education, 1981, University of Arizona; A.A., 1982, Central Oregon Community College; M.S. Computer Science Education, 1987, University of Oregon. At COCC since 1983.

## MONTE O. CHENEY, III

## Associate Professor of Mathematics

B.S. in Mathematics, 1994, Walla Walla College; M.S. in Mathematics, 1996, Washington State University; M.S. in Statistics, 1998, Washington State University. At COCC since 1998.

## JEFFREY D. COONEY

## Associate Professor of Biology

B.S. in Natural Science, 1981, Western Oregon State College; D.V.M. in Veterinary Medicine, 1987, Oregon State University. At COCC since 1995.

## LEWIS M. COUSINEAU

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B.S. in Industrial and Management Engineering, 1985, Montana State University; M.B.A., 1992, Seattle University. At COCC since 1998.

## DEBORAH S. DAVIES

## Associate Professor of Dental Assisting

A.A. in Dental Hygiene, 1987, Pueblo Community College; B.S. in Biology, 1975, University of Southern Colorado; holds Oregon Dental Hygiene License and certification by the National Dental Hygiene Board. At COCC since 1998.

## MICHELE D. DECKER

## Assistant Professor II of Nursing

B.S. in Community Health Education, 1979, Oregon State University; B.S. in Nursing, 1983, and M.S. in Nursing Education and Administration, 1991, Oregon Health Sciences University; M.Ed. in Adult Education, 2002, Oregon State University. At COCC since 2005.

## STACEY L. DONOHUE

## Professor of English

B.A. in English, 1985, University Center at Binghamton, State University of New York; Ph.D. in English, 1995, City University of New York. At COCC since 1995.

## JULIE DOWNING

## Professor of Health and Human Performance

B.S. in Corporate and Community Fitness, 1989, North Dakota State University; M.S. in Exercise Physiology, 1991, St. Cloud State University; Ph.D. in Human Performance, 2002, Oregon State University. At COCC since 1991.

## MARK W. EBERLE

## Professor of Biological Sciences

B.A. in Bacteriology, 1972, University of California, Davis; Ph.D in Entomology, 1981, University of California, Davis. At COCC since 1988.

## JAMES H. ELLIS

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B.S. in Behavioral Science, 1976, Westminster College; A.A. in Accounting, 1982, Salt Lake City Community College; B.S. in Accounting, 1984, and M.B.A. in Business, 1997, Westminster College; M.S. in International Business, 2004, Southern New Hampshire University. At COCC since 2006.

## BRUCE L. EMERSON

## Professor of Physics

B.S. in Physics, 1979, Montana State University; Ph.D. in Physics, 1992, University of Utah. At COCC since 1992.

## CATHERINE L. FINNEY

## Associate Professor/Faculty Librarian

B.A. in English, 1983, Carleton College; M.L.S. in Library Science, 1988, University of Washington. At COCC since 1992.

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A.S. in Forest Technology, 1990, Central Oregon Community College; B.S. in Forest Management and Rangeland Resource, 1993, Oregon State University; M.S. in Rangeland Resource Management, 1996, Oregon State University. At COCC since 1998.

## LILLI ANN FOREMAN

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A.B. in Drama, 1982, Stanford University; M.F.A. in Theatre, 1987, Pennsylvania State University. At COCC since 1987.

## MICHAEL C. GESME

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B.A. in Music, 1992, Luther College; M.M. in Orchestral Conducting, 1994, University of Missouri-Columbia. At COCC since 1996.

## DIANA K. GLENN

## Professor of Computer and Information Systems

B.S. in Business Education, 1970, Oregon State University; Ed.M. in Business Education, 1979, Oregon State University. At COCC since 1986.

## MARY M. HANSEN

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B.A. in Humanities, 1985, Washington State University; B.A. in French, 1992, Western Washington University; M.A. in French, 1997, University of Arizona. At COCC since 1998.

