

CENTRAL OREGON COMMUNITY COLLEGE
2009–2010 Catalog
TABLE OF CONTENTS

Introduction	2–5	Transitional Studies	32
Enrollment Services –		Pathways to Success:	
Admissions & Records/Registration	6–11	Overview of COCC Degree Options	33–47
Enrollment Services – Financial Aid	12–16	Program Descriptions	48–128
Student Services	17–22	Course Descriptions	129–225
Definitions	23	Faculty, Administration and Staff	226–240
Academic Information and Policies	24–31	Course Index	241–245
General Index	246–248		

WELCOME TO COCC

For 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.

Career and Technical Education (CTE) 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.

Community Learning

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 gardening and other outdoor activities.

Business, Professional and Employee Development

Noncredit business classes, resources, workshops and information to help you and your business succeed. Learn how to write a business plan, train your employees, further your career or gain new skills to help you succeed in the competitive job market.

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 Career and Technical Education (CTE) classes in the high schools. See page 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 23 buildings with a total of 453,982 square feet under roof. The newest building, the Campus Center, opened this year.

On the 25-acre Redmond Campus, there are three buildings, housing College administration, classrooms, a computer lab 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 five 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 full-

text 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 literary events through the Library Scholar in Residence program, 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, 37 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

More than 9,000 students enrolled in credit classes at COCC last year. Each quarter, approximately 2,100 full-time and 3,300 part-time students enroll. While half of the students are under the age of 24, another quarter are 32 and older. About 40 percent of the students enroll in career and technical education 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's purpose, as stated in the articles of incorporation, is to exist exclusively for the benefit of Central Oregon Community College, its faculty and students in the furtherance of the educational and charitable activities of the College.

It does so through providing financial assistance to students, fiscal support for college programs, and running campaigns in support of needed college capital improvements.

The COCC Foundation is the oldest community college foundation in Oregon. Its assets have grown significantly over the years, from the first gift of \$500 in 1955 to nearly \$11 million in assets today. In addition to scholarship support, these assets, primarily endowment funds, provide support in a variety of ways, from supporting faculty positions to providing support for the Nancy R. Chandler Visiting Scholar Program. For 2008-2009, the Foundation awarded more than 440 scholarships totaling more than \$630,000. For more information, call (541) 383-7225.

COMMUNITY LEARNING

Community Learning offers a wide variety of innovative, high-quality, 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.

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. Contact information: (541) 383-7290.

ADULT BASIC EDUCATION/COLLEGE PREPARATION (ABE/CP)

The Adult Basic Education/College Preparation (ABE/CP) 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/CP office, (541) 504-2950, or see the Web site at www.cocc.edu/abe for exact times and locations.

ABE/CP 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/CP computer labs provide access to distance learning services in Madras and Prineville. Community members can use the computers to practice basic computer skills and improve abilities 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, registration, cashiering, academic advising and a drop-in computer lab.

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

OREGON STATE UNIVERSITY - CASCADES CAMPUS

Oregon State University - Cascades Campus is a unique partnership among OSU, Central Oregon Community College and the University of Oregon that offers an affordable and personal university experience for students in Central Oregon seeking an undergraduate or graduate degree. Designed for those starting, transferring or returning to college, OSU-Cascades is located on the campus of COCC. The university offers both OSU and UO degree programs in 11 majors, plus three graduate programs. Referred to as Oregon's "transfer university," OSU-Cascades is an ideal next step after community college and for returning students. It is also a welcome haven for local high school students, who can be admitted as freshmen and, under the guidance of an OSU-Cascades advisor, take lower-division courses at COCC then transition to OSU-Cascades to complete their degrees. Student opportunities include research and internship programs with Central Oregon's business, government and nonprofit communities, as well as international programs in more than 80 countries. For information call (541) 322-3100 or go to www.OSUCascades.edu.

Undergraduate Programs

Art* (BA/BS/BFA)

- Art History Minor
- Visual Arts Minor

Business Administration* (BS/Minor)

- General Business Option
- International Business Option
- Hospitality Management Option
- Business and Entrepreneurship Minor

English* (Minor)

General Science ** (BA/BS)

- Biology Minor
- Chemistry Minor
- Geology Minor

General Social Science** (BS)

History** (Minor)

Human Development and Family Sciences* (BS)

- Early Childhood Development and Education Option
- Gerontology Option
- Human Services Option
- Early Childhood Development and Education Minor

International Studies* (BA)

Liberal Studies* (BA/BS)

- Pre-Education Option
- American Studies
- Social Communication, Identity and Place
- Intercultural Communication, Identity and Place
- Environmental Communication, Identity and Place
- Law and Politics
- Gender and Politics

Mathematics** (BA/BS/Minor)

Natural Resources* (BS/Minor)

- Natural Resource Policy Option

Political Science* (Minor)

Psychology** (BA/BS/Minor)

Speech Communication* (Minor)

Tourism and Outdoor Leadership* (BS/Minor)

- Tourism and Commercial Recreation
- Management Option
- International Ecotourism Option
- Outdoor and Experiential Education Option

Graduate Programs

Counseling* (MS)

- School Counseling Concentration
- Community Counseling Concentration

Education* (MAT)

- Early Childhood/Elementary School Authorization
- Middle/High School Authorization

* Oregon State University program

** University of Oregon program

ENROLLMENT SERVICES – ADMISSIONS AND 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. Most services are also available at COCC's Redmond Campus.

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 at 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 and a \$25 application fee. In addition, all official transcripts from previous institutions must be submitted prior to advising and/or registration.

Students not seeking a certificate or degree

Many students take college credit 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 College Web site for exemption criteria. Non certificate/degree-seeking students are not required to participate in advising but are welcome to do so.

APPLICATION DATES

COCC accepts applications on a continuing basis 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. Note that students will not be admitted after the first week of the term, except for the purpose of taking late-starting classes. The application deadline for each COCC term is the Wednesday before the start of 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 HD 110 (Career Planning), HD 190 (Latino Leadership) 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 degree-seeking 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 Admissions and Records.

HIGH SCHOOL STUDENTS

High school students over the age of 15 are eligible to register in up to 11 credits at COCC. High school students who register at COCC are fully responsible for complying with all policies and procedures of the College. As such, parents cannot access student records (grades, class schedule, attendance, etc.) without written permission from the student. Although members of the College staff can provide academic advising, they cannot interpret high school requirements or act in a supervisory role.

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

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 or designee 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.

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 \$10 per course. Courses offered vary by high school. For more information, contact COCC's College Now/Tech Prep coordinator at (541) 383-7782 or the 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 more than \$200 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 a specific high school, contact the high school counselor, call (541) 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 the high school counselor or ASPIRE coordinator for more information on eligibility requirements.

STUDENTS UNDER AGE 15

Students under the age of 15 must meet with the director of Admissions/Registrar or designee to assess readiness for college-level work prior to applying for admission. Students must meet minimum placement test scores, provide a statement of support from their school counselor and obtain permission from each instructor every term. If admission is approved, the student must submit a 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 at COCC are fully responsible for complying with all policies and procedures of the College. As such, parents cannot access student records (grades, class schedule, attendance, etc.) without written permission from the student. Although College staff members can provide academic advising, they cannot interpret high school requirements or act in a supervisory role.

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. A tuition payment plan does not relieve the student of an obligation to meet registration and/or withdrawal (drop) deadlines for refund purposes.

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

The College reserves the right to make changes in tuition and fees without notice; however, any changes made during a term will not become effective until the next term. 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 July 29 for summer term, by Nov. 12 for fall term, by Feb. 24 for winter term and by May 19 for spring term. A \$50 late fee is charged for payments made after the deadline.

TUITION FOR CREDIT COURSES

For 2009-2010

Fall, winter and spring

In district	\$66 per credit hour
Out of district	\$91 per credit hour
Out of state	\$186 per credit hour*
International	\$186 per credit hour
Audit	same as for credit

(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)	\$1.50 per credit
Technology fee (max. \$20 per term)	\$2 per credit
Green Energy fee	25¢ per 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 up to three weeks maximum	\$30 \$90

Fees for other courses

Adult Basic Education basic skills classes	free
English Language Learning classes	\$15
GED prep classes	\$30 per term
High school completion	\$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 be required 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, a collections fee will be applied to the student's account and the student may make payment(s) directly to the ODR or to the College. Once payment is received in full, the student will be allowed to register for 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 permission is required to add a course. Students may add classes via their Student Services Account or in person at the Boyle Education Center or at the Redmond Campus. A late registration fee of \$30 will be assessed for any class 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. Such changes must be done in person or online. Audit classes do not apply toward financial aid. Note: Different deadlines exist for short-term and summer classes; contact Admissions and Records, (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 at the Boyle Education Center or at the Redmond Campus. Drop forms may not be



mailed or faxed, but students may call Admissions and Records, (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 Web site 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 (pages 13-14) 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 pages 8-9 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 p.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, pages 13 and 14, 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 degrees are 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 transcript requests 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 portions of Klamath and Lake counties, and the Warm Springs Indian Reservation in Jefferson and Wasco counties.

Out-of-district (in-state) residency

An individual who 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 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 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-of-district) 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 documentation to verify residency.

Transferring to another Oregon Institution

In-state residency classifications are different at Oregon community colleges than at Oregon University System schools and can affect tuition rates. Students are encouraged to educate themselves before beginning their education in Oregon to avoid surprises later.

Oregon University System schools often classify people who move to Oregon to go to school as non-residents even if they have resided in the state for a year, attended a community college as an in-state resident, have registered to vote and own property in this state.

Students who moved to Oregon to attend school, with plans to start at a community college and then transfer to a university, should visit this Web page to plan a transfer: www.ous.edu/stucoun/prospstu/files/residencepolicies.pdf.

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>.

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.

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, transfer credit policy, retention rates, vaccinations, copyright infringement, improving academic programs, placement statistics, 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, FEEL disclosure;
- Campus Crime Report/Safety, Alcohol/Drug Policy, Fire and Safety Standards;
- COCC graduation and transfer rates;
- Students' rights under the Family Education Rights and Privacy Act (FERPA).

Student Right-To-Know information is available 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.



photo by David Morris

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. Degree-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 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 and P only will be evidence of 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/certificate 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

Measurement of Satisfactory Academic Progress is taken at the end of each academic year (spring term) for degree-seeking students. Certificate-seeking students are evaluated at the end of each term. Financial aid eligibility 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 each 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 transcribed 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.



photo by Andy Tullis

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 coursework is defined as Writing 60 through Writing 95, Math 10 through 95, and CIS 70.

APPEAL PROCEDURES

A student may petition a decision made by the Financial Aid office. 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 has earned. The amount of federal aid earned, under the federal aid return policy, may be less than tuition and other charges. This means that upon 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 complete withdrawal, students can request an estimated Title IV refund/repayment calculation from the Financial Aid office.

APPLICATION PROCEDURE

The Free Application for Federal Student Aid (FAFSA) 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. Students apply on the Web at www.fafsa.ed.gov. A paper FAFSA is available by calling the Department of Education at (800) 433-3243.

The COCC Financial Aid office can provide additional and detailed information about various financial aid programs. For further information, students should:

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

SCHOLARSHIPS

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 comprised of a board of directors, administrative staff members and a group of interested and concerned private citizens from throughout the College District who donate their time and money to help COCC's students and to improve College programs. Each

year, the COCC Foundation raises funds to finance a number of scholarships. A scholarship application is required. Applications are submitted online 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 in-district high schools. This scholarship may be renewed at COCC for second-year students with a minimum 3.5 cumulative grade-point 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 contact the Financial Aid office. Entering freshmen are encouraged to explore scholarship opportunities with the help of their high school counselors.

GRANTS

Grants are awarded on the basis of financial need. Grants do not have to be repaid and are another type of gift aid. Student financial aid packages include grant funds whenever student eligibility and funding levels permit. Funding for the grant programs administered at COCC comes from the 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 2008-2009 ranged from \$890 to \$4,731 annually 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 were \$360 in 2008-09 depending on federal funding allocations. The FSEOG is not available for summer term.

Oregon Opportunity Grant (OOG)

The state of Oregon provides funds for this grant program. Eligibility is based on financial need as defined by the Oregon Student 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. Oregon Opportunity Grant awards are set by the state of Oregon. The Oregon 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 must not be in default on a prior loan or owe a grant repayment. All loans must be repaid. Students must sign a promissory note (a legal agreement to repay) with 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. Stafford loans are accessed through the normal financial aid process. (For details, go to <http://finaid.cocc.edu/FAQs/stepstoaid>.)

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. Maximum annual loan limits are based on financial need, but cannot exceed \$3,500 for freshmen and students in certificate programs and \$4,500 for sophomores. Loans are interest-free 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. 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. In addition, dependent students as defined by the Department of Education are eligible to borrow up to \$2,000 in unsubsidized loans, and independent students, up to an additional \$6,000. Student borrowers will be responsible for payment of the interest that accrues on these loans while they are in school and during periods of deferment. Loan repayment begins six months after a student ceases to be enrolled at least half time. Monthly payment amount and length of repayment depend on the cumulative amount 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, capped at 9 percent, and subject to change annually. For more information on the PLUS loan and other publications, visit www.studentaid.ed.gov/. In addition to the PLUS application, a FAFSA is required at COCC; both are available online at <http://finaid.cocc.edu/loan/plus>.

WORK-STUDY AND STUDENT EMPLOYMENT

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

COCC Career Services maintains a list of off-campus job opportunities for students seeking employment outside the Federal Work-Study program. 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 will not receive any Federal Work-Study funds until they are actually placed and working in a work-study job. Due to the need to match job requirements with student skills, the College cannot guarantee employment to all eligible FWS recipients.

At COCC, work-study jobs provide experience in a variety of fields including physical education, library work, the sciences, health service and office work. Community service jobs are also available.

VETERANS EDUCATION BENEFITS

Students who believe they may be eligible for veterans educational benefits, such as a veteran or a widow or dependent of a 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 veteran educational benefits, students must be enrolled in a degree or certificate program offered by COCC and be approved by the State Approving Agency. 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 official 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.



photo courtesy of Wally Kempe & Associates

- 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
- Copy Center/Mail Services
- Counseling (CAP Center)
- Developmental Studies
- Digital Production Services
- Services for Students with Disabilities
- Library
- 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 not attended for more than a year participate in small-group advising sessions. After the first advising session, students are assigned an advisor in their declared major and e-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,



photo by Eugen Helmbrecht

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, Barber 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, gifts, convenience food and beverage items. 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 Barber Library. Call the CAP Center for more information about each of these services, (541) 383-7200, or go online, <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 Barber Library and offers 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 Barber 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 3 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.

COPY CENTER AND MAIL SERVICES

The Copy Center, located in the Bookstore on the Bend campus, is a full-service copy center. Services include: black and white as well as color copies, transparencies, binding and general mail services including UPS. For more information about the Copy Center and/or Mail Services, call (541) 383-7579.

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 Barber Library or at (541) 383-7200.

DEVELOPMENTAL/TRANSITIONAL 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. See page 32 for more information.

DIGITAL PRODUCTION SERVICES

The Digital Production 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;
- editing booths where students can use video/audio editing software for class projects;
- videotape/DVS/CD duplication following strict copyright laws
- video camera checkout with instructor approval. Use limited to in-class COCC related project.

Visit <http://media.cocc.edu/> or call (541) 383-7744 for more information.

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 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 OSU-Cascades 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.

MULTICULTURAL CENTER

The Multicultural Center is located in Room 224, Campus Center. 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



photo by Eugen Helmbrecht

offers activities and information during the academic year. For more information, contact the Multicultural Center at (541) 383-7412.

NATIVE AMERICAN PROGRAM

The Native American program provides individualized help to all Native Americans seeking to further their educational goals. The program is involved in a variety of campus and community cultural events during the year, including the annual Native American Spring Festival, Campus Mosaic and College 101, field trips teaching cultural skills and archeological history as well as current topic speaker presentations on campus to present the viewpoints of Native America on current topics. The Native American Club, as part of the Native American program, also does volunteer work in the local and Native community to help elders and others with a need.

For more information, contact the Native American program advisor, (541) 318-3782. The Native American program operates September through June and maintains a Web site at <http://nativeamerican.cocc.edu>.

SERVICES FOR STUDENTS WITH DISABILITIES

The Services for Students With Disabilities 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. For more information, visit the SSD Web site at <http://disability.cocc.edu> or drop in to the office at the Boyle Education Center, Rooms 123-125.

If the need for accommodation exists, it is the student's responsibility to inform the College by contacting the SSD office in a timely manner in order to arrange the specific accommodation(s). Students exhibiting difficulties who have not previously utilized assistance through the Rehabilitation Act may not know of the existence of the SSD office. We encourage referral of students by staff and faculty to the SSD office for consultation and determination of need. Contact Services for Students with Disabilities by calling (541) 383-7583 or visit the office in the Boyle Education Center.

STUDENT E-MAIL ACCOUNT

All students receive a free COCC e-mail account when they apply for admission. COCC will send most announcements to students' COCC e-mail accounts. This account can also 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. Students are responsible for reading and understanding COCC's Acceptable Use of Technology Resources policy. See <http://cocc.edu/AUP/>.

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 200 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. Students are responsible for reading and understanding COCC's Acceptable Use of Technology Resources policy. See <http://cocc.edu/AUP/>.

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 or <http://www.cocc.edu/studyabroad>. 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



photo by Eugen Helmbrecht

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 France. COCC is a member of the Oregon International Education Consortium, which is investigating the possibility of organizing its own program for spring 2010. More details about this opportunity will be posted on the COCC Web page as they become available.
- Summer two-week Spanish language immersion program in Guanajuato, Mexico. Students study the language at level 101, 102, 103, 201, 202, 203, 211, 212 or 213 (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 Mike Holtzclaw, (541)-383-7236, mholtzclaw@cocc.edu or Greg Lyons, (541) 383-7526, glyons@cocc.edu.

TUTORING AND TESTING CENTER

The Tutoring and Testing Center is located in the lower level of the Library with hours of operation available at <http://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 handouts, textbooks and graphing calculators. Math and computer science 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 anatomy and physiology, computer science, 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), Prometric APTC (www.prometric.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://tutorstest.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-run newspaper serving COCC, OSU-Cascades and the larger community. The staff publishes a minimum of 25 issues per school year with a circulation of 2,500 to campus, Bend, Redmond, Sisters, Prineville, Madras, Warm Springs and La Pine. The newspaper provides a forum for student free speech as well as a focus on college news, features and sports.

Each year *The Broadside* offers dozens of students opportunities in reporting, editing, design and layout, photography and journalism leadership. All students are welcome to apply for the paid positions. For more information, call *The Broadside* advisor, (541) 383-7252, or e-mail *The Broadside* editor-in-chief 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, body building, bowling, cycling, disc golf, golf, martial arts, nordic skiing, 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.

Clubs must involve at least four current COCC students, have a faculty or staff advisor, create a meaningful mission statement, and submit an annual budget to the ASCOCC. Anyone who has questions or ideas about forming a student club or participating in an existing club, can contact ASCOCC at (541) 383-7595.

FOOD SERVICE

Quality food service is available across campus, with the main campus dining services available in the Campus Center building. At the time of this publication, the specific locations, prices and options were being discussed with COCC's food service provider. Contact the Office of Student Life, (541) 383-7590, for details.

STUDENT HEALTH INSURANCE

Central Oregon Community College does not offer student health insurance. At the same time, the College does not require students to have health insurance coverage in order to enroll in courses and to participate in related activities and events. Students are responsible for their own health insurance coverage. The College does not have a student health clinic on campus. Limited health services are available for free or at a reduced cost in the local community.

COCC does not endorse any particular insurance, but it does have information on a few options. For information about contacting the carriers and other local resources in the community, go to the Student Life Web page, <http://studentlife.cocc.edu/resources/student+health+insurance>.

STUDENT HOUSING – ON CAMPUS

Juniper Hall houses 102 male and female students each year. Located near Grandview Hall, the residence hall offers shared rooms, cable, wireless Internet access, laundry and recreational facilities along with a full meal plan. Contact the Office of Residence Life at (541) 383-7534, or visit <http://residencelife.cocc.edu> for more information.

Space in Juniper Hall is limited. Therefore, students seeking accommodations are encouraged to submit an online application at their earliest convenience. As long as space is available, contracts will be sent to students for completion. Upon signing a contract, students must be prepared to pay a security deposit to guarantee a space in the hall. The room and board rate for the 2008-2009 academic year (fall, winter, spring) was \$7,324 for double occupancy. For more information regarding student on-campus housing at COCC, contact the housing office in Juniper Hall, (541) 383-7534.

Room and Board Package for Juniper Hall

2009-2010	Fall	Winter	Spring	Total
double occupancy	\$ 3,111	\$ 2,777	\$ 1,738	\$ 7,626

Note: Students living in Juniper Hall for spring term only will be assessed an additional \$300 for spring term.

STUDENT HOUSING – OFF CAMPUS

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

To view current submissions, visit http://studentlife.cocc.edu/Resources/Housing/Off_Campus. This Web page also provides other community resources that may be helpful in locating off-campus housing. The College provides this information as a service to our students; however, it does not assume responsibility for screening rentals.

SHUTTLE BUS

A free campus shuttle services the 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 escorts (phone 480-2418). 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 a listing of the coming term’s classes and registration instructions. The schedule is available online at www.cocc.edu.

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 **100-299** 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 **0.501 and 0.999** or are alpha numbered **below 100** do not normally transfer to four-year institutions.