## AMY E. HARPER

## Assistant Professor II of Anthropology

B.A. in Anthropology and Germanic Languages and Literature, 1992, University of Montana; M.A. in Anthropology, 1995, University of Massachusetts; Ph.D. in Anthropology, 2002, University of Massachusetts. At COCC since 2002.

## CARSON E. HAURY

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B.A. in Biology, 1975, State University of New York; M.S. in Information Systems, 1988, Naval Postgraduate School. At COCC since 1998.

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A.A. in Business Administration, 1982, Bakersfield Community College; B.S. in Business Administration/Accounting, 1984, California State University, Chico; M.B.A. 1995, California State University, Bakersfield; Ph.D. in Education, 2005, University of Idaho. At COCC since 2002.

## FRANZ HELFENSTEIN

## Professor of Mathematics

B.S. in Mathematics, 1979, Colorado State University; M.S. in Mathematics, 1982, Oregon State University; Ph.D. in Applied Mathematics, 1986, Oregon State University. At COCC since 1990.

## CAROL HIGGINBOTHAM

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B.A. in Chemistry, 1992, Central College; Ph.D. in Biochemistry, 1996, Montana State University. At COCC since 1999.

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B.A. in International Affairs, 1988, Lewis and Clark College; M.A. in Geography, 1993, Ph.D. in Geography, 1997, The Ohio State University. At COCC since 1997.

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## Assistant Professor II of Human Biology

B.S. in Human Nutrition, 1979, Oregon State University; Licensed Dietitian, 1990, Oregon State Board of Licensed Dietitians; Registered Dietitian, 1983, American Dietetic Association; M.S. in Nutrition, 1983, Oregon State University. At COCC since 1988.

## WILLIAM HOPPE

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B.A. in Art, 1967, St. Johns University; M.F.A., Art/Painting, 1973, University of Washington. At COCC since 2000.

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B.A. in English, 1985, Aristotelian University, Greece; M.L.S. in Library Science, 1986, Kent State University; Ph.D. in Library Science, 1993, University of North Carolina. At COCC since 1997.

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B.S. in English Education, 1976, West Chester State University; M.A. in Teaching English as a Second Language, 1982, San Francisco State University; Ph.D. in Applied Linguistics, 1988, University of Texas at Austin. At COCC since 1991.

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B.A. in Journalism, 1976, Idaho State University; M.A. in Speech/Theatre, 1984, Idaho State University; Ph.D. in Communication, 1993, University of Utah. At COCC since 1988.

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B.S. in Biology, 1974, City College of New York; M.S. in Zoology, 1981, University of Vermont; Ph.D. in Anatomy and Neurobiology, 1988, Colorado State University. At COCC since 2002

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B.S. in Elementary Education, 1979, Oregon College of Education, now Western Oregon State College; M.S.T. in Mathematics, 1990, Portland State University. At COCC since 1990.

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A.A.S. in Electronic Engineering Technology, 1979, Southern Illinois University. At COCC since 1988.

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B.S. in Music, 2000, Portland State University; M.M. in Choral Conducting, 2003, Portland State University. At COCC since 2003.

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B.B.A. in Business, 1976, University of Oregon; M.B.A. in Business Administration, 1993, Portland State University. At COCC since 1988.

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B.A. in English, 1966, Walla Walla College; M.A. in English, 1968, University of Nebraska; M.B.A. in Business Management, 1977; Advanced Professional Certificate in Management, 1987, Suffolk University. At COCC since 1981.

## AARON K. LISH

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B.S. in Sport Science, 1993, Northern Michigan University;
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## DAVID H. LIU

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B.A. in Chinese Language and Literature, 1984, Beijing Normal University; M.A. in Teaching, 1991, Pacific University. At COCC since 2006.

## GREGORY T. LYONS

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B.A. in English, 1972, Rice University; M.A. in English and American Literature, 1976, University of Washington; Ph.D. in Rhetoric and Composition, 1988, The University of Texas at Austin. At COCC since 1991.

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## LIBERTY T. MATTHEWS

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A.A. in Nursing, 2001, Central Oregon Community College. At COCC since 2004.

## KENNETH W. MAYS <br> Professor of Automotive Technology

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B.A. in Criminal Justice, 1980, Michigan State University; M.A. in Guidance and Counseling, 1987, Oakland University. At COCC since 2004.

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B.A. in English, 1996, Texas Woman's University; M.A. in English, 2000, Texas Woman's University. At COCC since 2002.

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B.S. in Wildlife Management, 1988, Humboldt State University;
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## LESLIE MINOR-EVANS

## Professor of Psychology and Education

B.A. in Psychology, 1982, University of Washington; M.A. in Social Ecology, 1990, University of California-Irvine; Ph.D. in Social Ecology, 1995, University of California-Irvine. At COCC since 1992.

## JAMES D. MOODIE

## Associate Professor of General Biology

B.S. in Biology, 1980, Saint John's University; M.S. in Zoology, 1983, University of Idaho; Ph.D. in Zoology, 1999, University of Oklahoma, Norman. At COCC since 2001.

## JANE MORROW

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B.A. Nursing, 1983, Augustana College; M.N. and F.N.P., 2001, Washington State University. At COCC since 2003.

## LYNN L. MURRAY

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Registered Dental Assistant License, Radiation Certification, Certified Dental Assistant, Expanded Functions Dental Assistant. At COCC since 1997.

## CHARLES T. NAFFZIGER

## Associate Professor of Mathematics

B.S. in Mathematics Education, 1987, University of Oregon; M.S. in Mathematics, 1991, University of Arizona. At COCC since 1995.

## DOUGLAS D. NELSON

## Professor of Mathematics

B.S. in Wood Science and Technology, 1983, Colorado State University; M.S. in Pure Mathematics, 1990, Northern Arizona University. At COCC since 1998.

## PATRICIA O'NEILL

## Professor of History

B.A. in European History, 1972, University of Pennsylvania; M.A. in Asian History, 1975, State University of New York at Buffalo; Ph.D. in History, 1995, University of Washington. At COCC since 1985.

## CHRISTINE OTT-HOPKINS

## Professor of Plant Biology

B.S. in Biology, 1966, Whitworth College; M.A. in Botany, 1968, Southern Illinois University; Ph.D. Botany, 1974, Miami University. At COCC since 1993.

## SANDOR D. (SEAN) PALAGYI <br> Associate Professor of Computer Aided Drafting and Design

Coursework in Drafting Technology and G.I.S., 1997, Central Oregon Community College; B.S. in Political Science, 1988, University of Oregon. At COCC since 1998.

## MARGARET A. PETERSON

## Professor of Allied Health/Health and Human Performance

B.A. in Anthropology, 1977, University of North Dakota; M.S. in Physical Education, 1979, University of North Dakota; Ed.D. in Higher Education Administration, 1988, Montana State University. At COCC since 1988.

## RALPH R. PHILLIPS

## Assistant Professor I of CIS

B.A. in Finance, 1995, and M.A. in Business/Office Education, 1999, at University of South Florida. At COCC since 2005.

## REBECCA J. PLASSMANN

## Associate Professor of Mathematics

A.B. in Mathematics, 1983, Bryn Mawr College; M.A. in Mathematics, 1988, Bryn Mawr College; M.A. in Education in Mathematics Science and Technology, 1992, University of California at Berkeley. At COCC since 1995.

## RISÈ QUAY

## Assistant Professor II of Composition

B.A. in English Education, 1975, Illinois Wesleyan University; M.S. in Writing, 1998, Illinois State University. At COCC since 2001.

## ROBERT W. REYNOLDS

Professor of Geology
B.S., Geology, 1973, Penn State University; M.S. in Geology, 1991, University of Idaho; Ph.D. in Geology, 1994, University of Idaho. At COCC since 1994.

## SEAN RULE

## Assistant Professor II of Mathematics

B.A. in Mathematics Education, 1996, University of Delaware;
M.Ed. in Mathematics Education, 2001, University of Delaware. At COCC since 2004.