Courses in the **9.000** 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 Community Learning, is published prior to each term. This schedule gives city and site locations for Community Learning 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 or given out over the phone.

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

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

Grade points

A	4.0	outstanding performance
A–	3.7	superior
B+	3.3	excellent
B	3.0	very good
B–	2.7	good
C+	2.3	better than satisfactory
C	2.0	satisfactory
D	1.0	passing
F	0	not passing
P		pass: not computed in GPA, applies toward percentage of credits completed, may be awarded only in authorized classes
NP		no pass: not computed in GPA, may be awarded only in authorized classes
W		withdraw: not computed in GPA, must be assigned by Records Office
IP		course in progress
I		incomplete: not computed in GPA, will convert to "F" if requirements of the Incomplete Grade Contract are not met by the end of the following term
X		audit: not computed in GPA, does not meet graduation requirements; not eligible for financial aid

Pass (P)/no pass (NP)

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



photo by Aaron Stark

Challenge course pass/no pass

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

Withdrawal (W)

Students who withdraw from courses between the eighth week of the term and the Wednesday before finals week will receive a "W" on their transcripts. Note: Permission of the instructor is required to withdraw from the course. A "W" is not computed in a student's GPA.

In progress (IP)

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

Students and instructors are strongly encouraged to complete an Incomplete Grade Contract in order to outline remaining requirements. Please see “Incomplete Grade Contract” on COCC’s 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 (A–F, P, NP) in a course should meet with the instructor to review the grade. If not satisfied, the student may meet with the department chair, who can further review the grade with the instructor. If the student believes that the grade 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:

3.60–3.74	honors
3.75–3.89	high honors
3.90–4.00	highest honors

Graduates participating in commencement exercises will receive honor cords. Graduates with a 4.00 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. Students may repeat a course as many times as they wish; however, only the original/first course’s grade will be excluded from the term and cumulative GPA and only the most recent course will be used toward graduation requirements. There is no limit to the number of courses a student may repeat. 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. 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., former students cannot ask to have a grade change unless they enroll 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 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 refundable.) 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 on pages 13-14.)

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 30), 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. 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 be rescheduled, only at the instructor’s discretion, in extraordinary circumstances. A grade of Pass or No Pass is assigned, where a Pass is earned for performance equivalent to a grade of “B–” or better. Students may not 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:

- 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 have 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 degree must complete a minimum of 24 COCC credits. Certificate-seeking students must complete a minimum of 18 COCC credits. Challenge, Advanced Placement (AP), College Level Examination Program (CLEP) and Credit for Prior Certification (CPC) credits do not meet this requirement.

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. 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 transcribed for prior certification may not be used to acquire full-time status or to meet eligibility requirements for any other purpose, such as financial aid, veteran benefits or scholarships. A maximum of 12 credits for prior certification will be awarded. With the exception of apprenticeship programs, credit for prior certification does not apply toward the minimum 24 COCC credits required to complete a COCC degree (18 COCC credits for a certificate).

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 Lit & Comp, score 3+ 4 credits in one of: ENG 104, 105, 106, 107, 108, 109
 (No writing credits earned with Literature & Comp tests)

AP French Language, score 3 FR 101, 102, 103
 AP French Language, score 4 FR 103, 201, 202
 AP French Language, score 5 FR 201, 202, 203
 AP German Language, score 3 GER 101, 102, 103
 AP German language, score 4 GER 103, 201, 202
 AP German Language, score 5 GER 201, 202, 203
 AP Spanish Language, score 3 SPAN 101, 102, 103
 AP Spanish Language, score 4 SPAN 103, 201, 202
 AP Spanish Language, score 5 SPAN 201, 202, 203

AP Biology, score 4+ BI 101, 102, and 103
 AP Chemistry, score 4+ CH 221, 222, 223
 AP Physics B, score 4+ PH 201, 202, 203
 AP Physics C, score 5 PH 201, 202, 203
 AP Physics C, Mechanics, score 4+ PH 211
 AP Physics C, Elect, score 4+ PH 212

AP Math Calculus AB, score 3 MTH 251
 AP Math Calculus AB, score 4+ MTH 251, 252
 AP Math Calculus BC, score 3 MTH 251, 252
 AP Math Calculus BC, score 4+ MTH 251, 252, 253

AP Comp Science A, score 4+ CIS 161
 AP Comp Science AB, score 3 CIS 161
 AP Comp Science AB, score 4+ CIS 161, 162

AP US Government, score 3-5 PS 201
 AP US History, score 4+ HST 201
 AP European History, score 3+ HST 101, 102
 AP Psych, score 3+ 4 credits, psychology prefix, distribution list
 AP Microeconomics, score 3+ EC 201
 AP Macroeconomics, score 3+ 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 9 credits of distribution list Humanities
 CLEP Am Lit, min score 50 ENG 253, 254, 255
 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 59 FR 201, 202, 203
 German: score 50 GER 101, 102, 103
 German: score 60 GER 201, 202, 203
 Spanish: score 50 SPAN 101, 102, 103
 Spanish: score 60 SPAN 201, 202, 203

CLEP General 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, minimum score of 50 9 non-lab science credits for “additional courses” or electives

CLEP Princ of Mgmt, min score 70 equivalent course credit as elective in business
 CLEP Accounting, min score 70 equivalent course credit as elective in business
 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 HST 201
 CLEP US History II min score 50 HST 202
 CLEP Western Civ I min score 50 HST 101
 CLEP Western Civ II min score 50 HST 103
 CLEP both Western CIV I and II with min scores of 50 HST 101, 102, 103
 CLEP Sociology, min score of 50 SOC 201
 CLEP Microeconomics, score 50 EC 201
 CLEP Macroeconomics, score 50 EC 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 48-128). 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 academic advisors.

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

Students seeking a Bachelor of Arts or a Bachelor of Science degree should be aware of foreign language and other degree or major-specific requirements. See pages 33-35 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/Policies/Rights+and+Responsibilities>.

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. Persons who need accommodation for College events because of other disabilities such as hearing impairment, should contact Anne Walker, 383-7743, in advance of the event. Further inquiries may be directed to the Affirmative Action Officer, c/o COCC's Human Resources office, (541) 383-7216.

SMOKING POLICY

Smoking is banned in all of the buildings of Central Oregon Community College. Smoking or the use of smokeless tobacco is limited to campus parking lots. During high fire danger periods, smoking will be banned completely.

TRANSITIONAL STUDIES

PRE-COLLEGE COURSEWORK

For those who find that their academic skills need sharpening, the College maintains transitional courses designed to equip students with the basic writing, mathematics and reading skills needed to succeed at the college level. Using placement test results provided through the CAP Center, advisors will recommend courses that will provide the most help. These classes are pre-college level and nontransferable, but they help build a solid foundation for success in future courses. They are extremely valuable for those who need preparation for success in retraining or re-entry into academic studies.

Two categories of instructional support are available:

1. Adult Basic Education/College Preparation (ABE/CP) courses which are non-credit, and
2. Pre-college level Basic Skills classes which are credit courses numbered below 100. There are also 100-level courses addressing college success and study strategies available that will count toward degree completion and transfer to other institutions.

ADULT BASIC EDUCATION/COLLEGE PREPARATION Non-Credit Options

Adult Basic Education/College Preparation (ABE/CP) provides an effective and affordable means for a successful transition to the college setting. Support is offered for English Language learners and GED/College Prep students as well as courses for refreshing students' skills in math, writing and reading. Contact the Adult Basic Education office, (541) 504-2950, for details.

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.

GED College Preparation

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. Students are also provided with secondary skills to achieve success in college credit classes.

The GED test covers five areas: language arts reading; language arts writing; social studies; science; and math. Each area 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. Tuition is affordable and books are available to help with studies.

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 ABCEP 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 who need high school credit and 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

Credit Options

Several academic departments offer courses that prepare students for college-level classes that will count toward degree completion and are transferable to other institutions. These classes are frequently available online or in classrooms on the Bend and Redmond campuses or other sites throughout Central Oregon. Check the current course schedule for convenient times and location: http://current.cocc.edu/Degrees_Classes/schedule/.

Basic Skills Classes by Subject

MTH 10	Developmental Mathematics
MTH 20	Pre-Algebra
MTH 29	Fraction Fridays
MTH 60	Algebra I
MTH 65	Algebra II
MTH 95	Intermediate Algebra
WR 60	Rhetoric and Critical Thinking I
WR 65	Rhetoric and Critical Thinking II
WR 75	Basic Writing I
WR 95	Basic Writing II
RD 117	College Reading
HD 100CL	Introduction to College Life
HD 100NT	Note Taking
HD 100 PM	Procrastination & Motivation
HD 100SC	Success in the Classroom
HD 100TT	Test Taking
HD 101	Study Strategies

PATHWAYS TO SUCCESS: OVERVIEW OF COCC DEGREE OPTIONS

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

GENERAL EDUCATION OUTCOMES

As part of its commitment to learning and to student success in transfer and career programs, COCC has adopted the following outcomes for general education (the basic skills and distribution requirements for its degrees):

Aesthetic Engagement

Students will engage in informed discussion of the meaning and value of aesthetic expression.

Communication

Students will speak, read, write and listen effectively.

Critical Thinking

Students will analyze, interpret and synthesize ideas and information.

Cultural Awareness

Students will explain how cultural context shapes human perceptions and values.

Health Choices

Students will identify responsible health and safety procedures.

Quantitative Reasoning

Students will apply appropriate mathematics to analyze and solve problems.

Scientific Reasoning

Students will apply scientific inquiry to arrive at informed conclusions.

Technology and Information Literacy

Students will use computer technology to gather, process and communicate information.

Values and Ethics

Students will evaluate the ethical dimensions of arguments and the consequences of decisions.

TRANSFER/BACHELOR DEGREE PREPARATION

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

degree designed for transfer. COCC offers transfer students the following primary options for credentials in addition to the option of transferring individual credit: Oregon Transfer Module (OTM), Associate of Arts Oregon Transfer (AAOT), Associate of Science (AS), Associate of Science - Direct Transfer to Oregon State University (AS-DT), Associate of Science Oregon Transfer - Business, and various articulation agreements with our two- and four-year partners.

THE OREGON TRANSFER MODULE (OTM)

(See page 37 for checklist of courses and requirements)

- 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 38 and 39 for checklist of courses and requirements)

- 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 38 and 39, 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 should review any foreign language and specialty course requirements of the transfer institution.

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.



photo by Candace Bowman

ASSOCIATE OF SCIENCE (AS)

(See pages 40 and 41 for checklist of courses and requirements)

- Designed for students who want to transfer to a specific four-year 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.
- Students should review any foreign language and specialty course requirements of the transfer institution.

Associate of Science - Direct Transfer to Oregon State University-Cascades Campus (AS-DT)

(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 OSU-Cascades 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 Science in Natural Resources; Natural Resources Policy option
 - Bachelor of Science in Tourism and Outdoor Leadership, options in Tourism and Commercial Recreation Management, International Ecotourism or Outdoor and Experiential Education

Associate of Science - Oregon Transfer, Business Degree

(See page 62 for checklist of courses and requirements)

- 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.
- Includes the courses required for entrance not only into an Oregon public university but to the university's business college as well.

ARTICULATION AGREEMENTS

Students may select individual courses at COCC and transfer them to a college or university. Students who will not complete a degree at COCC are encouraged to research degree requirements for the college at which they will earn their bachelor's degree and select courses accordingly. The Oregon public universities have equivalency guides to aid in selecting equivalent courses. Every college will have a policy on transfer credit that can usually be located on the destination college's Web site, often under the admissions information for transfer students. A COCC advisor or the CAP Center advisors can assist students with locating this information.

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 48-128 in the catalog. Contact the COCC Admissions 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 Brenda McDonald, EOU Distance Education coordinator, at 385-1137, or Boyle Education Center, Room 161.

- Business Administration
- Business Economics
- English/Writing
- Fire Science Administration
- Physical Activity and Health
- Philosophy, Politics and Economics
- Psychology
- Liberal Studies: Small City and 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.

Linn Benton Community College

Linn-Benton Community College (LBCC) offers a distance education, two-year certificate in Diagnostic Imaging (Radiological Technology). Students may complete their prerequisite coursework through COCC and complete the LBCC Radiological



photo courtesy of Wally Kempe & Associates

Technology coursework through a variety of distance education methods. Students who live in the COCC District apply for the Diagnostic Imaging program through COCC.

Oregon Institute of Technology

- Specific COCC coursework is aligned with requirements for OIT's Medical Imaging Technology program.
- OIT's Bachelor of Science degree in Operations Management is articulated with the following COCC degrees:
 - Automotive Management
 - Aviation
 - Business Administration
 - Computer and Information Systems (Computer Support Option)
 - Structural Fire Science
 - Wildland Fire Science
- Associate of Science degree is articulated with OIT's Bachelor of Science degree in Information Technology - Health Informatics option.

Oregon State University-Cascades Campus

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

Portland Community College

Portland Community College offers an Associate of Applied Science degree in Medical Laboratory Technology. Students complete the program prerequisites and general education requirements at their local community college and the MLT program requirements through PCC's Distance Education program. Students in the Extension program may occasionally meet with instructors; however, all of the MLT coursework is completed online. Clinical lab experiences are provided in Central Oregon at Cascade Healthcare Community.

CAREER AND TECHNICAL EDUCATION 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).
- Require a minimum of 18 certificate-applicable COCC credits.

Some certificate requirements include limited general education coursework (including coursework in computation, human relations and communication). General Education courses must be completed at a "C" grade or higher. See individual program pages for a list of courses and requirements.

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.
- Require at least 93 credits or two years of full-time study, including a minimum of 21 credits of general education courses.
- Require a minimum of 24 degree-applicable COCC credits.
- See page 42 for degree checklist.

GENERAL STUDIES DEGREE

Associate of General Studies (AGS)

- Designed for students who are not pursuing specific transfer or Career and Technical Education (CTE) 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 43 and 44 for degree checklist.

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 the student has met the following guidelines:

- ❑ Complete at least 93 credits for the associate degree
- ❑ Earn a minimum 2.0 cumulative grade-point average at COCC
- ❑ Owe no debt to the College
- ❑ Complete at least 24 residency credits for an associate's degree; 18 residency credits for a certificate
- ❑ Meet at least one of the following criteria:
 1. The student is eligible for the degree or certificate at the end of the last term attended at COCC when he or she meets degree requirements listed in any catalog in effect during the student's most recent continuous (unbroken) attendance
 - a. for the AA, limited to the most recent five years' catalogs
 - b. for the AAS, AGS, AS and certificates limited to the most recent two years' catalogs
 2. The student transfers back to COCC other college credit 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
 - a. for the AA, limited to the most recent five years' catalogs
 - b. for the AAS, AGS, AS and certificates limited to the most recent two years' catalogs
 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

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

Multiple/concurrent degrees

Students applying for multiple or concurrent degrees must meet the degree requirements outlined above and as listed for each degree on the following pages. For each additional degree, students must complete at least 15 COCC credits that are different from those used for the other degree(s) and are applicable to the additional degree requested.

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 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 Tutoring and Testing Center or any authorized Certiport Testing Center. Locally, appointments can be made through the Tutoring and Testing Center located in the lower level of the 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 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's 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 sent in April to all students who applied for a degree or certificate. Students wishing to participate in the commencement ceremony must submit participation confirmation 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 the 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. Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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.

Completion requirements

Complete all requirements listed below:

- Complete all OTM requirements as listed below;
- Earn a minimum 2.0 cumulative COCC grade-point average;
- Complete at least three OTM applicable credits at COCC;
- Submit degree application to the Admissions and Records office; and
- Owe no debt to the College.

FOUNDATION/Basic Skills

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

English Composition

Two college-level English Composition courses

- _____
- _____

Speech

- SP 111 _____

Math

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

Advisor notes

INTRODUCTION TO THE DISCIPLINES

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

Humanities/Arts & Letters

Three courses from COCC Humanities distribution list (page 45).

- _____
- _____
- _____

Total Humanities credits

Science

Three courses from COCC science/math/computer science distribution list (pages 45 and 46), including at least one biological science with a lab.

- _____
- _____
- _____

Total Science credits

Social Science

Three courses from COCC social science distribution list (page 46).

- _____
- _____
- _____

Total Social Science credits

Elective courses

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

- _____
- _____
- _____

Total Elective credits

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 48-127. 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.

Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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 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; and
- Owe no debt to the College.

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 or 214 or 227 _____

Speech

- SP 111 or 219 _____

Math

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

Health

- HHP 295, 266, 258, 242 or 231 _____
- and one HHP activity/health module _____
- or
- HHP252a _____

Computer skills

- Pass Computer Competency Test or take CIS 120 _____

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 45), 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.

<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
	Total Humanities credits	_____

Science/Math/Computer Science

A minimum of 15 credits from the science/math/computer science distribution list (see pages 45 and 46):

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

<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
	Total Science/Math/Computer Science credits	_____

Social Science

A minimum of 15 credits from the social science distribution list (see page 46), with:

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

<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
	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, Career and Technical Education (CTE) courses (12 credits maximum, see page 46 for list) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

General electives

<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

Career and Technical Education (CTE) electives

(maximum of 12 credits);
See page 46 for Career and Technical Education (CTE) course prefixes.

<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____
<input type="checkbox"/>	_____	_____

CWE, HHP activity or Music Performance electives

(maximum of 15 credits)

<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____

TOTAL DEGREE CREDITS (Basic Skills + Distribution + Electives), 93 minimum: _____

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.

Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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 AS degree requirements, as listed below.
Students may also use AS requirements as listed in one of the previous two 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; and
- Owe no debt to the College.

ASSOCIATE OF SCIENCE DEGREE COURSE REQUIREMENTS

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

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

English Composition

- WR 121 _____
- WR 122 _____
- Third approved writing course _____

Speech

- SP 111, 218, or 219 _____

Math

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

Health

- HHP 295, 266, 258, 242 or 231 _____
and one HHP activity/health module _____
- or
- HHP252a _____

Computer skills

- Pass Computer Competency Test or take CIS 120 _____

Total Basic Skills credits _____

(continued on next page)

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS (continued)

GENERAL EDUCATION: Distribution requirements (24-32 credits)

The following courses should be chosen with the 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 45 and 46) with at least two different prefixes and at least two courses with the same prefix; 9-12 credits.

2. Choose three courses from an area of the Distribution List (pages 45 and 46) different than used in 1 above with at least two different prefixes and at least two courses with the same prefix; 9-12 credits.

3. Choose two courses from the Distribution List (pages 45 and 46) from a different area than used in 1 or 2 above; 6-8 credits.

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.

Total program 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, Career and Technical Education (CTE) courses (12 credits maximum, see page 46 for list) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

General electives

Career and Technical Education (CTE) electives

(maximum of 12 credits).

See page 46 for Career and Technical Education (CTE) course prefixes.

CWE, HHP activity or Music Performance electives

(maximum of 15 credits)

<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____

TOTAL DEGREE CREDITS (Basic Skills + Distribution + Electives), 93 minimum: _____

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 Career and Technical Education (CTE) areas are provided on pages 48-127.

Advantages

The AAS 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 Career and Technical Education (CTE) 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 Career and Technical Education (CTE) courses are eligible for transfer.

GENERAL EDUCATION: Basic skills (16-20 credits with a "C" grade or better)

Writing and Communications (minimum 6 credits)

- 3 credits in a writing course as specified by program
3 credits in a writing or speech course as specified by program

Math

- See program descriptions for required math course or competency.

Health

Check your specific program for the required health course. If no specific course is listed, select from two choices below:

- HHP 295, 266, 258, 242 or 231 and one HHP activity/health module
HHP252a

Human Relations

- 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 (see page 36).

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)

- Complete all AAS degree requirements, as listed on pages 48-127. Students may also use AAS requirements listed in the previous two 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 & Records Office; and
Owe no debt to the College.

GENERAL EDUCATION: Distribution requirements (9 cr)

Complete minimum nine credits of distribution courses, pages 45 and 46. The courses must be outside of the AAS program area and each must have a different prefix.

- 3 blank checkboxes for distribution course prefixes

Total Distribution credits

PROGRAM REQUIREMENTS AND ELECTIVES

(approximately 73 credits)

- 11 blank lines for program requirements and elective courses

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 Career and Technical Education (CTE) 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 Career and Technical Education (CTE) 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;
- 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; and
- Owe no debt to the College.

ASSOCIATE OF GENERAL STUDIES DEGREE REQUIREMENTS

GENERAL EDUCATION: Basic Skills requirements (22-23 credits)

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

English Composition

Choose 6 credits from WR 121, 122, 123, 214, 227

- _____
- _____

Speech

Choose 3 credits from any SP 100+ class

- _____

Math

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

Health

- HHP 295, 266, 258, 242 or 231 _____
and one HHP activity/health module _____
- or
- HHP252a _____

Computer skills

- CIS 120 _____

Research/information

- LIB 127 _____

Total Basic Skills credits _____

(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 45.

Physical/biological lab science

Choose 4 credits from the Sciences Distribution List, pages 45 and 46, with a BI, CH, G, GS or PH prefix

Social Science

Choose 3-4 credits from the Social Science Distribution List, page 46.

Additional Distribution course

Three additional credits from any area on the Distribution List, pages 45 and 46

Business Administration

Choose any 3-4 credit class with a BA prefix

Career and Technical Education (CTE)

Three credits from a Career and Technical Education (CTE) area, as listed on page 46

Total Distribution credits _____

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.

Total Elective credits _____

TOTAL DEGREE CREDITS (Basic Skills + Distribution + Electives), 93 minimum: _____

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 to 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 the Visual Arts (4 credits)
 ART 115 Basic Design: 2-D (3 credits)
 ART 116 Basic Design: Color (3 credits)
 ART 117 Basic Design: 3-D (3 credits)
 ART 131, 132, 133 Drawing I, II, III (3 credits each)
 ENG 104 Intro to Literature: Fiction (4 credits)
 ENG 105 Intro to Literature: Drama (4 credits)
 ENG 106 Intro to Literature: Poetry (4 credits)
 ENG 107 Western World Literature: Ancient (4 credits)
 ENG 108 Western World Literature: Middle Ages (4 credits)
 ENG 109 Western World Literature: Modern (4 credits)
 ENG 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)
 ENG 260 Intro to Women Writers (4 credits)
 FA 101 Introduction to Film (3 credits)
 FA 257 Literature into Film (4 credits)
 FR 201, 202, 203 Second Year French I, II, III (4 credits each)
 FR 211, 212, 213 French Conversation & Culture I, II, III (3 credits each)
 GER 201, 202, 203 Second Year German I, II, III (4 credits each)
 GER 211, 212, 213 German Conversation & Culture I, II, III (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: Noir Film and Fiction (4 credits)
 HUM 266 Popular Culture: Travel Literature (4 credits)
 IT 201, 202, 203 Second Year Italian I, II, III (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 I, II, III (4 credits each)
 SPAN 211, 212, 213 Spanish Conversation & Culture I, II, III (3 credits each)
 SP 111 Fundamentals of Public Speaking (3 credits)
 SP 114 Argumentation and Critical Discourse (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 (4 credits)
 SP 270 Communicating Love (3 credits)

TA 141, 142, 143 Acting I, II, III (3 credits each)
 TA 200 Intro to Theater (3 credits)
 TA 207 Readings in Theater (3 credits)
 WR 240 Introduction to Creative Writing: Nonfiction (4 credits)
 WR 241 Introduction to Creative Writing: Fiction (4 credits)
 WR 242 Introduction to Creative Writing: Poetry (4 credits)
 WR 243 Introduction to Creative Writing: Scriptwriting (4 credits)

Science/Math/Computer Science Distribution course options

*BI 101, 102, 103 General Biology I, II, III (4 credits each)
 *BI 211 Principles of Biology I (5 credits)
 *BI 212 Biology of Plants II (5 credits)
 *BI 213 Biology of Animals III (5 credits)
 *BI 231, 232, 233 Human Anatomy and Physiology I, II, III (4 credits each)
 *BI 234 Microbiology (4 credits)
 *BOT 203 General Botany (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 Science Orientation (3 credits)
 CIS 161, 162 Computer Science I, II (4 credits each)
 ENGR 201 Electrical Fundamentals (3 credits)
 FN 225 Human Nutrition (4 credits)
 FOR 230A Map, Compass and GPS (3 credits)
 FOR 240A Forest Ecology (3 credits)
 FOR 240B Wildlife Ecology (3 credits)
 FOR 241A Field Dendrology (3 credits)
 FOR 251 Recreational Resource Management (3 credits)
 FOR 260 Conservation of Natural Resources (3 credits)
 FW 251 Wildlife Conservation (3 credits)
 *G 201, 202, 203 Geology I, II, III (4 credits each)
 G 240 Limnology (4 credits)
 *G 291 Rocks & Minerals (3 credits)
 *GS 104 Physical Science: Physics (4 credits)
 *GS 105 Physical Science: Chemistry (4 credits)
 *GS 106 Physical Science: Geology (4 credits)
 *GS 107 Physical Science: Astronomy (4 credits)
 *GS 108 Physical Science: Oceanography (4 credits)
 *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 Athletic Injury (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 (4 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 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)

(*Counts as a lab science course)

DISTRIBUTION COURSES (CONTINUED)

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)

Social Sciences Distribution course options

ANTH 102 Archaeology (4 credits)
 ANTH 103 Cultural Anthropology (4 credits)
 ANTH 230 Physical Anthropology (4 credits)
 ANTH 240 Language and Culture (4 credits)
 ANTH 254 Magic, Witchcraft and Religion (4 credits)
 ANTH 283 Introduction to Medical Anthropology (4 credits)
 ANTH 295 Gender & Sexuality in an Anthropological Perspective (4 credits)
 CJ 100 Survey of the Criminal Justice System (3 credits)
 CJ 101 Introduction to Criminology (4 credits)
 CJ 110 Law Enforcement (3 credits)
 CJ 120 Judicial Process (3 credits)
 CJ 201 Introduction to Juvenile Justice (3 credits)
 CJ 207 Seminar in Criminal Justice (3 credits)
 CJ 210, 211 Criminal Investigation I, II (3 credits each)
 CJ 220 Introduction to Substantive Law (3 credits)
 CJ 222 Search and Seizure (3 credits)
 CJ 230 Juvenile Corrections (3 credits)
 CJ 243 Drugs and Crime in Society (3 credits)
 CJ 253 Corrections (4 credits)
 EC 201 Microeconomics (4 credits)
 EC 202 Macroeconomics (4 credits)
 GEOG 106 Economic Geography (4 credits)
 GEOG 107 Cultural Geography (4 credits)
 GEOG 190 Environmental Geography (4 credits)
 GEOG 198 Field Geography of Central Oregon (3 credits)
 GEOG 201, 202 World Regional Geography I, II (4 credits each)
 GEOG 207 Geography of Oregon (3 credits)
 GEOG 208 Physical Geography: Landforms and Water (4 credits)
 GEOG 209 Physical Geography: Weather and Climate (4 credits)
 GEOG 240 Geography of Central Oregon (3 credits)
 GEOG 270 Map Interpretation and Design (4 credits)

GEOG 290 Environmental Problems (3 credits)
 GEOG 295 Wilderness and Society (4 credits)
 HD 208 Multicultural Issues in Human Services (4 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 History of the Civil War (4 credits)
 HST 207 History of the American West (4 credits)
 HST 218 Native American History (4 credits)
 HST 225 US Women's History (4 credits)
 HST 236 Women in 20th Century European History (4 credits)
 HST 242 History of the Pacific Northwest (4 credits)
 HST 258 Colonial Latin American History (4 credits)
 HST 259 Modern Latin American History (4 credits)
 HST 260 History of the Middle East (4 credits)
 HST 270 20th Century European History (4 credits)
 HST 290, 291, 292 East Asian History (4 credits each)
 PS 201 Introduction to US Government and Politics (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)
 PS 207 Politics of the Middle East (4 credits)
 PSY 201 Mind and Brain (4 credits)
 PSY 202 Mind and Society (4 credits)
 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)

CAREER AND TECHNICAL COURSES (AS APPLIED TO AAOT ELECTIVES)

Students may use up to 12 credits of Career and Technical Education (CTE) courses to meet elective credit requirements for the Associate of Arts Oregon Transfer (AAOT) and Associate of Science (AS) degree. Career and Technical Education (CTE) courses are 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 122 Introduction to Programming
 CIS 125A Access
 CIS 125A1 AutoCAD I
 CIS 125A2 AutoCAD II
 CIS 125A3 AutoCAD III
 CIS 125E Excel
 CIS 125G Photoshop
 CIS 135A1 AutoDESK Revit I

CIS 135A2 AutoDESK Revit 2
 CIS 135C1 AutoCAD Civil 3D
 CIS 135M1 AutoDESK Inventor I
 CIS 145 PC Technician
 CIS 279NI Windows 2003 Network Infrastructure Administration
 DA All courses
 DM All courses
 DSL All courses
 EMT All courses
 FOR 130 Chainsaw Use and Maintenance
 GEOG 211 Computer Cartography
 GEOG 265 Geographic Information Systems
 GEOG 266 Arc GIS

GEOG 267 Geodatabase Design
 GEOG 273 Spatial Data Collection
 GEOG 280 Co-op Work Experience GIS
 GEOG 284 GIS Customization
 GEOG 285 Data Conversion/Documentation
 GEOG 286 Remote Sensing
 GEOG 287 Analysis of Spatial Data
 HIT All courses
 LMT All courses
 MFG All courses
 MA All courses
 NUR All courses
 OA All courses

COLLEGE TRANSFER AND CAREER & TECHNICAL EDUCATION (CTE) PROGRAMS

Here is a quick-reference listing of the college transfer and Career and Technical Education (CTE) 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 48-128.

	short-term certificate	one-year certificate	two-year certificate	AAS	Transfer	OSU-Cascades		short-term certificate	one-year certificate	two-year certificate	AAS	Transfer	OSU-Cascades
Addictions Studies	48			50			Forest Resources Technology				85	86	86
Anthropology				51			Advanced Forest Concepts	84					
Apprenticeship	52	52		52			Conservation of Natural Resources	84					
Art				53	53		Forest Ecology	85					
Automotive Management				54			Forest Measurements	85					
Automotive Technology							Forest Protection	85					
Auto Drive Train Technician	55						Mapping/Cartography	85					
Auto Engine Technician	55						General Science						87 87
Auto Electrical Technician (Basic)	55						Geographic Information Systems (GIS)	88	89				
Auto Electrical Technician (Advanced)	56						Geography						90
Auto Engine Performance Technician	56						Geology						91 91
Auto Heating & Air Conditioning Technician	56						Health Information Technology				93		
Master Auto Technician	56						Insurance	92					
Undercar Technician	55						Medical Secretary	92					
Aviation Professional Pilot - Airplane				57	57		Electronic Medical Billing	93					
Aviation Professional Pilot - Helicopter				58	58		Medical Transcription	93					
Biology				59	59		Medical Coding			93			
Botany (see Biology)				59			Health Promotion						94
Business Administration				60	60	62	History						95 95
Accounting	60						Humanities						96 97
General Business				60	60		Law – Pre						117
Hotel, Tourism & Recreation Mgmt				61			Manufacturing Technology		100	100	101		
Information Systems Management				61			CNC Machining	98					
Management and Marketing				61			Fabrication Sheet Metal	98					
Retail Management	60			61			Manual Machining	99					
Chemistry				63	63		Quality Assurance	99					
Composites Manufacturing Technology	64	64					Welding	100					
Computer and Information Systems	65			66			Massage Therapy		103	103	103		
Networking				66			Mathematics						104 104
Computer Aided Drafting (CAD)	65			66			Medical Assistant		105				
Desktop Support				66			Medical Imaging – Pre						120
Criminal Justice				68	68		Medical (Pre) Lab Technology						118
Juvenile Corrections	67						Medicine – Pre						119
Culinary (Cascade Culinary Institute)	69	69		70			Microbiology (see Biology)						59
Dental Assisting	71						Military Science						106 106
Dental Hygiene – Pre				116			Music						107
Dentistry – Pre				119			Nursing		108	109			
Dietary Manager	72						Office Assistant		110				
Early Childhood Education				74	73	73	Outdoor Leadership						111 111
Economics				75			Pharmacy Technician*		113				
Education				76	76		Physics						114
Emergency Medical Services				76			Political Science						115 115
Engineering				114			Psychology						121 122
English/Literature				78	79		Radiology Technologist – Pre						120
Exercise Science				80			Science (General)						87 87
Fire Science – Structural				125			Sociology						123
Fire Science – Wildland Fire/Fuels Mgmt	127	127		127			Speech Communication						124 125
Foreign Languages				82	83		Veterinary – Pre						119

* pending State approval

ADDICTIONS STUDIES

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

Certificate of Completion

(60-64 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 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 60- to 64-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, first-served basis. Enrollment in practicum credits¹ is by program director or practicum supervisor approval only. Students who have a history of addiction are expected to maintain sobriety throughout the program.

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 161	Ethics for Human Services*	3
HD 162	Effective Helping Skills ²	3
HD 200	Addictive Behavior	3
HD 206	Groups and Addictions Treatment	3
HD 260	Counseling Theories	3
WR 121	English Composition	3

Winter term

HD 180	HIV, AIDS and Addictions	2
HD 201	Families and Addictions	3
HD 223	Drugs and Addictions	3
HD 262	Effective Helping Skills II	3
HD 266	Case Management	4
HD 291	Practicum Addictions Treatment	3

Spring

HD 205	Youth and Addictions ³	3
HD 208	Multicultural Issues in Human Services	4
HD 210	Dual Diagnosis	4
HD 263	Counseling the Chemically Dependent Client	3
HD 291	Practicum Addictions Treatment	3

Summer

HD 291	Practicum Addictions Treatment	3
MTH 60	Algebra I	4
Pass computer competency test		0
or CIS 120	Computer Concepts	4

- ¹ COCC recommends that students start their practicums 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.
- ² Choose to take course during either fall or spring term.
- ³ Choose to take course during either winter or spring term.

ADDICTIONS STUDIES (continued)

**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 ¹	3
WR 122	English Composition	3
or WR 123	English Composition	
or WR 214	Business Communication	
or WR 227	Technical Writing	
SP 111	Fundamentals of Public Speaking	3
or SP 218	Interpersonal Communication	
MTH 111	College Algebra	4
Health ²		3-4
Computer competency ³		0-4
LIB 127	Information Research Skills	2

General education/distribution (19 credits minimum)

(See pages 45 and 46 for distribution listings)

Humanities

A minimum of 3 credits from the humanities distribution list.

Physical Science/Biological Lab Science

A minimum of 4 credits from the science distribution list with a BI, CH, G, GS or PH prefix.

Social Science

A minimum of 3-4 credits from the social science distribution list.

Additional Distribution Course

Three additional credits from any area on the distribution list.

Business Administration

Choose any 3-4 credit class with a BA prefix (see BA listing in course descriptions on pages 144-147).

One course from the Career and Technical Education (CTE) course list (see page 46). 3



photo by Andy Tullis

Electives

HD 161	Ethics for Human Services ^{1*}	3
HD 162	Effective Helping Skills ¹	3
HD 180	HIV/AIDS and Addictions ¹	2
HD 200	Addictive Behavior ¹	3
HD 201	Families and Addictions ¹	3
HD 205	Youth and Addictions ¹	3
HD 206	Groups and Addictions Treatment ¹	3
HD 208	Multicultural Issues ¹	3
HD 210	Dual Diagnosis ¹	4
HD 223	Drugs and Addictions ¹	3
HD 260	Counseling Theories ¹	3
HD 262	Effective Helping Skills II ¹	3
HD 263	Counseling the Chemically Dependent Client ¹	3
HD 266	Case Management ¹	4
HD 291	Practicum ^{1,4}	9

¹ Required for the Certificate of Completion in Addictions Studies.

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 Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

⁴ COCC recommends that students start their practicums during winter term; however, practicum opportunities are available every term. A total of nine practicum credits is required for the Certificate of Completion in Addictions Studies.

ADDICTIONS STUDIES (continued)

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 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.

General education/basic skills

(All basic skills courses must be completed with a grade of "C" or higher)

English Composition

WR 121	English Composition	3
WR 122	English Composition	3
WR 123	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 111	College Algebra	4
---------	-----------------	---

Health ¹		3-4
Computer competency ²		0-4

General education/distribution

(See pages 45 and 46 for course listings)

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.



photo by Ben Edwards

Social Science

A minimum of 15 credits from the social science distribution list with at least two different prefixes.

Electives (32 credits)

32 credits from the Addictions Studies Certificate will be applied toward elective credits. No additional elective credits are needed to earn the AAOT.

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 36 for details) or take CIS 120, Computer Concepts.

Additional advising information and recommendations

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fill the humanities requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor.

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 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 anthropology.

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. Second-year foreign language recommended to meet part of this requirement.

Science³ 15 (minimum)

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

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		3-4



Electives

ANTH 240	Language and Culture	4
General Electives ⁴		24-30

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.

² Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

³ In general, very few bachelor's degrees in Anthropology have specific science requirements. However, if the interest is primarily archaeological, then Geology would fulfill the lab requirements. If the interest is primarily in physical anthropology, then select a Biology sequence or the Human Anatomy & Physiology sequence.

⁴ In choosing electives, consider two years of a foreign language since many BA degrees (including many anthropology programs) require two years or equivalent of a foreign language. Some Anthropology degrees may also require an upper-level statistics course. Taking MTH 243: Math for Management/ Life/Soc Science and MTH 244: Intro to Method of Probability and Stats is good preparation for the upper-division requirement. Either of these could count toward the non-lab requirement in the Science/Math/Computer Science general education requirement.

APPRENTICESHIP

Certificates of Completion (16-53 credits)
Associate of Applied Science (93-98 credits)

Apprenticeship is a structured training program based on a written agreement between the apprentice and the appropriate trade training committee. It combines on-the-job training and classroom coursework. 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.

For information about Apprenticeship Programs and jobs, phone the Bureau of Labor and Industries/Apprenticeship & Training at (541) 322-2435 or visit its Web site at www.boli.state.or.us.

For information regarding an Apprenticeship/Industrial Technology certificate or degree, please call Enrollment Services-Admissions, (541) 383-7500, or call the COCC Apprenticeship office at (541) 504-2930.

COCC contracts with trade training committees to provide classroom coursework to apprentices in the following trades: boiler/turbine operator, industrial maintenance millwright, limited maintenance electrician, manufacturing plant 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 journeypersons in their trade. Generally that involves taking one class in the evening two or three terms during the school year.

COCC is part of the statewide consortium of colleges offering a Certificate of Completion or an Associate of Applied Science degree in three different career pathways for apprentices:

- Industrial Mechanics and Maintenance Technology
- Construction Trades, General Apprenticeship
- Electrician Apprenticeship Technologies

Certificate of Completion (16-53 credits)

Short-term Certificates of Completion are offered in these trades: boiler operator, boiler/turbine operator, industrial maintenance millwright, limited maintenance electrician, manufacturing plant electrician, and sheet metal.

Associate of Applied Science (93-98 credits)

In addition to the credit received from related training during their apprenticeship and any other required trade-specific training; apprentices seeking the Associate of Applied Science degree must complete the following coursework with a grade of "C" or better:

WR 121	English Composition	3
SP 111	Fundamentals of Public Speaking	3
or SP 218	Interpersonal Communication	
MTH 85	Technical Math I	4
BA 285	Business Human Relations	3
or PSY 207	Applied Psychology	
or SP 218	Interpersonal Communication	
Health ¹		3-4
Computer Competency ²		0-4

Distribution list courses; each must have a different prefix (e.g., HHP, MUS, SOC) 9

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 36 for details) or take CIS 120, Computer Concepts.

After students have completed their related training and the general education credits, they may receive 11 to 22 credits for on-the-job experience of between 4,000 and 8,000 hours, depending on the trade. Those credits are recognized only upon completion of all other requirements for the degree and presentation of a valid journeyperson's card.

Journeypersons who have completed their related training in a registered Oregon apprenticeship program outside of COCC may earn an Associate of Applied Science degree from COCC in one of three career pathways. To begin the process a student must transfer any earned, related-training credits to COCC by submitting a college transcript or by submitting course syllabi for credit evaluation. To earn a degree under these pathways, a student must have 46 to 57 credits of trade-specific, related training (depending on the trade), complete all required general education classes and obtain 11 or 22 credits for on-the-job training, awarded after presenting a journeyperson's card and all other requirements have been met.

ART

Associate of Arts Oregon Transfer (93 credits)

COCC's 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 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 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	

Speech¹

SP 111	Fundamentals of Public Speaking	3
or SP 219	Small Group Communication	

Mathematics

MTH 111	College Algebra	4
---------	-----------------	---

Health ²		3-4
---------------------	--	-----

Computer competency ³		0-4
----------------------------------	--	-----

General education/distribution

Humanities - select two art history courses from the following:

ARH 201	Art History I	4
ARH 202	Art History II	4
ARH 203	Art History III	4

plus one additional course from COCC's distribution list, other than an ARH prefix, preferably with an ART 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

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 36 for details) or take CIS 120, Computer Concepts.

Transfer information

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.

Note that an Associate of Science – Direct Transfer to Oregon State University-Cascades Campus degree is available. This degree allows 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 OSU-Cascades Campus. Contact the Admissions & Records office for a listing of course and degree requirements. OSU-Cascades Campus currently offers a Bachelor of Fine Arts degree. Please see an OSU-Cascades advisor for details.

The University of Oregon offers a Bachelor of Fine Arts degree in several art media areas.

AUTOMOTIVE MANAGEMENT

Associate of Applied Science

(95-99 credits; seven quarters to complete if attending full time)

The following courses are required for COCC's Associate of Applied Science in Automotive Management degree. Students should work closely with an advisor if they wish to attend part time. Note that several of the courses qualify students to also earn short-term certificates in various automotive technology areas. See the Automotive Technology certificates on the following pages.

YEAR ONE

Fall term

AUT 101	Basic Electricity for Automotive	2
AUT 106	Automotive Program Orientation	1
AUT 107	Mechanical Systems I	3
AUT 110	Small Gas Engines	3
AUT 204	Steering and Suspension	3
AUT 208	Automotive Brakes	3

Winter term

AUT 102	Automotive Electric I	4
AUT 103	Automotive Electric II	2
AUT 105	Diesel Performance I	2
AUT 205	Engine Performance I	2
HHP 252A	Fitness/First Aid	3
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		0-4

Summer term

AUT 216	Co-op Work Experience-Automotive	4
---------	----------------------------------	---

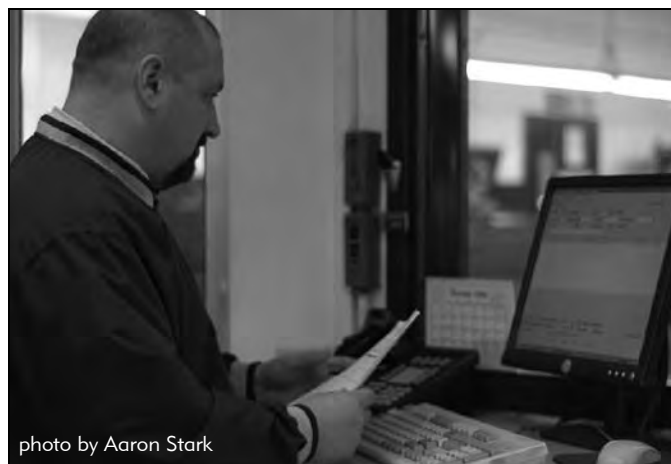


photo by Aaron Stark

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
or SP 218	Interpersonal Communication	
WR 214	Business Communication	3
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 Business	3
BA 286	Managing Business Processes	4

¹ Pass computer basic skills competency test (see page 36 for details), or take CIS 120, Computer Concepts.