## ARTURO E. SANCHEZ

## Professor of Computer and Information Systems

B.S. in Business, 1975, University of Albuquerque; M.S. in Educational Foundations, 1988, University of New Mexico. At COCC since 1983.

## MARIKO SHIMIZU

## Assistant Professor I of Mathematics

B.A. in Mathematics Education and Primary School Education, 2000, Miyagi University of Education; M.A. in Mathematics, 2002, The University of Mississippi. At COCC since 2005.

## KIRI A. SIMNING

## Associate Professor of Nursing

B.S. in Nursing, 1983, University of North Carolina, Chapel Hill; M.S. in Nursing, 1990, Loma Linda University. At COCC since 1998.

## KATHY SMITH

## Assistant Professor II of Mathematics

B.A.S. in Mathematics and Philosophy, 1994, University of California, Davis; M.S. in Mathematics, 1997, Oregon State University; Ph.D. in Mathematics, 2000, Oregon State University. At COCC since 2001.

## ELEANOR SUMPTER-LATHAM

## Professor of Developmental Writing and Composition/

 Summer Term DirectorB.A. in English, 1975, University of British Columbia; M.A. in English, 1978, University of British Columbia; M.A. in English, 1985, University of Victoria; Ph.D. in English, 1993, University of Washington. At COCC since 1994.

## MARGARET TRIPLETT

## Associate Professor of Reading

B.S. in English, 1971, Iowa State University; M.A. in English, 1976, Iowa State University; M.A. in Education (Reading), 1992, California State University. At COCC since 1993.

## RICKY VIRK

## Associate Professor of Health and Human Performance

B.A. in Biology, 1989, University of Texas at Austin; M.S. in Nutrition Science, 1992, Oregon State University; Ph.D. in Nutrition Science, 1994, Oregon State University. At COCC since 2001.

## ELIZABETH VON CLEVE

## Associate Professor of Sociology

B.A. in Social Work, 1977, University of Washington; M.Ed. in Educational Psychology, 1980, University of Washington; Ph.D. in Social Welfare, 1987, University of Washington. At COCC since 1999.

## REBECCA L. WALKER-SANDS <br> Professor of Psychology

B.S. in Psychology, 1977, Southern Oregon State College; M.A. in Experimental Psychology, 1982, University of Nevada, Reno; Ph.D. in Psychology, 1995, University of North Carolina at Greensboro. At COCC since 1995.

## ANDRIA J. WOODELL

## Assistant Professor II of Psychology

B.A. in Psychology, 1999, University of Arkansas; M.A. in Experimental Psychology, 2002, University of Arkansas; Ph.D. in Experimental Psychology, 2004, University of Arkansas. At COCC since 2004.

## NANCY A. ZAVACKI

## Associate Professor of Nursing

A.D.N., 1977, Southern Oregon State College; B.S. in Nursing, 1987, Southern Oregon State College; M.S. in Nursing, University of Texas, 1988. At COCC since 1999.

## NANCY L. ZENS

## Professor of History

B.A. in American History, 1983, Washington State University; M.A. in American History, 1984, Washington State University; Ph.D. in History, 1988, Washington State University. At COCC since 1989.

## ZELDA ZEIGLER

## Assistant Professor II of Chemistry

B.S. in Chemistry, 1981, Idaho State University; Ph.D. in Analytical Chemistry, 1989, Purdue University. At COCC since 2002.