² Choose nine credits from COCC's distribution list (pages 45 and 46); each course must have a different prefix.

AUTOMOTIVE TECHNOLOGY

Certificates of Completion

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	Basic Electricity for Automotive	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 the National Institute for Automotive Service Excellence (ASE) certification in (A6) Electrical/Electronic Systems.

Automotive basic skills		9
AUT 102	Automotive Electric I	4

Automotive Drive-Train Technician Short-term Certificate (18 credits) Two quarters to complete if attending full time

From drivelines to transaxles, clutches to differentials, COCC's Transmission Technology 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 203	Manual Drive Trains II	2
AUT 251	Automatic Transmissions I	3
AUT 252	Automatic Transmissions II	1

Automotive Engine Technician Short-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)



photo by Aaron Stark

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) Short-term Certificate (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	9
AUT 102 Automotive Electric I	4
AUT 103 Automotive Electric II	2
AUT 104 Automotive Electric III	2

Automotive Engine Performance Technician Short-term Certificate (26 credits; three quarters to complete if attending full time)

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 Certificate of Completion (68 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 203 Manual Drive Trains II	2
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-Automotive	8
AUT 251 Automatic Transmissions I	3
AUT 253 Automotive Air Conditioning	3
BA 285 Business Human Relations	3
MTH 60 Algebra I	4
or MTH 85 Technical Math I	
WR 60 Rhetoric and Critical Thinking I	4

AVIATION

Associate of Applied Science
Associate of Science

Aviation – Airplane
Associate of Applied Science
(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. 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.

Graduates of this program receive the following certificates and ratings: Private Pilot, Commercial Pilot, and Certified Flight Instructor certificates; and Instrument and Multi-engine 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.

The aviation program faculty work closely with each student to ensure achievement of academic goals. Flight and simulator fees are required for AV 110, AV 115, AV 210A, AV 210H, AV 220, AV 225, AV 230, AV 255 and AV 256. Those fees are in addition to normal tuition and must be paid by the end of the second week of the term. Students will be dropped at that time for nonpayment of fees. The fee structure is available on the Aviation web site (<http://aviation.cocc.edu>). Contact the Aviation program director, (541) 318-3736, for more information. The AAS degree – Airplane option will require approximately 250 hours of flight training at an approximate cost of \$48,000. The AAS degree will only be awarded when the following certificates and ratings are obtained: Private Pilot and Commercial Pilot certificates, and Instrument and Multi-engine ratings.

The AAS 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 director, 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 the program director 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) ¹	5
CIS 120	Computer Concepts	4
WR 121	English Composition	3

Winter term

AV 104	Introduction to Aircraft Systems	4
AV 108	Meteorology I	4
MTH 85	Technical Math I	4
	or MTH 111 College Algebra (or higher)	
	General education distribution course ²	3

Spring term

AV 208	Meteorology II	4
AV 210A	Instrument-Airplane (10 hours) ¹	5
MTH 86	Technical Math II	4
	or MTH 111 College Algebra (or higher)	
	General education distribution course ²	3

YEAR TWO

Fall term

AV 150	Aerodynamics	4
AV 220	Commercial Pilot (10 hours) ¹	4
	General education distribution course ²	3
	Elective ²	3

Winter term

AV 204	Advanced Aircraft Systems	4
AV 230	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 Requires simulator hours. Flight and simulator fees are required in addition to normal tuition and must be paid by the end of the second week of the term. Students will be dropped at that time for nonpayment of fees. The fee structure is available on the Aviation web site (<http://aviation.cocc.edu>). Contact the Aviation program director, (541) 318-3736, for more information.

² See advisor for options.

³ HHP 252A 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 (continued)

Aviation – Helicopter
Associate of Applied Science
 (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. Flight and simulator fees are required for AV 110, AV 115, AV 210A, AV 210H, AV 220, AV 225, AV 230, AV 255 and AV 256. Those fees are in addition to normal tuition and must be paid by the end of the second week of the term. Students will be dropped at that time for nonpayment of fees. The fee structure is available on the Aviation web site (<http://aviation.cocc.edu>). Contact the Aviation program director, (541) 318-3736, for more information.

The AAS degree – Helicopter option will require approximately 150 hours of flight training at an approximate cost of \$60,000. The AAS degree will only be awarded when the following certificates and ratings are obtained: Private Pilot and Commercial Pilot certificates, and the Instrument rating.

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

YEAR ONE

Fall term

AV 101	Introduction to Aviation	3
AV 115	Private Pilot-Helicopter (5 hours) ¹	8
CIS 120	Computer Concepts	4
WR 121	English Composition	3

Winter term

AV 104	Introduction to Aircraft Systems	4
AV 108	Meteorology I	4
MTH 85	Technical Math I	4
	or MTH 111 College Algebra (or higher)	
	General education distribution course ²	3

Spring term

AV 208	Meteorology II	4
AV 210H	Instrument-Helicopter (10 hours) ¹	5
MTH 86	Technical Math II	4
	or MTH 111 College Algebra (or higher)	
	General education distribution course ²	3

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	6

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

¹ Requires simulator hours. Flight and simulator fees are required in addition to normal tuition and must be paid by the end of the second week of the term. Students will be dropped at that time for nonpayment of fees. The fee structure is available on the Aviation web site (<http://aviation.cocc.edu>). Contact Aviation program director, (541) 318-3736, for more information.

² See advisor for options.

³ HHP 252A 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, botany, forest or marine science, veterinary medicine, agricultural research, pharmaceuticals, human medicine or other life science careers such as research in microbiology, biotechnology, bio-informatics or genetics.

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	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

BI 211	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	4
CH 223	General Chemistry III ³	4
or		
CH 104	Introduction to Chemistry I ⁴	4
CH 105	Introduction to Chemistry 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	4
---------	----------------	---

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 36 for details) or take CIS 120, Computer Concepts.

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

Accounting Clerk Certificate of Completion (43 credits)

COCC's Accounting Clerk certificate is designed to give students a foundation for careers in clerical accounting. All coursework may be applied to an AAS Business degree.

Degree/course requirements

The following are the required courses for the Business Administration Accounting Clerk certificate. Students must complete each required course for this certificate with a "C" grade or better.

BA 101	Introduction to Business	4
BA 104	Business Math*	3
BA 111	Applied Accounting I	3
BA 112	Applied Accounting II	3
BA 113	Applied Accounting III	3
BA 177	Payroll Accounting	3
BA 220	Math for Business Decisions	4
BA 229	QuickBooks	3
BA 280	Co-op Work Experience Business	3
BA 285	Business Human Relations	3
CIS 125E	Excel	4
CIS 131	Software Applications	4
WR 121	English Composition	3

Retail Management Certificate of Completion (45 credits)

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 I	3
BA XXX	Business Electives ² (recommend BA 101, Intro to Business)	4
CIS 131	Software Applications	4
WR 121	English Composition	3

Winter

BA 104	Business Math*	3
BA 206	Management Fundamentals I	4

BA 223	Marketing Principles I	4
BA XXX	Business Elective ² (recommend BA 178, Customer Service)	3
BA 285	Business Human Relations	3

Spring

BA 224	Human Resources Management ¹	4
BA 249	Retailing ¹	4
SP 111	Fundamentals of Public Speaking or SP 219 Small Group Communication	3
WR 214	Business Communications	3

¹ Offered only during the term listed

² Business electives split in the sample coursework between fall and winter terms

Associate of Applied Science with Specializations (96-98 credits)

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; Retail Operations Management 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 101	Introduction to Business	4
BA 104	Business Math*	3
BA 111	Applied Accounting I	3
BA 178	Customer Service	3
CIS 131	Software Applications	4
SP 111	Fundamentals of Public Speaking or SP 219 Small Group Communication	3
WR 121	English Composition	3

Plus any math courses necessary to prepare for BA 220 in Level III Accounting or Marketing & Management specializations (prerequisite MTH 65).

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

BUSINESS ADMINISTRATION (continued)

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 112	Applied Accounting II	3
BA 113	Applied Accounting III	3
BA 223	Marketing Principles I	4
BA 226	Business Law I	4
BA 285	Business Human Relations	3
CIS 125E	Excel	4
WR 214	Business Communications	3

Level III Specialization Courses

See specialization below in: Accounting; Hotel, Tourism and Recreation Management; Information Systems Management; Management and Marketing; Retail Operations Management; or General Business.

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	Co-op Work Experience Business	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; Management and Marketing; or Retail Operations Management.

Accounting

This specialization is for those who desire to be accountants for a small- to medium-sized business. (25 credits)

BA 220	Math for Business Decisions	4
BA 177	Payroll Accounting	3
BA 211	Financial Accounting I	3
BA 212	Financial Accounting II	3
BA 213	Managerial Accounting	3
BA 228	Computer Accounting Applications	3
BA 229	QuickBooks	3
Business electives		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	3
HTRM 105	Food Service Management	4
HTRM 106	Lodging Management	3
Business electives		14

(HTRM 233 Event Planning recommended)

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 66 for options. (24 credits)

CIS 125A	Access	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials	4
CIS 235	IT in Business	4

Select two electives from the following:

CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
CIS 295	Web Development II	4

Management and Marketing

This specialization is for those who plan to be managers or marketers for small- to medium-size businesses. (24 credits)

BA 220	Math for Business Decisions	4
BA 207	Management Fundamentals II	4
BA 239	Marketing Principles II	4
Business Electives (BA and HTRM prefixes)		12

Retail Operations Management

This specialization is for those who plan to be operating managers for medium- to large-size businesses in sales, human resources or customer service with specialized projects. (24 credits)

BA 220	Math for Business Decisions	4
BA 224	Human Resources Management	4
BA 239	Marketing Principles II	4
BA 249	Retailing	4
BA 261	Consumer Behavior	4

Select one from the following:

BA 207	Management Fundamentals II	4
BA 238	Selling and Negotiation	4

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

BUSINESS ADMINISTRATION (continued)

There are several transfer degrees with business coursework that are designed for students who plan to attend a four-year institution. The Associate of Science Oregon Transfer (ASOT) listed below 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.

Other options include a degree designed specifically for the students planning on attending OSU-Cascades Campus (ASDT) and a degree for those planning to attend Oregon State University in Corvallis or who need business subject preparation but are unsure of their major or intended institution (AAOT with emphasis coursework). See your business department advisor to determine the best course of study and COCC transfer degree for you.

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 COCC business department advisors to determine the best course of study and COCC transfer degree from the many options available to business transfer students.)

Courses marked with a footnote (¹) must be completed with a grade of "C" or better.

General requirements

CIS 120	Computer Concepts 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, that do not have an EC prefix.

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 ¹	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 Career and Technical Education (CTE) 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 to transfer 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 or see your business department advisor for specific OSU-Cascades articulation requirements and the Associate of Science Direct Transfer (ASDT) coursework.

For more information about the Associate of Science degree and articulation agreements with local colleges and universities, see pages 34 and 35.

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 or 211	General Physics I	5



photo by Eugen Helmbrecht

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 or 212	General Physics II	5
PH 203 or 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 36 for details) or take CIS 120, Computer Concepts.

Transfer information

Oregon public 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
Certificate of Completion

All courses may not be offered every year.

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 Composites Short-term Certificate

(14 credits; one quarter to complete if attending full time)

Fall term

CMT 101	Introduction to Composites	4
CMT 110	Composites Occupational Topics	4
MFG 101	Blueprint Reading	2
MTH 60	Algebra I	4



Composites Manufacturing Technology Certificate of Completion

(36 credits; three quarters to complete if attending full time)

Fall term

CMT 101	Introduction to Composites	4
CMT 110	Composites Occupational Topics	4
MFG 101	Blueprint Reading	2
MTH 60	Algebra I	4

Winter term

CMT 102	Composite Materials/Process	4
CMT 120	Composites Fabrication	4
SP 219	Small Group Communication	3
or SP 218	Interpersonal Communication	
or BA 285	Business Human Relations	

Spring term

CMT 103	Applied Composite Technology	4
CMT 130	Composites Practicum Seminar	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 (CIS) 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 66-68 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 45-46 credits.

The Computer Aided Drafting option prepares students for entry-level employment in the drafting field. Students prepare for advanced CAD applications through an introductory set of CAD-based curriculum. Students will gain experience using dedicated architectural, civil and mechanical software.

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 a remote location. Other responsibilities may include providing support for computer hardware and software, including printing, installation, word processing, spreadsheets, database, electronic mail and operating systems.

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.

A Computer Aided Drafting certificate is also available for students seeking a basic working knowledge of CAD systems. Full-time students can complete the program in three terms, although full-time enrollment is not required. This certificate provides training for entry-level CAD operator positions. All credits apply toward the Associate of Applied Science degree in CIS/CAD. Students may earn a Certificate of Completion by successfully completing the required 44-45 credit hours with a grade of “C” or better in all courses.

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 and Information Systems (CIS) Certificate of Completion (45-46 credits; three quarters to complete if attending full time)

BA 285	Business Human Relations	3
or SP 218	Interpersonal Communication	
CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials	4
CIS 145	PC Technician	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 195	Web Development I	4
MTH 85	Technical Math I	3-4
or BA 104	Business Math	
WR 121	English Composition	3

Computer Aided Drafting (CAD) Certificate of Completion (44-45 credits; three quarters to complete if attending full time)

BA 285	Business Human Relations	3
or SP 218	Interpersonal Communication	
CIS 120	Computer Concepts	4
CIS 125A1	AutoCAD I	4
CIS 125A2	AutoCAD II	4
CIS 125A3	AutoCAD III	4
CIS 135A1	AutoDESK Revit I	3
CIS 135A2	AutoDESK Revit II	3
CIS 135M1	AutoDESK Inventor I	3
CIS 135M2	AutoDESK Inventor II	3
CIS 135C1	AutoCAD Civil 3D	3
CIS 140	A+ Essentials	4
MTH 85	Technical Math I	3-4
or BA 104	Business Math	
WR 121	English Composition	3

COMPUTER AND INFORMATION SYSTEMS (continued)

Computer and Information Systems (CIS)

Associate of Applied Science

(93-97 credits; six quarters to complete if attending full time)

Required core courses (66-69 credits)

BA 285	Business Human Relations	3
or SP 218	Interpersonal Communication	
CIS 120	Computer Concepts	4
CIS 122	Introduction to Programming	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials	4
CIS 145	PC Technician	4
CIS 178	Internet in Depth	4
CIS 179	Networking Essentials	4
CIS 244	Information System Analysis	4
CIS XXX	CIS elective	
	(in addition to one of the CIS options)	3-4
CIS 280	Co-op Work Experience CIS	3
	General Education Distribution Courses ¹	9
MTH 85	Technical Math I	3-4
or BA 104	Business Math	
WR 121	English Composition	3
Health ²		3-4
WR 214	Business Communications	3
or WR 227	Technical Writing	
or SP 111	Fundamentals of Public Speaking	

CIS electives

(27-28 credits with CIS prefix or choose one of the following CIS options)

For a general CIS AAS degree (no option) select 27-28 credits with a CIS prefix from the list in the course descriptions, pages 152-156, or choose one of the following CIS options for your degree.

Networking option (28 credits)

CIS 151C	Cisco Internetworking	4
CIS 152C	Cisco Router Configuration	4
CIS 154C	Cisco VLAN / WAN Technologies	4
CIS 279XP	Windows XP Professional	4
CIS 279NE	Managing a Windows 2003 Server Network Environment	4
CIS 279NI	Windows 2003 Network Infrastructure Administration	4
CIS 279V	Windows Vista	4



photo by Aaron Stark

Desktop Support option (28 credits)

CIS 125E	Excel	4
CIS 125A	Access	4
CIS 195	Web Development I	4
CIS 125G	Photoshop	4
CIS 295	Web Development II	4
CIS 279XP	Windows XP Professional	4
or CIS 279V	Windows Vista	
CIS 235	IT in Business	4

CAD option (27 credits)

CIS 125A1	AutoCAD I	4
CIS 125A2	AutoCAD II	4
CIS 125A3	AutoCAD III	4
CIS 135A1	AutoDESK Revit I	3
CIS 135A2	AutoDESK Revit II	3
CIS 135C1	AutoCAD Civil 3D	3
CIS 135M1	AutoDESK Inventor I	3
CIS 135M2	AutoDESK Inventor II	3

¹ Choose courses from distribution list, pages 45 and 46. Each course must have a different prefix and cannot have a CIS prefix.

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.

CRIMINAL JUSTICE

Certificate of Completion

Associate of Applied Science

Associate of Arts Oregon Transfer

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 a concentration in juvenile corrections is specifically designed for individuals who want to work directly with juvenile offenders in various settings. These settings may include Oregon Youth Authority (OYA) as well as other public, private and nonprofit agencies/programs. A criminal background check is required to complete the one-year certificate or the two-year degree. The criminal background check is also a requirement for any job in the criminal justice field.
- **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 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.

Students are encouraged to work closely with their advisors to decide which option is most appropriate based on long-term career goals.

Criminal Justice Proficiency Areas (13-16 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	4

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	Juvenile Corrections	3
PSY 215	Developmental Psychology	4
PSY 216	Social Psychology	3
HD 205	Youth and Addictions	3

Parole and Probation (15 credits)

PSY 233	Violence and Aggression	4
SOC 211	Social Deviance	4
PSY 219	Abnormal Psychology	4
HD 200	Addictive Behavior	3

Criminal Investigations (13 credits)

CJ 210	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 (49-53 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 Psychology	4
PSY 219	Abnormal Psychology	4
PSY 233	Psychology of Violence & Aggression	4
SOC 201	Introduction to Sociology*	4

CJ courses

CJ 100	Survey of the Criminal Justice System	3
CJ 101	Introduction to Criminology	4
CJ 201	Introduction to Juvenile Justice	3
CJ 230	Juvenile Corrections	3
CJ 280	Co-op Work Experience Criminal Justice	2

¹This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk (*).

CRIMINAL JUSTICE (continued)

Criminal Justice

Associate of Applied Science

(93-95 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 Fundamentals of Public Speaking	3
or SP 219 Small Group Communication	
WR 121 English Composition	3

Support courses

LIB 127 Information Research Skills	2
PSY 201 Mind and Brain	4
PSY 202 Mind and Society	4
PSY 233 Psychology of Violence & Aggression	4
SOC 201 Introduction to Sociology*	4
SOC 211 Social Deviance	4
SOC 212 Race, Class Ethnicity	4
Criminal Justice open electives ⁵	17
Electives ³ (from general distribution list)	9

Criminal Justice program courses

CJ 100 Survey of the Criminal Justice System	3
CJ 101 Introduction to Criminology	4
CJ 120 Judicial Process	3
CJ 253 Corrections	4
CJ 201 Introduction to Juvenile Justice	3
CJ 280 Co-Op Work Experience Criminal Justice	2
CJ electives ⁴	6

Students should take all of the above plus enough additional coursework to reach the 93 minimum credits required for the AAS degree.

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 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 ²	3-4
Computer competency ¹	0-4

General education/distribution

(See pages 45 and 46 for course listings)

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.

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 of the Criminal Justice System	3
CJ 101 Introduction to Criminology	4
CJ 120 Judicial Process	3
CJ 253 Corrections	4
CJ 201 Introduction to Juvenile Justice	3
CJ 280 Cooperative Work Experience	2

¹ Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

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.

⁵ See advisor.

Advising information

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

If transferring to Portland State University, CJ 101, 110 and 253 are recommended.

If transferring to Western Oregon University, CJ 100 is recommended.

CULINARY

Certificates of Completion
Associate of Applied Science

Kitchen Prep
Short-term Certificate (22 credits)
(One to two quarters to complete if attending full time)

The Cascade Culinary Institute® Kitchen Prep certificate prepares students in the fundamental techniques of “level one” baking, hot foods, garde manger and dining room service along with basic sanitation and food service nutrition.

CCI 71	Basic Sanitation	2
CCI 81	Food Service Nutrition (offered fall term only)	2
CCI 121	Hot Food Production I	4
CCI 141	Baking I	4
CCI 151	GardeManger I	4
CCI 161	Dining Room Service I	3
CCI 280A	Co-op Work Experience Culinary	3

Culinary
Certificate of Completion
(69 credits; four to five quarters to complete if attending full time)

A Cascade Culinary Institute® 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® certificate verifies that a student is competent and can compete, as well as communicate and interact with peers and superiors, in traditional food-service operations.

The Cascade Culinary Institute® 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.

Pre- or corequisites

CCI 71	Basic Sanitation	2
--------	------------------	---

Level 1 kitchen-block coursework

CCI 121	Hot Food Production I	4
CCI 141	Baking I	4
CCI 151	GardeManger I	4
CCI 161	Dining Room Service I	3

Level 2 kitchen-block coursework

CCI 122	Hot Food Production II	4
CCI 142	Baking II	4
CCI 152	GardeManger II	4
CCI 162	Dining Room Service II	3



photo by Eugen Helmbrecht

Level 3 kitchen-block coursework

CCI 123	Hot Food Production III	4
CCI 143	Baking III	4
CCI 153	GardeManger III	4
CCI 163	Dining Room III: Management	3

Other required courses

CCI 81	Food Service Nutrition (offered fall term only)	2
HTRM105	Food Service Management (offered spring term only)	4
CCI 107	Culinary Supervision * (offered winter term only)	3
CCI 280A,B,C	Co-op Work Experience Culinary (3 cr each)	9
WR 65 ¹	Rhetoric & Critical Thinking II (or higher WR coursework)	4

¹ Students expecting to continue toward the Associate of Applied Science Culinary Management degree will be required to take WR 95.

Advising information

Cascade Culinary Institute® kitchen-block coursework must be taken concurrently. Each kitchen-block level is full time at 15 credits. Level 1 is scheduled fall and winter terms only. Students must meet with and receive permission to register from the program coordinator prior to registration.

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.

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

CULINARY (continued)

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. Students may register for CCI 280A, B and C credits as needed without incurring late registration fees.

Certified Dietary Manager certification may also be obtained at COCC; see page 72. See advisor for ease of concurrent Cascade Culinary Institute® and Dietary Management program coursework.

Culinary Management
Associate of Applied Science
(96-97 credits; six quarters to complete if attending full time)

The 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 with their advisors 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	Customer Service	3
CCI 71	Basic Sanitation	2
CIS 120	Computer Concepts	4
WR 95	Basic Writing II	3
Health ²		3-4

Second through fifth terms

Upon completion of these courses, plus WR 95 or higher, CCI 280 and CCI 71, students will earn a certificate of completion in Culinary.

CCI 121	Hot Food Production I	4
CCI 122	Hot Food Production II	4
CCI 123	Hot Food Production III	4
CCI 141	Baking I	4
CCI 142	Baking II	4
CCI 143	Baking III	4
CCI 151	GardeManger I	4
CCI 152	GardeManger II	4

CCI 153	GardeManger III	4
CCI 161	Dining Room Service I	3
CCI 162	Dining Room Service II	3
CCI 163	Dining Room III: Management	3
CCI 81	Food Service Nutrition (fall term only)	2
HTRM 105	Food Service Management (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 (winter term only)	3
CCI 280A,B,C	Co-op Work Experience Culinary (3 cr each)	9
	General education distribution courses ¹	9
SP 111	Fundamentals of Public Speaking	3
or SP 218	Interpersonal Communication	

¹ Choose classes from COCC's distribution list (pages 45 and 46); 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® kitchen-block coursework must be taken concurrently. Each kitchen-block level is full time at 15 credits (see Cascade Culinary Institute® certificate on page 69). Level 1 is scheduled fall and winter terms only. Students must meet with and receive permission to register from the program coordinator prior to registration.

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.

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

DENTAL ASSISTING

Certificate of Completion (60-65 credits)
(Four quarters to complete if attending full time)

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.

Due to the number of credits of non-program specific coursework, the Dental Assisting program will take an average of four to six terms to complete. Although it is highly recommended that the non-program specific coursework be completed before entry into the program, these courses can 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	Coursework
Reading: 43	WR 65, 75 or 95
Writing: 43	
Numerical Skills: 48	MTH 20
Elementary Alg: 27	

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 required courses must be completed with a grade of "C" or better and students must maintain a 2.0 overall GPA to graduate.

Summer term (or during program)

WR 121	English Composition	3
	Health ¹	3-4
	Computer competency ²	0-4
SP 218	Interpersonal Communication	3
PSY 207	Applied Psychology	3

Fall term

DA 110	Basic Dental Assisting	4
DA 115	Dental Science	4
DA 125	Dental Infection Control	3
DA 145	Preventive Dentistry	3

Winter term

DA 120	Advanced Dental Assisting	4
DA 130	Dental Materials I	3
DA 134	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 36 for details) or take CIS 120, Computer Concepts.

Important Registration Information

Enrollment into the Dental Assisting program is first come, first served. Students must meet the following prerequisites in order to be eligible to register: minimum placement scores resulting in WR 121 and MTH 60 placement (ASSET scores of Reading: 43 and Writing: 43; Numerical Skills: 45 or Elementary Algebra: 27) OR successful completion of the following courses: WR 65 or WR 75 or WR 95; and MTH 20. Students with transfer credits must provide the Admissions office with a copy of their transcript at least two weeks prior to registration.

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

DIETARY MANAGER

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.



photo by Andy Tullis

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	Coursework
Reading: 43	WR 65, 75 or 95
Writing: 43	
Numerical Skills: 48	MTH 20
Elementary Alg: 27	

Fall term

CCI 71	Basic Sanitation	2
CCI 81	Food Service Nutrition	2
DM 121	Practicum: Sanitation	1
DM 221	Practicum: Food Service Nutrition	1

Winter term

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

Spring term

CCI 91	Food Service Controls	3
DM 131	Practicum: Food Service Management	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 a 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 and 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) 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 and 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. Students are strongly encouraged to either be dually enrolled or meet with advisors from COCC and OSU-Cascades to ensure the most up-to-date information on teaching in Oregon.

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 ¹		3-4
---------------------	--	-----

Mathematics

MTH 105	Intro to Contemporary Math (or higher)	4
or MTH 111	College Algebra	
or MTH 211-213	Fund of Elementary Math I-III	12

Computer competency ²		0-4
----------------------------------	--	-----

General education/distribution

(See pages 45 and 46 for course listings)

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.

EARLY CHILDHOOD EDUCATION (continued)

Note: For students intending to transfer to Oregon State University-Cascades Campus program in Human Development and Family Sciences, the following courses are required and may be used to fulfill the general education requirements: SP 218, Interpersonal Communication; PSY 201, Mind and Brain; PSY 202, Mind and Society; SOC 201 Introduction to Sociology; FN 225, Human Nutrition; HHP 231, Human Sexuality; and HHP 295, Health and Fitness.

Recommended program electives

To provide the best preparation for upper-division courses, particularly at OSU-Cascades, students should work with their advisor to select the most applicable electives from the following:

ED 140 ³	Intro to Early Childhood Education	4
ED 150	Environments and Curriculum in ECE	4
ED 151	Observation and Guidance of Young Children's Learning	4
ED 172	Language and Literacy in Early Childhood Education	3
ED 173	Movement, Music, and the Arts in Early Childhood Education	3
ED 174	Math, Science, and Technology in Early Childhood Education	3
ED 250 ³	Advanced Curriculum Development and Teaching Methods in Early Childhood	4
ED 219	Multicultural Issues in Education Settings	3
ED 265	Children at Risk	3
ENG 221	Introduction to Children's Literature	4
PSY 215	Developmental Psychology	4
LIB 127	Information Research Skills	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 or health module —OR— HHP 252A.

² Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

³ Course required for OSU-Cascades HDFS program.

Associate of Applied Science (93-95 credits)

General education/basic skills

WR 121	English Composition	3
WR 122	English Composition	3
WR 123	English Composition	3
or WR 227	Technical Writing	3
SP 218	Interpersonal Communication	3

MTH 60	Algebra I	4
PSY 201	Mind and Brain	4
PSY 202	Mind and Society	4
PSY 215	Developmental Psychology	4

Health (recommended health courses)

HHP 231	Human Sexuality	3
or HHP 295	Health and Fitness	
and one health module (HHP 185xx)		1

Computer competency ¹	0-4
----------------------------------	-----

Distribution requirements

Lab science

Select two lab science courses from the distribution list for a total of 7-8 credits.

Social Science

Select one Social Science course with a prefix other than PSY for four credits.

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
ED 151	Observation and Guidance in ECE Learning	4
ED 172	Language and Literacy in Early Childhood Education	3
ED 173	Movement, Music, and the Arts in Early Childhood Education	3
ED 174	Math, Science, and Technology in Early Childhood Education	3
ED 250	Advanced Curriculum Development and Teaching Methods in ECE	4
ED 269	Exceptional Children in Early Childhood Education	3
ED 261/262	Practicum I and II	6
ED 219	Multicultural Issues in Education Settings	3
FN 225	Human Nutrition	4
LIB 127	Information Research Skills	2

Humanities elective

Select one Humanities course from the distribution list for three to four credits.

¹ Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

ECONOMICS

Associate of Arts Oregon Transfer (93 credits)

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 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 economics.

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
or SP111	Fundamentals of Public Speaking	

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

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 36 for details) or take CIS 120, Computer Concepts.

EDUCATION

Associate of Arts Oregon Transfer (93 credits)

EMERGENCY MEDICAL SERVICESAssociate of Applied Science
(103-111 credits; seven quarters to complete if attending full time)

photo by Aaron Stark

COCC offers lower division coursework for students preparing to become teachers in Oregon. In general, the Associate of Arts degree (see pages 38-39 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 post-baccalaureate program or a master's-level program. Students prepare to teach at different grade levels of authorization, depending on their background, interests and the requirements of specific programs of study. Students may prepare a transfer degree in early childhood education through COCC (see pages 73-74) 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.

The Associate of Applied Science degree (AAS) in Emergency Medical Services (EMS) is designed for students seeking an EMS career in either the fire service or private ambulance environments. 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, EMT Intermediate or 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, EMT Intermediate 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 in all EMS course syllabi.

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-EMT Basic Part A, and EMT 152-EMT Basic Part B, students must pass the NREMT (National Registry) written exam and the State of Oregon Practical Exam prior to applying for admission into EMT Paramedic courses. Students must complete a minimum of EMT Basic Part A and Part B and pass the NREMT test, Medical Terminology, all Anatomy and Physiology (A&P) courses, Writing 121, Math 60 (minimum) and be current with the EMT Basic Oregon Certification and in good standing with the state of Oregon prior to being eligible to apply to the second-year paramedic course. Second-year paramedic classes are open only to admitted EMS students. Admission is competitive and an application process is required. All students should contact the Admissions and Records office and the EMS program director for application details during their first year.

This is a suggested schedule and can be taken out of order. Transfer credits may apply. Request a transcript evaluation from the Admissions and Records office. (A copy of your previous transcripts will be needed to determine if you have credits from another college that may apply.)

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

EMERGENCY MEDICAL SERVICES (continued)

YEAR ONE

Fall term

BI 231	Human Anatomy and Physiology I	4
EMT 151	EMT Basic Part A ³	5
EMT 175	Intro to Emergency Services	3
or SFS 101	Intro to Emergency Services	
MTH 60	Algebra I	4
or MTH 85	Technical Math I ⁴	

Winter term

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

Spring term

BI 233	Human Anatomy and Physiology III	4
Health ²		3-4
Computer competency ¹		0-4
General education distribution course ⁵		3-4
SP 218	Interpersonal Communication	3
or SP 111	Fundamentals of Public Speaking	

YEAR TWO

Fall term

EMT 170	Emerg. Response Comm/Documentation	2
EMT 171	Emerg. Response Patient Transportation	2
EMT 290	EMT Paramedic Part 1	8
EMT 291	EMT Paramedic Part 1 Clinic	3
SFS 230	Rescue Practices	3

Winter term

BA 285	Business Human Relations	3
or FOR 211	First Line Supervision*	
EMT 292	EMT Paramedic Part 2	8
EMT 293	EMT Paramedic Part 2 Clinic	3

Spring term

EMT 195	Crisis Intervention (spring and fall)	3
EMT 294	EMT Paramedic Part 3	8
EMT 295	EMT Paramedic Part 3 Clinic	3
General education distribution course ⁵		3-4

Summer term

EMT 280	EMT-Paramedic Co-op Work Experience	7
---------	-------------------------------------	---

¹ Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

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:



photo by Eugen Helmbrecht

Nutrition for Health, HHP 295: Health and Fitness and one activity or health module —OR— HHP 252A.

³ Upon completion of EMT 151 and 152, students must pass the National Registry and 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 course.

⁴ Students planning to transfer should take MTH 105 or 111.

⁵ See the COCC catalog humanities and social science distribution lists only. Highly recommended are PSY 201 or higher, SOC 201 or higher, and CJ 100 or higher. 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 successful completion of placement test at college-level reading, writing and math.

Second-year paramedic courses are open only to students who have been admitted to the course. Students should contact the EMS program director for application process details. Students are strongly encouraged to complete all first-year courses and general education requirements prior to applying to the second-year paramedic course as the time requirements for didactic and clinical training are significant.

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, Non-Western 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.

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 English/Literature.

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	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 American 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)

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	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 256	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 36 for details) or take CIS 120, Computer Concepts.

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 SCIENCEAssociate 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 111	College Algebra (or higher)	4
---------	-----------------------------	---

Health ¹		3-4
---------------------	--	-----

Computer competency ²		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	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	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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum). The following is a list of recommended 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 and winter)	3
HHP 262	Training Theory and Applications (offered spring)	3
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 36 for details) or take CIS 120, Computer Concepts.

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 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 111	College Algebra (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	Care and Prevention of Athletic Injury ³ (offered spring)	3
HHP 260	Intro to Human Movement ³ (offered winter)	3
HHP 261	Basic Exercise Physiology ³ (offered fall and winter)	3
HHP 262	Training Theory and Applications ³ (offered spring)	3
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, Career and Technical Education (CTE) 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 36 for details) or take CIS 120, Computer Concepts.

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 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 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	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



photo by Aaron Stark

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 36 for details) or take CIS 120, Computer Concepts.

FOREIGN LANGUAGES (continued)

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 and Literatures (majors): French, German, Spanish; International Degree Program (including Foreign Languages and 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/ESOL-Bilingual 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 Department offers minors in German and Spanish, and BA in Liberal Studies with concentration in German or Spanish.

Southern Oregon University

Foreign Languages and 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 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.



photo by Benjamin Edwards

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.

FOREST RESOURCES TECHNOLOGY

Short-term Certificates
Associate of Applied Science
Transfer Preparation

Jobs in the forestry industry offer many opportunities for employment locally and nationally. Traditional forest technician positions are now often referred to as natural resource technicians. Technicians spend considerable time outdoors.

Typical entry-level positions might include forest management activities such as evaluation of reforestation efforts, timber sale layout, tree measurements, forest damage assessment and numerous other activities that are required when managing a forest. Additionally, entry-level natural resource technicians may perform noxious weed identification and eradication, plant and wildlife surveys, fire protection and suppression, and stream monitoring and restoration. Natural resource technicians can work for state or federal government agencies and manage public property or work for private industry and private land owners.

COCC's Forest Resources Technology program has the advantage of being located among several national forests. A majority of the courses within the program include outdoor lab opportunities to gain first-hand experiences and knowledge of the necessary elements of being a natural resource technician. Additionally, students are able to take advantage of job opportunities working with local agencies to develop and implement land management plans in the capstone course at the end of their second year.

There are six short-term certificate programs as well as the Associate of Applied Science degree available to students. The following certificates include classes that are already included as degree requirements. These short-term certificates allow for completion along the path to a two-year degree. The certificates are also designed for those already in the workforce looking to enhance their skills in a specific area.

All required program courses 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.

Central Oregon Community College offers students the following options within the Forestry program:



Advanced Forest Concepts Short-term Certificate (12 credits) (Three quarters to complete)

This certificate is designed to train individuals on the complexities of determining forest utilization, planning and management.

FOR 205	Silviculture and Harvesting Processes	5
FOR 215	Forest Resource Capstone	3
FOR 220C	Resource Sampling	4

Conservation of Natural Resources Short-term Certificate (14 credits) (Three quarters to complete)

This certificate is designed to train individuals on basic concepts of conserving natural resources including forest, wildlife, soil and water resources.

FOR 111	Forestry Perspectives	4
FOR 208	Soils: Sustainable Ecosystems	4
FOR 240B	Wildlife Ecology	3
FOR 260	Conservation of Natural Resources	3

FOREST RESOURCES TECHNOLOGY (continued)

Forest Ecology Short-term Certificate (12 credits) (Three quarters to complete)

This certificate is designed to introduce the practical aspects of forest ecology, dendrology and their applications.

FOR 240A	Forest Ecology	3
FOR 241A	Field Dendrology	3
FOR 241B	Dendrology	3
FOR 203	Applied Forest Ecology	3

Forest Measurements Short-term Certificate (13 credits) (Three quarters to complete)

This certificate is designed to train individuals on basic measurements of trees and land and on land navigation using maps, compass and GPS.

FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
FOR 220A	Aerial Photo	3
FOR 220B	Resource Measurement	4

Forest Protection Short-term Certificate (15 credits) (Three quarters to complete)

This certificate is designed to train individuals on identification of forest disease and insects and the basic techniques used to protect forests from fire, disease and insects.

FOR 110	Wildland Fire Science I	2
FOR 210	Wildland Fire Science II	2
FOR 202	Forest Entomology/Pathology	3
FOR 203	Applied Forest Ecology	3
FOR 205	Silviculture and Harvesting Processes	5

Mapping Cartography Short-term Certificate (14 credits) (Two quarters to complete)

This certificate is designed to train individuals on the basic use and production of maps focusing on field techniques and use of basic geographic information systems.

FOR 230A	Map, Compass and GPS	3
FOR 230B	Forest Surveying	3
GEOG 211	Computer Cartography	4
GEOG 265	Geographic Information Systems	4

*This program includes coursework that meets accreditation standards for communication, human relations and computation.
Courses that contain embedded instruction will be noted with an asterisk (*).

Associate of Applied Science (104-108 credits; six quarters to complete if attending full time)

The Associate of Applied Science (AAS) degree program in Forest Resources Technology provides the education and practical skills needed to succeed as a technician in forestry and natural resource fields throughout the western U.S. The AAS degree program from COCC is recognized by the Society of American Foresters. Job opportunities exist in government agencies (both state and federal) as well as private industry (contractors, consultants and private companies). The U.S. Forest Service is the primary employer for graduates of this program.

This program can be completed within two years provided the student is adequately prepared to take MTH 85 and WR 121 and coursework is initiated during fall term. Students entering in winter or spring term and/or who require developmental writing or math courses, can complete the program within a three-year period. Students interested in entering the program must meet basic competencies in reading, writing and math as determined by the minimum scores received on placement tests as well as hold a high school diploma or its equivalent.

Students who are interested in gaining employment in wildland fire, or adding these courses to their Forest Resource Technology degree can accomplish both degrees within three years. Students seeking the Wildland Fire Science degree are typically advised to complete the Forest Resources Technology degree first and return for a third year to complete the Wildland Fire Science degree. The dual-degree option is the ideal approach for those students interested in both wildland fire fighting and forestry.

The following is a suggested course sequence for students able to attend full time. Students are encouraged to meet with a faculty member in the Forestry program to discuss a two- or three-year educational plan. Students who have obtained a degree or completed coursework from another institution may be able to transfer some coursework to apply toward the AAS in Forest Resources Technology. A meeting with faculty or their advisor is strongly recommended. For further information, contact Michael Fisher at mfisher@cocc.edu or (541) 383-7755.

YEAR ONE

Fall term

FOR 230A	Map, Compass and GPS	3
FOR 240A	Forest Ecology	3
FOR 241A	Field Dendrology	3
FOR 100	Forestry Program Orientation	1
FOR 111	Forestry Perspectives* (also offered winter)	4
MTH 85	Technical Math I ¹	4
	Computer competency ²	0-4

FOREST RESOURCES TECHNOLOGY (continued)

Winter term

FOR 230B	Forest Surveying	3
FOR 203	Applied Forest Ecology	3
FOR 220B	Resource Measurement	4
GEOG 211	Computer Cartography	4
MTH 86	Technical Math II	4

Spring term

FOR 110	Wildland Fire Science I	2
FOR 126	Field Studies Pacific NW Forests	1
FOR 127	Plants of the Pacific Northwest	1
FOR 202	Forest Entomology/Pathology	3
FOR 220A	Aerial Photo	3
FOR 241B	Dendrology	3
WR 121	English Composition ³	3

Summer term

FOR 180	Co-op Work Experience Forestry	3
---------	--------------------------------	---

YEAR TWO

Fall term

FOR 205	Silviculture and 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		3

Winter term

FOR 211	Supervision and Leadership*	3
FOR 220C	Resource Sampling	4
GEOG 265	Geographic Information Systems	4
HHP 252A	Fitness/First Aid	3
General education distribution courses ⁴		3

Spring term

FOR 208	Soils: Sustainable Ecosystems	4
FOR 215	Forest Resource Capstone	3
FOR 260	Conservation of Natural 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 their advisor for specific transfer requirements.

² Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

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.

Transfer Options (credits vary)

Institutions with which COCC has articulation agreements in Forest Resources Technology are Oregon State University, Oregon State University-Cascades Campus, University of Idaho and Humboldt State University.

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.

Oregon State University (www.osucascades.edu/academics/naturalresources/ or www.cof.orst.edu)

Forest Engineering
Forest Engineering/Civil Engineering
Forest Operations Management
Forest Management
Recreation Resource Management
Natural Resources
Tourism and Outdoor Leadership
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 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 general science.

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 Science³

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 36 for details) or take CIS 120, Computer Concepts.

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
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.



photo by Aaron Stark

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.