## ADJUNCT FACULTY

Jacob Agatucci, Writing
Anne Ankrom, Nursing
Camille Atkinson, Philosophy
Charles Alexander, Math
Marlena Bellavia, Foreign Language
Hilda Beltran-Wagner, Composition
Carl Cavallo, Automotive
Sally Deitchler, Writing
Tara Endries, HHP
James Erickson, Psychology
Denise Fainberg, Foreign Language
Daria Ferrara, Nursing
Jack Gallagher, Math
Kevin Grove, Science
Jim Hawes, Humanities
Amy Howell, Education
Nathan Hovekamp, Biology
George Jolokai, Art/Photography
Justin Mackey, Nursing
Kim MacTaggart, Nursing
Bradley McKerihan, Speech
Linda Meurer, Nursing
Peter Meyer, Art
John Miller, Aviation
Betsy Nagler, Nursing
Vanessa Polvi, HHP
Julie Schmidt, Math
Patricia Sunset, Math
Gregg Terhaar, HHP
Dana Topliff, Nursing
Jan Tuckerman, Math
Michael Wonser, Art History

## ADULT BASIC EDUCATION INSTRUCTORS

## JANICE ALEXANDER

B.S. in Secondary Education, 1969, Western Oregon State College. At COCC since 1990.

## S. BLAIR BRAWLEY

A.A. in Language Arts, 1973, Mitchell College; B.A. in English, 1975, University of North Carolina-Charlotte; M.Ed. in Adult Education, 2003, Oregon State University. At COCC since 2003.

## CHRISTY FRANDSEN-OIZ

B.A. in English, 1980, University of Nevada, Reno. At COCC since 2000.

## JANET HUDDLESTON

B.A. in Education, 1973, Central Washington University. At COCC from 1987-1989 and since 1990.

## KAREN LEEP

B.A. in Secondary Education, 1975, Western Oregon State College. At COCC since 1995.

## ANITA MACINNIS

B.A. in Social Psychology, 1966, University of Michigan. At COCC since 1998.

## MELISSA POTTER

B.S. in Liberal Studies, 1993, Eastern Oregon University; M.Ed. in Adult Education, 1996, Oregon State University. At COCC 1986-1987 and since 1991.

## AMY STINARD

B.S. in Business/Marketing, 1996, Ball State University. At COCC since 1997.

## FACULTY EMERITUS

## GLORIA AHERN, R.R.A.

## Professor of Health Information Technology

B.A. in Medical Record Administration, 1969, Carroll College; Certificate in Medical Record Science, 1969, Providence Hospital, Seattle; AHIMA registration, 1969. At COCC from 1980 to 2002.

## ROBERT BROOKOVER

## Professor of Business Equipment Service Technology

B.A. in Industrial Arts, 1970, San Francisco State University; M.Ed. in Vocational Education, 1979, Oregon State University. At COCC from 1972 to 1997.

## BILL BUCK

## Professor of English

B.A. in English, 1984, California State University at Fullerton; M.A. in English, 1985, California State University at Fullerton; Ph.D, English Literature, 1990, University of California, Riverside. At COCC from 1989 to 2004.

## BOB COOPER

## Professor of Forestry

B.S. in Forest Management, 1966, Oregon State University; M.F.R. in Forestry, 1971, University of Washington. At COCC from 1986 to 1998.

## FORREST M. DANIEL

## Professor of Music

B.A. in Music, 1960, Adams State College; M.A. in Music, 1961, Adams State College. At COCC from 1978 to 1995.

## DANIEL EARLY <br> Professor of Anthropology and Sociology

A.A., 1964, San Francisco City College; B.A. in Anthropology and Sociology, 1966, University of California, Berkeley; M.A. in Anthropology and Sociology, 1970, Catholic University; Ph.D. in Anthropology, 1978, Catholic University. At COCC from 1978 to 2002.

## J. ALLEN EHL

## Associate Professor of Automotive Technology

B.Ed in Trade and Industrial Education, 1962, Colorado State University; M.Ed in Administration and Supervision of Vocational Education, 1966, 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, 1956, College of Idaho; M.A. in Zoology, 1962, University of South Dakota. At COCC from 1965 to 1994.

## DONALD L. GALLAGHER

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B.S. in Secondary Education, 1961, Northern Montana; M.A.T. in Mathematics, 1965, University of Montana. At COCC from 1969 to 1994.