Geographic Information Systems Certificate of Completion (49 credits)

Fall term

GEOG 265	Geographic Information Systems	4
GEOG 266	ArcGIS	5
GEOG 273	Spatial Data Collection	5
WR 121	English Composition	3

Winter term

GEOG 211	Computer Cartography	4
GEOG 285	Data Conversion and Documentation	5
GEOG 287	Analysis of Spatial Data*	5

Spring term

GEOG 267	Geodatabase Design	5
GEOG 275	GIS Capstone	5
GEOG 286	Remote Sensing	5
BA 285	Business Human Relations	3

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

GEOGRAPHIC INFORMATION SYSTEMS (GIS) (continued)

Geographic Information Systems
Associate of Applied Science

(97 credits; six quarters to complete if attending full time)

YEAR ONE

Fall term

FOR 230A	Map, Compass, and GPS	3
GEOG 265	Geographic Information Systems	4
GEOG 266	ArcGIS	5
MTH 85	Technical Math I	4

Winter term

FOR 230B	Forest Surveying	3
FOR 220B	Resource Measurement	4
GEOG 211	Computer Cartography	4
MTH 86	Technical Math II	4

Spring term

CIS 122	Introduction to Programming	4
FOR 220A	Aerial Photo	3
GEOG 267	Geodatabase Design	5
WR 121	English Composition	3

Summer term

GEOG 280	Co-Op Work Experience GIS	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	5
GEOG 285	Data Conversion and Documentation	5
GEOG 287	Analysis of Spatial Data	5
General education distribution course ¹		3

Spring term

BA 285	Business Human Relations	3
GEOG 275	GIS Capstone	5
GEOG 286	Remote Sensing	5
General education distribution course ¹		3

¹ Choose a minimum of nine credits from COCC's distribution list (pages 45 and 46); each course must have a different prefix.

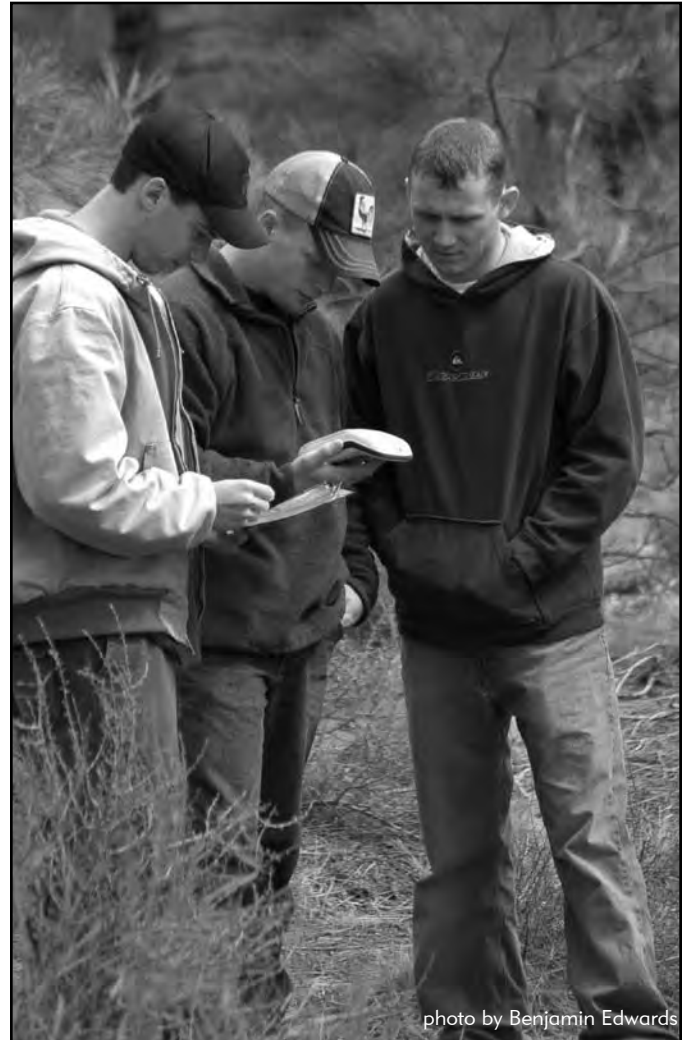


photo by Benjamin Edwards

**This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk (*).*

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 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 geography.

General education/basic skills

(All basic skills courses must be completed with a grade of "C" or higher)

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 111	College Algebra	4
---------	-----------------	---

Health ¹		3-4
Computer competency ²		0-4

General education/distribution

(See pages 45 and 46 for course listings)

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.

GEOG 201 ³	World Regional Geography I	4
GEOG 202 ³	World Regional Geography II	4
GEOG 208 ³	Landforms and Water	4
or GEOG 209 ³	Weather and Climate	

plus another course from the Social Science distribution list that does not have a GEOG prefix.

Electives (28-33 credits)

GEOG 106	Economic Geography	4
GEOG 107	Cultural Geography	4
GEOG 190	Environmental Geography	4

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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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 36 for details) or take CIS 120, Computer Concepts.

³ Courses in Geography do not need to be taken in sequence.

Additional advising information and recommendations

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fill the humanities requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor.

GEOLOGY

Associate of Arts Oregon Transfer (93 credits)

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 landforms. It is a science that addresses problems by combining field investigations with laboratory experiments and theoretical studies. Geology addresses many natural hazards that affect humans, such as earthquakes, flooding and volcanic eruptions. 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 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 geology.

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

G 201	Geology I	4
G 202	Geology II	4

G 203	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 36 for details) or take CIS 120, Computer Concepts.

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 Applications, 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
- Computer basics
- Study skills
- Spelling skills
- Keyboarding, 40 WPM minimum
- Basic English (writing skills)
- Reading skills
- Word processing skills essential

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.



photo by Aaron Stark

Insurance

Certificate of Completion

(35 credits; two quarters to complete if attending full time)

Fall term

AH 100	Introduction Health Occupations	2
AH 111	Medical Terminology I	3
BI 121	Human Anatomy & Function I ¹	4
HIT 103	Health Information Systems and Procedures*	5
WR 121	English Composition	3

Winter term

AH 112	Medical Terminology II	3
BI 122	Human Anatomy & Function II ¹	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

Certificate of Completion

(53 credits; three quarters to complete if attending full time)

Complete Insurance Certificate	35
--------------------------------	----

Spring term

AH 113	Introduction to the Study of Disease	5
CIS 120	Computer Concepts	4
HIT 131A	Document Management & Technology	3
HIT 180	HIPAA Management	2
HIT 182	Introduction to Medical Coding	4

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

HEALTH INFORMATION TECHNOLOGY (continued)

Medical Transcription Certificate 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

(68-72 credits; five quarters to complete if attending full time)

Complete Medical Transcription courses
(HIT 131C optional) 53-57
HIT 193 Directed Practice I 2

Fall term

HIT 201 Legal Aspects/Medical Records 4
HIT 205 Introduction to Medical Record Analysis 3
HIT 296 Ambulatory Data Systems 3
General education distribution course² 3
Pass proficiency exam 0

Medical Coding Certificate of Completion

(78-82 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 & Reimbursement Systems 4
Pass proficiency exam 0

Associate of Applied Science

(100-105 credits; eight quarters to complete if attending full time)

YEAR ONE

Fall term

AH 100 Introduction to Health Occupations 2
AH 111 Medical Terminology I 3
BI 121 Human Anatomy & Function I¹ 4
HIT 103 Health Information Systems and Procedures 5
WR 121 English Composition 3

Winter term

AH 112 Medical Terminology II 3
BI 122 Human Anatomy & Function II¹ 4
HIT 104 Health Data Content & Structure 5
WR 122 English Composition 3
or WR 227 Technical Writing
General education distribution course² 3

Spring term

AH 113 Introduction to the Study of Disease 5
CIS 120 Computer Concepts 4
HIT 131A Document Management & Technology 3
HIT 180 HIPAA Management 2
HIT 182 Introduction to Medical Coding 4

Summer term

HIT 131C Medical Transcription Applications (optional) 4
HIT 193 Directed Practice I 2

YEAR TWO

Fall term

Health³ 3-4
HIT 201 Legal Aspects Medical Records 4
HIT 205 Introduction to Medical Record Analysis 3
HIT 296 Ambulatory Data Systems 3
General education distribution course² 3

Winter term

HIT 281 Health Data Collection* 3
HIT 283 Coding Classifications 6
HIT 203 Health Care Delivery and Technology 2
General education distribution course² 3

Spring term

HIT 272 Health Information Management* 5
HIT 282 Quality Improvement in Health Care 4
HIT 284 Classifications & Reimbursement Systems 4

Summer term requirement for graduation

HIT 293 Directed Practice II 2

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 42.

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). Students should check with each school to ensure the latest transfer information is used when designing their program.

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 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	Fundamentals of Public Speaking	3
or SP 219	Small Group Communication	

Math

MTH 111	College Algebra (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
BI 234	Microbiology	4
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	Mind and Society	4
HHP 248	Health Psychology	3

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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum).

Recommend: HHP 220, Introduction to Epidemiology; HHP 258, Holistic Wellness.

¹ To meet this requirement, students can choose between HHP 231: Human Sexuality, HHP 242: Stress Management, HHP 258: Holistic Wellness 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 36 for details) or take CIS 120, Computer Concepts.

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

HISTORY

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 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 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	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.

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.



photo by Andy Tullis

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 36 for details) or take CIS 120, Computer Concepts.

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 the "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. 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 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 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 degree 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 transfer 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)

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 36 for details) or take CIS 120, Computer Concepts.

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 and 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).



photo by Aaron Stark

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

Certificates of Completion
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. The 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). 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)

(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 202	Metals Preparation	2
MFG 205	Drill Press	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)

Manual Machining

Short-term Certificate (27 credits)

(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	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 203	Layout	2
MFG 210	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 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 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	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)

Welding

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	Blueprint 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	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)

(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.

MANUFACTURING TECHNOLOGY (continued)

Sequences of courses are offered in CAD/CAM, quality control, CNC programming, welding, machining and computer 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	Computer Concepts	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	Vertical Milling	2
MFG 211	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 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	4
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	Fundamentals of Public Speaking	3
or SP 219	Small Group Communication	

MASSAGE THERAPY

One-Year Certificate of Completion

Two-Year Certificate of Completion

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 prepares 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 780 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 Department of Education and the Northwest Association of Schools and Colleges. They are approved by the Oregon Board of Massage Therapists.

Prior to starting the program, students must demonstrate the following skills via the ASSET placement test or coursework:

ASSET scores

Reading: 43

Writing: 43

Numerical Skills: 48

Elementary Algebra: 27

Coursework

WR 65, 75 or 95

MTH 20



photo by Aaron Stark

Important Registration Information

Enrollment into the Massage Therapy program is first come, first served. Students must meet the following prerequisites in order to be eligible to register: minimum placement scores resulting in WR 121 and MTH 60 placement (ASSET scores of Reading: 43 and Writing: 43; Numerical Skills: 45 or Elementary Algebra: 27) OR successful completion of the following courses: WR 65 or WR 75 or WR 95; and MTH 20. Students with transfer credits must provide the Admissions office with a copy of their transcript at least two weeks prior to registration.

Students must have a high school diploma or equivalent and be 18 years of age prior to starting the LMT program.

All required courses must be completed with a grade of “C” or better and students must maintain a 2.0 overall GPA to graduate.

MASSAGE THERAPY (continued)

One-Year Certificate

(50 credits; four quarters to complete if attending full time)

First term

BI 121	Human Anatomy and Function I	4
LMT 113	Kinesiology I	3
LMT 155	Eastern Theory and Practice	3
LMT 170	Professional Ethics and Rules *	2

Second term

BI 122	Human Anatomy and Function II	4
LMT 118	Kinesiology II	4
LMT 145	Massage I *	4

Third term

LMT 124	Kinesiology III	3
LMT 140	Pathology	5
LMT 150	Massage II *	4
LMT 175	Clinic I *	2

Fourth term

BA 150	The Business of Massage ¹ *	3
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.

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 240	Advanced Treatment I	5
LMT 280	Effective Thinking in Office Decisions	2

Winter term

LMT 250	Advanced Treatment II	5
LMT 270	Clinical Assessments	4



photo by Eugen Helmbrecht

Spring term

LMT 210	Advanced Clinic ¹	2
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

(102-107 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 218	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 45-46 for options.

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 36 for details) or take CIS 120, Computer Concepts.

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

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 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 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	Fundamentals of Public Speaking	3
or SP 219	Small Group Communication	

Health ¹		3-4
CIS 120	Computer Concepts	4
MTH 111	College Algebra	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 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	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— 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 ASSISTANT

Certificate of Completion
(54-59 credits; four quarters to complete if attending full time)

The Medical Assistant 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 Assistant 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 assistant 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 Assistant 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	Coursework
Reading: 43	WR 65, 75 or 95
Writing: 43	
Numerical Skills: 48	MTH 20
Elementary Alg: 27	

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 stethoscopes, lab jackets, materials and certification exams.

All required courses must be completed with a grade of "C" or better and students must maintain a 2.0 overall GPA to graduate.

Fall term

AH 100	Introduction to Health Occupations	2
AH 111	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	Human 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	Introduction to the 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 121	English Composition	3

Summer term

MA 147	Medical Assistant Practicum I	5
--------	-------------------------------	---

¹ Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

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.

Important Registration Information

Enrollment into the Medical Assistant program is first come, first served. Students must meet the following prerequisites in order to be eligible to register: minimum placement scores resulting in WR 121 and MTH 60 placement (ASSET scores of Reading: 43 and Writing: 43; Numerical Skills: 45 or Elementary Algebra: 27) OR successful completion of the following courses: WR 65 or WR 75 or WR 95; and MTH 20. Students with transfer credits must provide the Admissions office with a copy of their transcript at least two weeks prior to registration.

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

MILITARY SCIENCE

Transfer Preparation (20 credits)

The Military Science department, in conjunction with Oregon State University ROTC, offers “the best leadership course in America.” This course of study is open to all students and is designed to give students instruction and experience in the art of organizing, motivating and leading others. The courses focus on leadership, goal setting and implementation, planning, and plans execution. Classroom and practical exercises are designed to challenge students in all aspects.

YEAR ONE

Fall term

MS 101	Military Science I	1
MS 180	Army Physical Fitness	1

Winter term

MS 102	Military Science II	1
MS 180	Army Physical Fitness	1

Spring term

MS 103	Military Science III	1
MS 180	Army Physical Fitness	1

Summer term

MS 205	OCS Phase I	5
--------	-------------	---

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

Upon graduation with a bachelor's degree from an approved four-year college, students can compete to earn a commission as an Army officer. All study and classroom materials are provided. Merit scholarship opportunities exist for students in any approved academic discipline. For more information, contact the Guard Officer Leadership Development program, (541) 322-3143.



photo by Aaron Stark

MUSIC

Associate of Arts Oregon Transfer (93 credits)

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 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 music.

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	

Math

MTH 105	Intro to Contemporary Math	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. 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, and 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 enunciation 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 36 for details) or take CIS 120, Computer Concepts.

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 Oregon 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. Students leaving the nursing program at any point must apply for re-admission into the program. 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. 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. 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. Due to the rigor and time required for program-specific coursework, students are highly encouraged to complete non-specific program coursework prior to admission. 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 for specific information about the process, financial aid and strategies for program success.

Practical Nursing Certificate of Completion (59-63 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 certificate prior to applying to the program.

PREREQUISITES AND SUPPORT COURSES (Year One)

Fall term

BI 231	Human Anatomy & Physiology I	4
MTH 95	Intermediate Algebra	4
WR 121	English Composition	3

Winter term

BI 232	Human Anatomy & Physiology II	4
	Computer competency ¹	0-4
PSY 215	Developmental Psychology	4

Spring term

BI 233	Human Anatomy & Physiology III	4
BI 234	Microbiology	4

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	Pharmacology II	2

¹ Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

NURSING (continued)

Registered Nursing Associate of Applied Science (103-108 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 Oregon State Board of Nursing.

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 certificate prior to applying to the program.

PREREQUISITES AND SUPPORT COURSES (Year One)

Fall term

BI 231	Human Anatomy & Physiology I	4
CH 104	Introduction to Chemistry I	4
or CH 221	General Chemistry I	
or GS 105	Physical Science: Chemistry	
Computer competency ¹		0-4
MTH 95	Intermediate Algebra	4

Winter term

BI 232	Human Anatomy & Physiology II	4
Health ²		3-4
PSY 215	Developmental Psychology	4
WR 121	English Composition	3

Spring term

BI 233	Human Anatomy & Physiology III	4
BI 234	Microbiology	4
FN 225	Human Nutrition	4

WR 122	English Composition	3
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	Pharmacology 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 36 for details) or take CIS 120, Computer Concepts.

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, Fit/First Aid.

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.

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

OFFICE ASSISTANT

Certificate of Completion (45 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 part-time 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 101	Introduction to Business	4
BA 104	Business Math* ¹	3
BA 111	Applied Accounting I	3
CIS 120	Computer Concepts	4
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 125E	Excel	4
CIS 235	IT in Business ²	4
OA 116	Office Procedures Practicum	3

Summer

OA 280	Co-op Work Experience Office Admin.	4
--------	-------------------------------------	---

¹ May require preparatory math course.

² Class is offered fall and spring term only in 2009-10.

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 10 is recommended for basic keyboarding skills acquisition.



photo by Aaron Stark

OUTDOOR LEADERSHIP

Associate of Science - Direct Transfer

Associate of Science

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, 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.

The AS-DT is designed for students planning to transfer to OSU-Cascades Campus. This degree will allow students to meet all lower-division baccalaureate and major requirements for a Bachelor of Science in Tourism and Outdoor Leadership.

The AAOT degree meets the state of Oregon transfer degree requirements, allowing students to transfer to an Oregon public university and some out-of-state universities having met all lower-division general education requirements; with the appropriate course planning, 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, students entering into the program, whether to pursue the AS-DT or AAOT, are required to complete a freshman package of courses before enrolling in the sophomore-level courses. Freshman completion requirements for enrollment into the sophomore level include completion of a minimum of 36 college-level credits made up, in part, by the following courses. See advisor for details.

WR 121	English Composition	3
WR 122	English Composition	3
SP 111	Fundamentals of Public Speaking	3
HHP 295	Health and Fitness for Life	3
CIS 120	Computer Concepts	4
GEOG 212	Tourism and Recreation	3
HHP 111	Introduction to Outdoor Leadership	3
HHP 253	Wilderness Advanced First Aid	3
HHP 255	Outdoor Living Skills	3

Associate of Science Direct Transfer (93-94 credits)

General education/basic skills

English Composition		
WR 121	English Composition	3
WR 123	English Composition	3
Speech		
SP 111	Fundamentals of Public Speaking	3
Mathematics		
MTH 111	College Algebra (or higher)	4

HHP 295	Health and Fitness for Life	3
CIS 120	Computer Concepts	4

General education/distribution

(See OSU Web site or advisor for details)

Humanities: One course from the humanities distribution list, three to four credits. If planning to transfer to OSU-Cascades, one course must have an ARH, ENG or MUS prefix (200-level for MUS prefix course); or check the OSU transfer guide.

Science/Math/Computer Science: A minimum of 11 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. Recommended courses include:

GS 106	Geology	4
GS 107	Astronomy	4
GS 108	Oceanography	4
BI 102	General Biology II	4

Social Science: A minimum of 12 credits from the social science distribution list, with at least two different prefixes and at least two courses with the same prefix. Recommended courses include:

ANTH 103	Cultural Anthropology	4
GEOG 201	World Regional Geography I	4
GEOG 202	World Regional Geography II	4

Program requirements

BA 226	Business Law I	4
CIS 131	Software Applications	4
CIS 235	IT in Business	3
FOR 251	Recreational Resource Management	3
GEOG 212	Tourism and Recreation	3
HHP 111	Introduction to Outdoor Leadership	3
HHP 207	Seminar in Outdoor Leadership	2
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	2

Choose two courses from

FOR 255	Resource Interpretation	3
BA 250	Enterpreneruship	4
HHP 244	Psychology of Risk and Adventure	3

Choose one course from

HHP 294CC	Challenge Course Practices	3
HHP 294RC	Teaching Rock Climbing	3
HHP 294WG	Whitewater Raft Guiding	3
HTRM 233	Event Planning	3

OUTDOOR LEADERSHIP (continued)

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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum).

Lab fees:

\$20 for HHP 295 Health and Fitness, 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 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	

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.

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, Career and Technical Education (CTE) 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 111	Introduction 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	

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 36 for details) or take CIS 120, Computer Concepts.

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

PHARMACY TECHNICIAN

Pending State Approval

Certificate of Completion (42 credits)

(3 quarters to complete if attending full time)

This three-term program is developed to prepare individuals for employment in the pharmacy industry. Pharmacy technicians are skilled workers who are educated and trained to work in a pharmacy and assist in all areas of the pharmacy not requiring the professional judgment of the registered pharmacist. Some current practice areas for the pharmacy technician include retail, hospital, manufacturing, disease state management, and mail order and insurance claim specialists. The pharmacy technician processes prescriptions and medication orders and plays an integral role in maintaining the pharmacy department.

Courses are completed in an online and hybrid format, and focus on the abilities needed to assist the pharmacist and provide the skills necessary to process prescriptions accurately, participate in administration and management of a pharmacy, and maintain inventory. Topics of study include medical terminology, anatomy and functions of the human body, therapeutic classification and drug names, pharmacy procedures, pharmaceutical calculations, pharmacy law and interpersonal communications. Students will have a working knowledge of sterile technique, standards of practice, quality assurance and patient confidentiality. In addition, students will develop and practice communication skills needed to function in a professional setting. In order to gain workplace experience, students will also participate in a hospital and retail pharmacy practicum.

The program will prepare students to take the national certification examination to become a Certified Pharmacy Technician as required by the Oregon Board of Pharmacy and to be employed in a pharmacy setting.

To earn a certificate all required courses must be completed with a grade of “C” or better and students must maintain a 2.0 overall GPA to graduate.

Required Coursework

WR 121	English Composition	3
AH 111	Medical Terminology I	3
BI 121	Anatomy and Function I	4
PHM 100	Introduction to Pharmacy Technician	3
PHM 120	Drug Classification and Therapeutics I	3
AH 112	Medical Terminology II	3
BI 122	Anatomy and Function II	4
PHM 110	Pharmacy Calculations	3
PHM 140	Pharmacy Technician Procedures	4
PHM 130	Drug Classification and Therapeutics II	3
PHM 190	Practicum I: Hospital/Institutional	2
PHM 191	Practicum II: Retail/Community	3
PHM 181	Pharmacy Technician Seminar	1
SP 218	Interpersonal Communication	3

Advising Information

The Pharmacy Technician Program allows for entry into the core PHM course once per year in the winter term. The program coursework is an online format and computer competency is a program admission requirement. It is highly recommended that the student begin general education courses such as English Composition, Anatomy and Function, Medical Terminology or Interpersonal Communication in the fall term. Registration into the winter term core PHM courses is based on a first-come, first-served basis for all applicants and requires program director approval. Prior to starting the program classes, students must complete all of the following: (1) high school diploma or GED and (2) take COCC's placement test and receive the minimum scores or complete the equivalent courses listed below:

WR 65, 75, or 95 or placement into WR 121

MTH 20 or placement into MTH 60

Pass Computer Competency or CIS 120 (grade of “C” or better)

Pharmacy Technician program-specific classes require instructor approval prior to registration. Students are also required to complete units 1 through 5 of the online orientation. For details, see <http://web.cocc.edu/onlineorientation>.

Once admitted to the program, students must obtain a one-year nonrenewable Pharmacy Technician License from the Oregon State Board of Pharmacy. This license is required to participate in the Pharmacy Technician Practicum courses. Applicants must have a high school diploma or equivalency (GED), be at least 18 years of age, and submit to a criminal background check to obtain this license. Information for licensure is available from the Oregon Board of Pharmacy and can be found at www.pharmacy.state.or.us or by calling (971) 673-0001.

Prior to entering the Practicum courses, students must provide proof of current immunization to Hepatitis B, Measles, Mumps, Rubella, Tetanus/Diphtheria. A negative TB test (within the last year) and a current CPR/AED for the Professional Rescuer certification are required.

Due to the nature of this curriculum and access to drugs, all students will have to declare themselves “drug free” and be subject to a criminal background check. Drug testing will be done prior to the clinical experience practicum. A positive drug test or criminal background check may prevent the student from registering for the practicum coursework and completing the program.

This program includes coursework that meets accreditation standards for communication, human relations and computation. Courses that contain embedded instruction will be noted with an asterisk ().

PHYSICS, ENGINEERING AND ENGINEERING TECH

Associate of Science (93 credits)

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 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 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	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

BI 101	General Biology I	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.

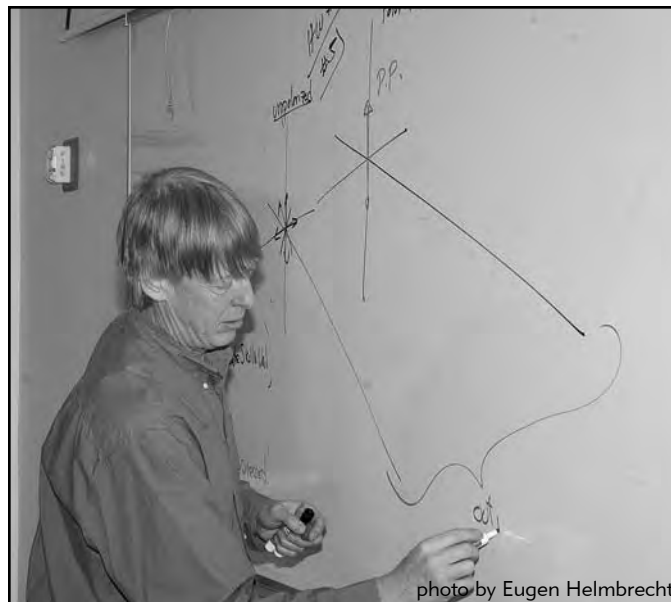


photo by Eugen Helmbrecht

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

Students should take all of the above plus enough additional coursework to reach the 93 minimum credits required for the AS degree.

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 36 for details) or take CIS 120, Computer Concepts.

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 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 political science.

General education/basic skills

(All basic skills courses must be completed with a grade of "C" or higher)

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 111	College Algebra	4
---------	-----------------	---

Health¹

Computer competency ²		0-4
----------------------------------	--	-----

General education/distribution

(See pages 45 and 46 for course listings)

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.

PS 201 ³	Intro to US Government and Politics	4
PS 204 ³	Intro to Comparative Politics	4
PS 205 ³	Intro to International Relations	4

plus another course from the Social Science distribution list that does not have a PS prefix.

Electives (28-33 credits)

PS 206 ³	Intro to Political Thought	4
---------------------	----------------------------	---

plus 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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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 36 for details) or take CIS 120, Computer Concepts.

³ Courses in Political Science do not need to be taken in sequence.

Additional advising information and recommendations

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fill the humanities requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor.

It is recommended that students pursuing a Political Science major take additional social sciences courses to fulfill some of their elective credits. Economics, geography and history courses are particularly helpful in this regard.

PRE-DENTAL HYGIENE

Transfer Preparation (57 credits)

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

Colleges in Oregon offering a dental hygiene program include:

- Lane Community College
- Mt. Hood Community College
- ODS College of Dental Sciences - La Grande
- Oregon Institute of Technology
- Pacific University
- Portland Community College



photo by Benjamin Edwards

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 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.

Most law schools have no requirements for a pre-law curriculum and will accept a bachelor's degree in any major. Students should develop an educational program that is broad, yet provides depth of understanding in at least one subject area, along with fundamental insights into human institutions and values. The emphasis should be on a degree program that meets students' needs and interests, that students find challenging, and in which students will do their best work and will earn good grades.

Legal educators agree that the development of particular skills and habits will contribute more to success in law school than a major in any one subject. Therefore, coursework should focus on strengthening habits of thoroughness, intellectual curiosity, scholarship, the ability to research a topic, write concisely, analyze information and think critically. Verbal and written communication skills are very important.

Courses in literature, language, composition, logic and linguistics are directly concerned with the cultivation of these skills. In addition, lawyers must be adept at problem solving and organizing information to support a point of view. Courses in political science, economics, American and British history, journalism, philosophy and business principles will provide an opportunity to practice these skills and gain an understanding of social institutions and values.

The following is a suggested course of study for students interested in pursuing a bachelor's degree before moving on to Law School.

The following is a suggested course of study for students interested in pursuing a bachelor's degree in pre-law.

General education/basic skills

(All basic skills courses must be completed with a grade of "C" or higher)

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 111	College Algebra	4
Health ¹		
		3-4
Computer competency ²		
		0-4

General education/distribution

(See pages 45 and 46 for course listings)

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.

Electives (28-33 credits)

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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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 36 for details) or take CIS 120, Computer Concepts.

Additional advising information and recommendations

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fill the humanities requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor.

PRE-MEDICAL LAB TECHNOLOGY

Transfer Preparation (51-59 credits)

Portland Community College (PCC) offers an Associate of Applied Science degree in Medical Laboratory Technology (MLT) via distance education. Students complete specific prerequisite courses at COCC and then apply to the PCC distance learning MLT program. Acceptance into the program is on a limited basis, and is dependent on clinical space available. Additionally, continuation into the second year is contingent upon performance during the first year of the program. The medical laboratory technology courses are taught primarily online and the clinical practicum is completed at local area clinical laboratories in Central Oregon. Occasional day or weekend travel to Eugene or Portland is necessary for additional PCC required laboratory activities. Please see an advisor for details.

Required prerequisites

(All courses can be taken at COCC)

WR 65	Rhetoric and Critical Thinking II	4
or WR 75	Basic Writing I	3
or WR 95	Basic Writing II	3
	or Reading & Writing ASSET score 43	
MTH 65	Algebra II	4
	or Elem. Algebra ASSET score 52	
CH 104	Introduction to Chemistry I	4
BI 101	General Biology I	4

YEAR ONE

(All courses can be taken at COCC except MLT 111, MLT 112, and MLT 213, which can be taken online through PCC)

Fall Term

BI 121	Anatomy and Function I	4
or BI 231	Human Anatomy and Physiology I	4
MLT 111	Medical Technology I (online)	4
WR 121	English Composition	3

Winter Term

BI 122	Anatomy and Function II	4
or BI 232	Human Anatomy and Physiology II	4
CH 105	Introduction to Chemistry II	4
MLT 112	Medical Technology II (online)	4
	General Education Elective	4

Spring Term

BI 233	Human Anatomy and Physiology III	4
or BI 234	Microbiology	4
CH 106	Introduction to Chemistry III	4
MLT 213	Intro. to Medical Microbiology (online)	4
	General Education Elective	4



photo by Eugen Helmbrecht

YEAR TWO

Students who wish to continue should contact PCC and apply for acceptance to the second year of the Medical Laboratory Technology program. Once students are officially accepted into the PCC MLT program, they will enroll in all remaining courses through PCC.

For details go to <http://www.pcc.edu/programs/medical-lab/>.

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; a 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

SP 219	Small Group Communication	3
or SP 111	Public Speaking	

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

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

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.



photo by Eugen Helmbrecht

Electives

CH 222	General Chemistry II	4
CH 223	General Chemistry III	4
CH 241	Organic Chemistry I	5
CH 242	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	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	

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 36 for details) or take CIS 120, Computer Concepts.

PRE-MEDICAL IMAGING TECHNOLOGY

Transfer Preparation (49+ credits)

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 apply for admission into OIT's MIT program. Admission is highly competitive; see <http://www.oit.edu/programs/mit> for program details and admission process. Students spend the second and third years of the program at the Klamath Falls campus and the fourth year at a hospital site for externship.

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 list)	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
	Humanities distribution course ¹	3-4

¹ These courses must be selected from OIT's list of approved courses. See advisor for recommendations.

PRE-RADIOLOGY TECHNOLOGIST

Transfer Preparation (33+ credits)

Linn-Benton Community College (LBCC) offers an Associate of General Studies in diagnostic imaging (radiological technology) via a 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	4
HHP 231	Health Care	3
HHP 185	Activity Class	1
MTH 111	College Algebra	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	
BI 101	Introduction to Biology	4
or BI 211	Principles of Biology I	
PH 201	General Physics	4
or PH 211	General Physics I	
or GS 104	Physical Science: Physics	
SP 219	Small Group Communication	3
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 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 psychology.

General education/basic skills

(All basic skills courses must be completed with a grade of “C” or higher)

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 219	Small Group Communication	3
or SP 111	Fundamentals of Public Speaking	

Mathematics

MTH 111	College Algebra	4
---------	-----------------	---

Health ¹		3-4
Computer competency ²		0-4

General education/distribution

(See pages 45 and 46 for course listings)

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.

PSY 201 ³	Mind & Brain	4
PSY 202 ³	Mind & Society	4



Electives (28-33 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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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 36 for details) or take CIS 120, Computer Concepts.

³ These courses do not need to be taken in sequence.

PSYCHOLOGY (continued)



Additional advising information and recommendations

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fill the humanities requirement.

Students pursuing a BS after transfer should consider taking more math and science courses. Language is not necessary. For specific details, speak with an advisor.

Although students may take whichever science sequence they prefer, it is recommended to take BIO 101, 102, 103 or BI 231, 232, or 233 due to the relevance these courses have to upper-division psychology courses.

It is advisable for students to consider the following psychology courses as electives to gain a further insight into the field and to help them determine what area of psychology they may be interested in pursuing: Personality Psychology (PSY 214), Lifespan Psychology (PSY 215), Abnormal Psychology (PSY 219), Social Psychology (PSY 216), Psychology of Violence and Aggression (PSY 233), and any other potential special topics courses that are offered from time to time.

Students who are considering clinical or counseling psychology might consider the following electives: Effective Helping Skills I (HD162), Effective Helping Skills II (HD 262), Ethics for Human Services (HD 161), Groups and Addiction Treatment (HD206), Dual Diagnosis (HD 201), Counseling Theories (HD 260), Crisis Management (EMT195), and Children at Risk (ED265).

Psychology students will be required to take statistics when they transfer. Although MTH 111 is sufficient for the math requirement, advisors recommend taking one or both of MTH 243 or MTH 244 to finish the science requirement and to allow students to be exposed to statistics beforehand.

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 who transfer should contact in the institution they plan to attend to ensure they have fulfilled the specific requirements for their program.

Students have the option of pursuing a bachelor's degree in psychology through the University of Oregon (contact Diane Pritchard, UO advisor, 541-617-4665) or through a distance program with Eastern Oregon University (contact Brenda McDonald, EOU advisor, 541-385-1137); 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 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 sociology.

General education/basic skills

(all basic skills courses must be completed with a grade of "C" or higher)

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 111	College Algebra	4
---------	-----------------	---

Health ¹		3-4
Computer competency ²		0-4

General education/distribution

(see pages 45 and 46 for course listings)

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.

SOC 201	Introduction to Sociology	4
---------	---------------------------	---

Electives (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, Career and Technical Education (CTE) courses (12 credits maximum) or CWE/HHP/performance classes (15 credits maximum). Students transferring to an Oregon public university should review any foreign language and specialty course requirements of the transfer institution.

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 36 for details) or take CIS 120, Computer Concepts.

Additional advising information and recommendations

Students pursuing a BA after transfer should consider completing three terms of a 200-level language course. The 100-level language courses will count as electives. The 200-level language courses will partially fill the humanities requirement.

It is advised for students to consider the following sociology courses as electives to gain a further insight into the field and to help them determine what area of sociology they may be interested in pursuing: Social Psychology (SOC 206); Social Deviance (SOC 211); Race, Class, and Ethnicity (SOC 212); Social Issues and Social Movements (SOC 215); Sociology of Religion (SOC 219); Sociology of Popular Culture (SOC 250); and any other potential special topics courses that are offered from time to time.

Sociology students typically will be required to take statistics when they transfer. Although MTH 111 is sufficient for the math requirement, advisors recommend taking one or both of MTH 243 or MTH 244 to finish the science requirement and to allow students to be exposed to statistics beforehand.

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. Students who transfer should contact in the institution they plan to attend to ensure they have fulfilled the specific requirements for their program. This includes the transfer option to OSU-Cascades (OSU or UO degree).

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 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 speech communication.

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	4
or MTH 111	College Algebra	

Health ¹		3-4
Computer competency ²		0-4

General education/distribution

Humanities

Two courses from HUM 261 - 266 plus one additional course from the humanities distribution list with an SP 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 36 for details) or take CIS 120, Computer Concepts.

Advising information

Students planning to transfer to OSU need to take:

HHP 295	Health and Fitness	3
and HHP 185	Activity class	1

SPEECH COMMUNICATION (continued)

STRUCTURAL FIRE SCIENCE

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



photo by Eugen Helmbrecht

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 its Admissions office for more information.

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, news-editorial 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. The program also meets the undergraduate fire course requirements for a Bachelor of Science degree in fire administration at Western Oregon University.

Students should contact the SFS program coordinator at (541) 504-2932 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/.

STRUCTURAL FIRE SCIENCE (continued)

Degree/course requirements

YEAR ONE

Fall term

EMT 151	EMT Basic Part A	5
SFS 101	Introduction to Emergency Services	3
or EMT 175	Introduction to Emergency Services	
SFS 102	Firefighter Safety and Survival	2
WR 121	English Composition	3
General education distribution course ¹		3

Winter term

EMT 152	EMT Basic Part B	5
SFS 120	Fixed Systems and Extinguishers	3
GS 105	Physical Science: Chemistry	4
MTH 85	Technical Math I	4
or MTH 60	Algebra I	

Spring term

Health ³		4
SP 218	Interpersonal Communications	3
or SP 111	Fundamentals of Public Speaking	
or WR 227	Technical Writing	
General education distribution course ¹		6
Elective ⁴		3

YEAR TWO

Fall term

GS 104	Physical Science: Physics	4
SFS 110	Building Construction for Fire Personnel	3
SFS 112	Public Education and Fire Prevention	3
SFS 205	Fire Behavior and Combustion	3

Winter term

FOR 211	Supervision and Leadership*	3
or BA 285	Business Human Relations	
SFS 210	Fire Investigation	3
SFS 212	Fire Codes and Ordinances	3
SFS 232	Fire Protection Hydraulics and Water Supply	4
Computer competency ²		0-4

Spring term

SFS 211	Fire Tactics and Strategies	3
SFS 215	Urban Interface	3
SFS 230	Rescue Practices	3
SFS 233	Fire Service Entry Exams	3
SFS 283	Capstone for Fire Science	1
Elective ⁴		3

Students should take all of the above plus enough additional coursework to reach the 93 minimum credits required for the AAS degree.

¹ See AAS checklist, general education distribution requirements, page 42. However, for students who are going to be completing the EMS degree, see advisor for distribution requirements.

² Pass computer basic skills competency test (see page 36 for details) or take CIS 120, Computer Concepts.

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.

⁴ Students can choose from the following electives: Medical Terminology, AH 111; Communication & Transportation, EMT 170; Crisis Intervention, EMT 195; Fire Law, SFS 121; Incident Command Systems, WF 100; Chainsaw Use & Maintenance, FOR 130.

Advising information

In order to receive an AAS in Structural Fire Science, students must provide certification in NFPA Firefighter I, I-200 Incident Command Systems; NFPA HazMat Awareness and Operations; and OHD EMT Basic Certification. To obtain these certifications, students must become affiliated with a fire agency. It is recommended students become affiliated before their second year. Contact advisor for information.

Articulation information

Students transferring from COCC to Eastern Oregon University'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 MTH 105 or MTH 111. (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, <http://www.eou.edu/advising/transfer/cocc.htm>). This information is subject to change and should always be checked with the EOU advisor prior to registration in these courses.

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 FUELS MANAGEMENT

Short-term Certificate
 Certificate of Completion
 Associate of Applied Science

COCC offers students the following options within the Wildland Fire program:

- Less than one-year certificate in Firefighter Type II
 The certificate is designed to provide basic skills for students interested in working in the wildland fire profession. Courses are open to all students and the certificate takes one term/quarter (winter) to complete for students attending full time.
- 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.

Firefighter Type II
Less than One-Year Certificate
 (14 credits; one quarter to complete if attending full time)

Winter term

FOR 111	Forestry Perspectives (also taught fall term)	4
WF 100	Incident Command Systems	3
WF 101	Introduction to Fire Behavior and Firefighter Training	3
WF 134	S-134, Lookouts, Communication, Escape Routes, Safety Zones	2
WF 260	S-260 Interagency Incident Bus Mgmt	2

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 Suppression
Certificate of Completion
 (46 credits; three quarters to complete if attending full time)

Fall term

FOR 230A	Map, Compass and GPS	3
HHP 252A	Fitness/First Aid	3
MTH 85	Technical Math I	4
SP 218	Interpersonal Communications	3

Winter term

FOR 111	Forestry Perspectives (also taught fall term)	4
WF 100	Incident Command Systems	3
WF 101	Introduction to Fire Behavior and Firefighter Training	3
WF 260	S-260 Interagency Incident Business Mgmt	2
WR 121	English Composition	3
WF 134	S-134, Lookouts, Communication, Escape Routes, Safety Zones	2

Spring term

BA 101	Intro to Business	4
FOR 110	Wildland Fire Science I	2
FOR 130	Chainsaw Use and Maintenance	2
WF 131	S-131 Advanced Firefighter	1
WF 211	S-211 Portable Pumps	2
WF 234	S-234 Ignition Operations	2
WF 290	S-290 Intermediate 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/Fuels Management
Associate of Applied Science (95-103 credits)
 (More than six quarters to complete if attending full time)

YEAR ONE

Fall term

CIS 120	Computer Concepts or Computer Competency	0-4
FOR 230A	Map, Compass and GPS ¹	3
FOR 240A	Forest Ecology	3
FOR 241A	Field Dendrology ¹	3
MTH 85	Technical Math I	4

WILDLAND FIRE FUELS MANAGEMENT (continued)

Winter term

FOR 111	Forestry Perspectives	4
FOR 220B	Resource Measurement	4
MTH 86	Technical Math II	4
WF 101	Introduction to Fire Behavior and Firefighter Training	3
WR 121	English Composition	3

Spring term

FOR 110	Wildland Fire Science I	2
FOR 202	Forest Entomology/Pathology	3
FOR 203	Applied Forest Ecology	3
FOR 220A	Aerial Photo	3
FOR 241B	Dendrology	3

YEAR TWO

Fall term

FOR 205	Silviculture and Harvesting Processes	5
FOR 210	Wildland Fire Science II	2
WF 100	Incident Command Systems	3
WF 260	S-260 Interagency Incident Business Mgmt	2
Elective course ²		2-4

Winter term

HHP 252A	Fit/First Aid	3
SP 218	Interpersonal Communication	3
WF 211	S-211 Portable Pumps	2
WF 215	S-215 Fire Ops Urban Interface	3
Wildland Fire Open Electives ³		2-4

Spring term

FOR 209	Fire Ecology and Effects	3
FOR 260	Conservation of Natural Resources	3
WF 270	S-270 Basic Air Operations	2
WF 290	S-290 Intermediate Wildfire Behavior	3
General education distribution course		3

Additional Wildland Fire Management short courses required

WF 230	S-230 Crew Boss	3
WF 234	S-234 Ignition Operations	2
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 FOR 130, Chainsaw Use and Maintenance.