ROGER D. GILDERSLEEVE

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B.S. in Biology, 1957, Albion College; M.A. in Education and Psychology, 1959, Western State College, Colorado. At COCC from 1969 to 1991.

## RAYMOND R. HATTON <br> Professor of Geography

B.S. in Education, 1961, University of Idaho; M.Ed. in Secondary Education, 1966, University of Idaho; M.A. in Geography, 1969, University of Oregon; Ph.D in Geography, 1989, University of Oregon. At COCC from 1969 to 1993.

## CHARLES R. HEIDEN

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B.M., Northwestern University, 1952; M.F.A., 1956, Ohio University; D.M., Northwestern University. At COCC from 1981 to 1994.

## TIMOTHY H. HILL

## Associate Professor of Business

B.S. in Business, 1968, Brigham Young University; M.S. in Business Education, 1977, Brigham Young University; Ph.D. in Higher Education Administration, 1985, Washington State University. At COCC from 1985 to 2002.

## DUANE HOUGHT

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B.S. in Business Administration, 1968, University of Nevada; M.S. in Business Education, 1985, Oregon State University. At COCC from 1979 to 2002.

## ELLEN M. HOWE

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B.S. in Nursing, 1965, Mount Marty College for Women; M.S. in Nursing, 1985, University of Portland. At COCC from 1981 to 2002 .

## RODNEY A. KOHLER

## Professor of Mathematics

B.S. in Math, Science Education, 1962, Eastern Oregon College; M.S. in Mathematics, 1966, University of Oregon. At COCC from 1966 to 1998.

## MILLIE MACKENZIE

## Professor of Business

B.S. in Finance and Business Environment, 1965, University of Oregon; M.S., Personnel and Industrial Management, 1968, University of Oregon; Certified Professional Secretary, 1982. At COCC from 1978 to 1999.

## BRUCE W. McCLELLAND

## Professor of Chemistry

B.S. in Chemistry, 1966, University of California, Berkeley; Ph.D. in Chemistry, 1971, Oregon State University. At COCC from 1974 to 2003.

## JACK R. McCOWN, JR.

## Professor of Mathematics

B.S. in Math Education, 1970, Eastern Oregon College; M.S. in Mathematics, 1972, Idaho State University. At COCC from 1976 to 2004.

## DONALD T. MOODY

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## RICHARD NIEDERHOF

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B.S. in Forest Management, 1967, Clemson University; M.S. in Forestry and Industrial Management, 1969, Clemson University. At COCC from 1972 to 1999.

## BRUCE NOLF

## Professor of Geology

B.A. in Geology, 1954, University of Iowa; M.S. in Geology, 1955, California Institute of Technology; Ph.D. in Geology, 1966, Princeton University. At COCC from 1966 to 1993.

## LORETTA NOLL

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B.S.N., Nursing, 1972, Southern Illinois University; M.S.N., Nursing, 1976, Texas Women's University. At COCC from 1978 to 1999.

## STEVE O'BRIEN

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B.A. in Philosophy and Government, 1970, Boston University; M.S. in Counseling/ Recreation/Community Education, 1975, University of Oregon. At COCC from 1977 to 2003.

## E. ROBERT POWELL

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## DOUGLAS CAMPBELL SMITH

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## WILLIAM P. SMITH

## Professor of Machine Shop

A.A., 1987, Fullerton College; A.S., Industrial Technology, 1989, COCC; CMfgE. At COCC from 1984 to 2003.

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B.S. in Business Administration, 1979, Portland State University; M.S.T. in Education, 1986, Portland State University. At COCC from 1984 to 2003.

## TOM TEMPLE

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B.S. in Art Education, 1962, University of Oregon; M.S. in Art Education, 1963, University of Oregon. At COCC from 1971 to 1990 .

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B.A. in English, 1964, Portland State College; M.A. in English and Comparative Literature, 1966, Occidental College; Ph.D. in Comparative Literature, 1975, University of California, San Diego. At COCC from 1975 to 2001.

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B.S. in Business Education, 1955, Oregon State University; M.Ed. in Business Education, 1959, Oregon State University. At COCC from 1958 to 1986.

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B.A. in Economics, 1956, Duke University; M.B.A., 1975, California State University, Dominguez Hills. At COCC from 1982 to 2002.

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Ph.B. in Music, 1959, University of North Dakota; M.A. in Music, 1964, University of Northern Colorado. At COCC from 1970 to 1993.

## 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 and Computer Science
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

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B.A. in Philosophy, 1976, University of California at Santa Cruz; M.L.S. in Library Science, 1985, Syracuse University. At COCC since 1993.

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B.A. in Sociology, 1988, DePauw University; M.A. in Secondary Education Teaching, 1990, Tufts University; M.A. in Higher Education Administration, 1994, University of Denver; Ed.D. in Educational Leadership, 2006, University of Northern Iowa. At COCC since 2006.

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## Director of Human Resources

A.A., 1975, Danville Area Community College; B.S. Liberal Arts and Sciences, Psychology, 1977, University of Illinois. At COCC since 1998.

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B.S. in Home Economics Education, 1975, Oregon State University; Ed.M. in Adult Education, 1980, Oregon State University. At COCC since 1985.

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B.A. in Computer Science and B.S. in Biology, 1978; M.B.S. in Science, 1995, University of Colorado; M.B.A. in Business
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B.A. in Academic Studies, 1979, Western New Mexico University; M.A. in English, 1984, Western New Mexico University. At COCC since 1989.

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B.S. in Human Development and Family Science, 2001, Oregon State University; M.A. in Teaching, Elementary Education, 2003, Oregon State University. At COCC since 2006.

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Sallie Wetherbee, Social Science
Pam Whelchel, Library
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Linda Williams, College Relations
Sarah Wilson, Campus Services
Stephanie Wilson, Information Technology
Susan Wood, Continuing Education
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REDMOND CAMPUS


[^0]:    (continued on next page)

[^1]:    GEOG 207 Geography of Oregon (3 credits)
    GEOG 209 Weather and Climate ( 3 credits)
    GEOG 240 Geography of Central Oregon (3 credits)
    GEOG 270 Cartographic Methods ( 4 credits)
    GEOG 290 Environmental Problems (3 credits)
    HHP 248 Health Psychology (3 credits)
    HST 101, 102, 103 History of Western Civilization (4 credits each)
    HST 104, 105, 106 World History (4 credits each)
    HST 201, 202 History of the US ( 4 credits each)
    HST 204 Civil War (4 credits)
    HST 207 American West (4 credits)
    HST 218 Native American History (4 credits)
    HST 225 US Women's History (4 credits)
    HST 236 Women in 20th Century European History (4 credits)
    HST 242 Pacific Northwest (4 credits)
    HST 258, 259 Latin American History (4 credits each)
    HST 270 20th Century European History ( 4 credits)
    HST 290, 291, 292 History of East Asian Civilization (4 credits each)
    PS 201 American Governments (4 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)
    PSY 201, 202 General Psychology (4 credits each)
    PSY 207 Applied Psychology (3 credits)
    PSY 215 Developmental Psychology (4 credits)
    PSY 216 Social Psychology ( 4 credits)
    PSY 219 Abnormal Psychology (4 credits)
    PSY 233 Psychology of Violence and Aggression (4 credits)
    PSY 235 Human Development: Child (3 credits)
    PSY 236 Human Development: Adult (3 credits)
    SOC 201 Introduction to Sociology (4 credits)
    SOC 206 Social Psychology (4 credits)
    SOC 211 Social Deviance (4 credits)
    SOC 212 Race, Class and Ethnicity (4 credits)
    SOC 215 Social Issues and Social Movements ( 4 credits)
    SOC 250 Sociology of Popular Cultures (4 credits)

[^2]:    One course from the professional technical course list (see page 45)

[^3]:    See Health and Human Performance: Outdoor Leadership