³ Choose any course with the WF prefix.



photo by Aaron Stark

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 60 days' 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 by calling the program coordinator at the Bend campus, (541) 383-7265, or the Redmond campus, (541) 504-2932.

COURSE DESCRIPTIONS

Central Oregon Community College has a diverse selection of transfer and Career and Technical Education (CTE) courses. Prerequisites are specified in many of the course descriptions. It is the student’s responsibility to meet the prerequisite conditions before enrolling in the course.

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

EXPLANATION

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

Courses are grouped by area of study and listed alphabetically by **letter prefix** and **course number**. Courses numbered 100 and above are designed for transfer to other colleges for degree credit.

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 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.

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 writing-intensive coursework.

ADDICTIONS STUDIES

HD 161

ETHICS FOR HUMAN SERVICES

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. Offered fall term. 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. Offered fall term.

Credits: 3 Lecture: 3

HD 180

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 the virus and the 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. Offered winter term.

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. Offered fall term. Recommended pre- or corequisite: WR 121.

Credits: 3 Lecture: 3

HD 201

FAMILIES AND ADDICTIONS

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. Offered winter term. Recommended pre- or corequisite: WR 121.

Credits: 3 Lecture: 3

HD 205

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. Offered winter and spring terms. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

HD 206

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. Offered fall term.

Credits: 3 Lecture: 3

HD 208

MULTICULTURAL ISSUES IN HUMAN SERVICES

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 mental health challenges as well as chemical dependency problems. Examines how knowledge of diversity issues can be essential to the counselor in communications, treatment planning and implementation. Offered spring term. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4

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. Offered spring term. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4

HD 223

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. Offered winter term. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

HD 260 COUNSELING THEORIES

Introduces major counseling theories that have demonstrated effectiveness with a variety of mental health issues including substance abuse disorders. Includes an overview of 10 specific theories (including affective, behavioral and cognitive approaches), their founders, key concepts, techniques, and appropriate applications. Offered spring term. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

HD 262 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. Offered winter term. Recommended prerequisite: 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. Offered spring term.

Credits: 3 Lecture: 3

HD 266 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. Offered spring term. Recommended prerequisite: HD 262 or instructor approval. Recommended corequisites: WR 121, HD 260.

Credits: 4 Lecture: 4

HD 291 PRACTICUM ADDICTIONS TREATMENT

The practicum is a 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. Typically offered every term. 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

AH 100 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 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 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**INTRODUCTION TO THE STUDY OF DISEASE**

Reviews abnormal pathological changes that occur within individual organs and body systems as the result of a disease process. Disease processes are studied in detail with regard to the cause, pathological features, physical signs and symptoms, diagnostic procedures, current preferred treatment, prognosis and pertinent public health issues. Fulfills program requirements for Health Information Technology and Medical Assisting. Recommended prerequisites: BI 122 or BI 233.

Credits: 5 Lecture: 5

AH 199**SPECIAL TOPICS: ALLIED HEALTH**

Reserved for courses that cover topics of general interest in health occupations.

Credits: 1 to 3

AH 283**INTRODUCTION TO ALTERNATIVE MEDICINE**

Introduces the historical and sociopolitical context of biomedicine and “alternative” medical systems in the United States. A number of alternative medical practices will be examined as independent systems, and also as parts within the larger context of integration into the overall 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 prerequisite: WR 121.

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.

Credits: 4 Lecture: 4

ANTH 103**CULTURAL ANTHROPOLOGY**

Provides an introduction to the diversity of human beliefs and behaviors around the world. Explores cross-cultural similarities and differences in systems of values, family, religion, economics, politics, and social structure, including issues of race and ethnicity. The goals of this course are to foster an appreciation of cultural diversity, to use this appreciation to better understand the student’s culture(s), and to learn to be active and aware participants of local and global communities.

Credits: 4 Lecture: 4

ANTH 141**FILM & SOCIETY: RACE, GENDER, AND CLASS**

Examines the representation of race, social class and gender in film. Special attention is given to how particular representations reflect the broader historical context surrounding when the films were produced and culturally based audience sentiments. Anthropological and sociological analyses of the films will be provided to give a multi-disciplinary account of how films reflect, create and support various ideological positions regarding race, class and gender.

Credits: 2 Lecture: 1 Lab: 3

ANTH 142**FILM & SOCIETY: GLOBAL CULTURES**

Examines global issues in both foreign and domestic films from sociological and anthropological perspectives. Selected films cover topics that are relevant to understanding global processes such as global economy and Islam in the contemporary world, as well as films that address the more regionally localized processes of community and family. The purpose of the course is to use film to expose students to diverse perspectives and to encourage the critical awareness of the global interconnections that influence and constrain our modern lives. Films will include documentaries, as well as feature films.

Credits: 2 Lecture: 1 Lab: 3

ANTH 143**FILM & SOCIETY: CONTEMPORARY ISSUES**

Examines contemporary issues in film from sociological and anthropological perspectives. Selected films cover such topics as youth culture, nationalism, local culture and poverty, mental health or other social problems. The content of the films, as well as issues of film production, historical context and audience reception will be the major focus of analysis.

Credits: 2 Lecture: 1 Lab: 3

ANTH 188**SPECIAL STUDIES: ANTHROPOLOGY**

Credits: 1 to 3

ANTH 199**SELECTED TOPICS: ANTHROPOLOGY****Credits: 1 to 4****ANTH 202****ARCHAEOLOGY OF OREGON**

Investigates the diverse nature of Oregon archaeology. Prehistoric patterns of human occupation in five distinct regions will be analyzed: the Great Basin, Columbia Plateau, Lower Columbia and Coast, Willamette Valley and the Southwestern Mountains. May be taught with a WIC designation. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4**ANTH 212****ARCHAEOLOGY FIELD METHODS**

Provides an introduction to archaeological field methods as applied to the study of pre-history, including, but not limited to: field inventory, site recording, mapping, archaeological excavation and data/artifact collection, laboratory analysis and documentation/report preparation.

Credits: 4 Lecture: 2.75 Other: 22.5**ANTH 230****PHYSICAL ANTHROPOLOGY**

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 240****LANGUAGE AND CULTURE**

An introduction to the relationship between communication and culture. Designed to help students become familiar with and understand the mechanics of language from brain structure to how we make sounds; cross-cultural and historical variations between and within communicative systems; and language as a form of social interaction, specifically exploring the complex and diverse relationships between language, socio-cultural, politics and identity.

Credits: 4 Lecture: 4**ANTH 254****MAGIC, WITCHCRAFT, RELIGION**

Introduces students to the subject of religion in the broad anthropological context, contributes to a deeper awareness of diverse expressions of religious faith in a multicultural world, and promotes openness to and tolerance of world views different from the student's own. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4**ANTH 283****INTRODUCTION TO MEDICAL ANTHROPOLOGY**

Introduces the main theories, concepts, and methods of exploring health, illness, disease and health care systems from a medical anthropological perspective. Uses a cultural interpretive approach to explore health beliefs, healing practices, and healer's and patient's roles within the context of world health care systems. Includes an examination of the biomedical model of health care as a cultural construct created through Western belief systems. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4**ANTH 295****GENDER AND SEXUALITY IN AN ANTHROPOLOGICAL PERSPECTIVE**

Examines the constructions of femininities, masculinities and sexualities from a cross-cultural perspective. The cross-cultural focus will provide students with the comparative framework necessary to understand the diversity of gender roles within the context of specific cultural, political and economic processes. While exploring how both Western and non-Western cultures from diverse parts of the world imagine, negotiate, and even contest gender identities and relations, this course will also address key theoretical issues and anthropological approaches to understanding gender. Recommended prerequisites: WR 121 and ANTH 103.

Credits: 4 Lecture: 4**ANTH 299****SELECTED TOPICS: ANTHROPOLOGY****Credits: 1 to 4****ART**

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 of visual arts in the West. Introduces students to the concepts of art and surveys the development of art in historical context from Paleolithic cave paintings up through early Christians. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them. Need not be taken in sequence. May be offered with a WIC designation.

Credits: 4 Lecture: 4

**ARH 202
INTRODUCTION TO ART HISTORY**

Surveys the major periods of visual arts in the West. Introduces students to the concepts of art and surveys the development of art in historical context from early Medieval up through the Mannerists. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them. Need not be taken in sequence. May be offered with a WIC designation.

Credits: 4 Lecture: 4

**ARH 203
INTRODUCTION TO ART HISTORY**

Surveys the major periods of visual arts in the West. Introduces students to the concepts of art and surveys the development of art in historical context from Baroque through Modern. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them. 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 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 115
BASIC DESIGN: 2-D**

Introduction to theory and studio practice using the elements of line, value, shape and texture with the principles of organization to articulate visual ideas in black and white.

Credits: 3 Lecture: 1.5 Lab: 4.5

**ART 116
BASIC DESIGN: COLOR**

Introduction to color theory and studio practice using value, hue and intensity with the elements of line, shape, texture and the principles of organization to articulate visual ideas with two-dimensional color design problems. Offered winter term.

Credits: 3 Lecture: 1.5 Lab: 4.5

**ART 117
BASIC DESIGN: 3-D**

Explores elements and principles of design using hands-on experience to make three-dimensional constructions using inexpensive materials. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 1.5 Lab: 4.5

**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: 1.5 Lab: 4.5

**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: 1.5 Lab: 4.5

**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: 1.5 Lab: 4.5

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. Not offered every term. Recommended prerequisites: ART 131 and ART 154.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 254
CERAMICS IV

Ceramics classes include developing designs for both functional and nonfunctional work, mastering hand building, advanced throwing skills and glaze application. 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: 1.5 Lab: 4.5

ART 255
CERAMICS V

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: 1.5 Lab: 4.5

ART 256
CERAMICS VI

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 will be included in the upper-level classes. 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: 1.5 Lab: 4.5

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 131
DRAWING I

Emphasis on observing and developing fundamental drawing and composition skills. Still life material used extensively.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 132
DRAWING II

Concepts and skills developed in ART 131 will be applied to introduction to drawing the figure and portraits. Recommended prerequisite: ART 131.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 133
DRAWING III

Emphasis on landscape drawing and creative expression working with a broader range of media. Recommended prerequisite: ART 131.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 234
FIGURE DRAWING I

Studio introduction to drawing the clothed and unclothed figure using a variety of techniques and media. Recommended prerequisite: ART 131 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 235
FIGURE DRAWING II

Studio introduction to drawing the clothed and unclothed figure using a variety of techniques and media. Recommended prerequisite: ART 234 or permission of instructor.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 236
FIGURE DRAWING III

Studio introduction to drawing the clothed and unclothed figure using a variety of techniques and media. Recommended prerequisite: ART 235 or permission of instructor.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 157A1
METALWORK & JEWELRY - HOT FABRICATION I

Introduction to the basic skills used to fabricate non-ferrous metals including silver, copper and copper alloys to make jewelry or other small metal objects. Projects will be joined using high temperature silver solder and natural gas/compressed air torches as the heat source. Additional instruction includes developing designs, annealing, drilling, sawing, filing, texturing, dapping, and finishing techniques.

Credits: 2 Lecture: 1 Lab: 3

ART 157A2
METALWORK & JEWELRY - HOT FABRICATION II

Builds the skills learned in ART 157A1. Students will develop soldering skill by designing more complex and dimensional projects. Bezel setting a cabochon stone, making hinges, and more complex forming techniques and texturing methods will also be included. Recommended prerequisite: ART 157A1.

Credits: 2 Lecture: 1 Lab: 3

ART 157B1**METALWORK & JEWELRY - COLD FABRICATION I**

Introduction to the basic skills used to fabricate non-ferrous metals including silver, copper and copper alloys to make jewelry or other small metal objects. Projects will be joined using rivets, tabs, links and other methods of cold connections. Additional instruction includes developing design, annealing, drilling, sawing, filing, texturing, dapping, and finishing techniques.

Credits: 2 Lecture: 1 Lab: 3

ART 157B2**METALWORK & JEWELRY - COLD FABRICATION II**

Builds the skills learned in ART 157B1 with more challenging project assignments. Students will develop technical skills by designing projects which include simple forming techniques, moving parts, incorporating found objects and/or stone settings. Recommended prerequisite: ART 157B1.

Credits: 2 Lecture: 1 Lab: 3

ART 157C1**JEWELRY - PRECIOUS METAL CLAY I**

An introduction to working with Precious Metal Clay (PMC) to make fine silver jewelry. The course will include designing projects, making a texture stamp, manipulation and joining techniques for both soft and unfired PMC, kiln firing, and finishing techniques.

Credits: 1 Other: 2

ART 157C2**JEWELRY - PRECIOUS METAL CLAY II**

Builds on the skills learned in ART 157C1. It will include making hollow and three-dimensional forms, making molds and multiples, setting stones, torch firing, fusing gold and simple soldering. Recommended prerequisite: ART 157C1.

Credits: 1 Other: 2

ART 158A1**METALWORK & JEWELRY - SURFACES I**

Includes a number of methods used to change the surface of non-ferrous metals. The techniques used for projects may include reticulation, keum-boo, patinas, embossing, overlay and fusing. Recommended prerequisite: Either ART 157A1 or ART 157B1.

Credits: 2 Lecture: 1 Lab: 3

ART 158A2**METALWORK & JEWELRY - SURFACES II**

Builds on the skills learned in ART 158A1. It may include marrying metal, granulation, inlay, electro-plating, using acrylic paint and colored pencils on metal. Recommended prerequisites: ART 158A1 and ART 157A1.

Credits: 2 Lecture: 1 Lab: 3

ART 158B1**JEWELRY - CASTING & CHAIN MAKING I**

An introduction to centrifugal lost wax casting process. Additive and subtractive methods will be used to sculpt small scale wax models which will be sprued and invested for casting. Fusing links to weave simple chains and finishing techniques will be included.

Credits: 2 Lecture: 1 Lab: 3

ART 158B2**JEWELRY - CASTING & CHAIN MAKING II**

Builds on the skills learned in ART 158B1. It will include centrifugal, vacuum, cuttlebone casting and sand casting. The use of molds to duplicate textures to transfer onto wax, creating stone settings in wax, controlling the wax burn-out and weaving complex linked chains will be included. Recommended prerequisites: ART 158B1 and ART 157A1.

Credits: 2 Lecture: 1 Lab: 3

ART 158C1**JEWELRY - ENAMELING I**

Basic introduction to enameling on copper and fine silver. Techniques for texturing, using stencils, sifting and wet-packing enamel, adding foils, kiln firing, cold connecting and finishing techniques will be included.

Credits: 1 Other: 2

ART 158C2**JEWELRY - ENAMELING II**

Builds on the skills learned in ART 158C1. Techniques of champleve, cloisonne, image transfer, and fusing the enamel with a torch will be included. Recommended prerequisites: ART 158C1 and ART 157A1.

Credits: 1 Other: 2

ART 159A1**METALWORK & JEWELRY - FORMING I**

Students will make non-ferrous metal projects which include a third dimension. The projects can be fabricated jewelry, containers, or small scale sculpture made using folding, scoring, chasing and repousse, or other metalworking techniques used to form sheet metal. Projects may include the use of hot and/or cold connections and non-metal materials. Recommended prerequisite: ART 157A1.

Credits: 2 Lecture: 1 Lab: 3

ART 159A2**METALWORK & JEWELRY - FORMING II**

Builds on the skills learned in ART 159A1. The projects can be fabricated from sheet metal using angle raising, shell-forming, hydraulic-press forming and electro-forming. Projects may include the use of hot and/or cold connections and non-metal materials. Recommended prerequisites: ART 157A1 and ART 159A1.

Credits: 2 Lecture: 1 Lab: 3

ART 159B1**METALWORK & JEWELRY - ETCHING & HYDRAULIC PRESS I**

Includes using PNP paper, nail polish and tapes as resists for etching copper to create textures. Embossing and non-conforming silhouette dies will be made to form the etched metal using the hydraulic press. The use of patinas will also be covered. Recommended prerequisite: Either ART 157A1 or ART 157B1.

Credits: 2 Lecture: 1 Lab: 3

ART 159B2**METALWORK & JEWELRY - ETCHING & HYDRAULIC PRESS II**

Builds on the skills learned in ART 159B1. Etching resists will include markers, oil paint and asphaltum varnish as resists for copper. Non-conforming carved acrylic and liquid steel conforming dies will be made to form the etched metal using the hydraulic press. Recommended prerequisites: ART 159B1 and either ART 157A1 or ART 157B1.

Credits: 2 Lecture: 1 Lab: 3

ART 159C1**JEWELRY - PRECIOUS METAL CLAY & ENAMELING I**

Focuses on improving designs for fine silver precious metal clay. The fired projects will be enhanced with enamel to add color and then fired again to fuse the enamel. Recommended prerequisite: ART 157C1.

Credits: 2 Lecture: 1 Lab: 3

ART 159C2**JEWELRY - PRECIOUS METAL CLAY & ENAMELING II**

Focuses on designing projects to create recesses in the precious metal clay. After firing the PMC, enamel is placed in the depressions. The project is fired again to fuse the enamel. Cold connections and adding gold will also be covered. Recommended prerequisite: ART 159C1.

Credits: 2 Lecture: 1 Lab: 3

ART 181**PAINTING I**

Introduction to materials and techniques using alkyd oil, acrylic and/or water-soluble oil paints, building canvas supports, stretching canvas and preparing painting grounds. Studio experience using still life, self-portrait, landscape and the figure. Recommended prerequisite: ART 131 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 182**PAINTING II**

Introduction to color theory and personal expression. Studio experience using still life, portrait, figure and landscape. Application of compositional principles using the grid, sequential imagery and continuous field. Recommended prerequisites: ART 131 and ART 181 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 183**PAINTING III**

Exploration of personal iconography. Studio experience using still life, landscape, figure in context, abstract spatial and abstract geometric. Recommended prerequisites: ART 131 and ART 182 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 281**PAINTING IV**

Introduction to materials and techniques using alkyd oil, oil and/or water-soluble oil paints and mediums. Studio emphasis on exploration, self expression and non-traditional supports. Recommended prerequisites: ART 131 and ART 183 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 282**PAINTING V**

Emphasis on individual exploration of color, visual concepts, critical doubling, the diptych and scale. Recommended prerequisites: ART 131 and ART 281 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 283**PAINTING VI**

Emphasis on independent projects, the triptych, exploration of contemporary problems in painting, statement of a thesis, painting the proposition through a series of interrelated works and the professional documentation and exhibition of the paintings. Recommended prerequisites: ART 131 and ART 282 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 161**PHOTOGRAPHY I**

Introduction to traditional black and white film photography including camera operation, composition, film processing, printing and presentation. Emphasis is on creative problem solving and understanding the basic photographic concepts used to create good visual communication. Weekly photo assignments will require shooting outside of class, as will text readings. In-class critiques of work are a major part of this course. Recommended prerequisite: ART 115.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 162**PHOTOGRAPHY II**

Introduction to black and white fine printing in the traditional wet darkroom. Course includes a basic overview of the Zone System, with the goal of "pre-visualizing" a scene as a finished photograph being an expected outcome. Students work with fiber base printing paper, print bleaching, toning, archival print finishing and other advanced techniques to create an expressive

print statement. Creative problem solving and development of personal vision are a course emphasis. Weekly shooting and printing assignments, class critiques and a final project are part of the course. Recommended prerequisite: ART 161.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 163 PHOTOGRAPHY III

An exploration of alternative darkroom processes including hand coloring, multiple image printing, selective/multiple toning, “solarization” (Sabattier effect), negative prints and more. A course goal is to use a “post-visualization” approach, allowing students to evolve visual communication beyond what was initially conceived in the field. Creative problem solving and development of personal vision are emphasized. Weekly printing assignments, class critiques and a final project are part of the course. Recommended prerequisite: ART 161.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 265 DIGITAL PHOTOGRAPHY

Introduces students to the basics of composition and camera settings and provides an understanding of digital photo-editing for the purpose of creating successful landscape, portrait, montage and other photographic forms. Students must own a digital camera.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 191 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: 1.5 Lab: 4.5

ART 184 WATERCOLOR I

Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 185 WATERCOLOR II

Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence. Recommended prerequisites: ART 131 and ART 184 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

ART 186 WATERCOLOR III

Studio exploration of the unique qualities of watercolor as a painting medium. Emphasis on fundamental skills, color and composition while painting from a variety of subjects. Should be taken in sequence. Recommended prerequisites: ART 131 and ART 185 or instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

AUTOMOTIVE TECHNOLOGY

AUT 101 BASIC ELECTRICITY FOR AUTOMOTIVE

Provides understanding of fundamental principles of electricity. Covers basic electrical quantities, Ohm’s law, power, series, and parallel circuits, magnetism, electromagnetism and an introduction to DC current troubleshooting. Introduces student to the use of a digital multimeter and oscilloscope. Student will also be introduced to electrical schematics. A self-paced course. Recommended 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. Recommended 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. Recommended prerequisites: AUT 102, AUT 107.

Credits: 2 Lecture: 1 Lab: 3

AUT 104 AUTOMOTIVE ELECTRIC III

A “hands-on” study and familiarization of repair procedures for air bag, security entry, and cruise control systems. Learn diagnostic and repair procedures using body control modules. Learn diagnostics and repair procedures for hybrid and new electrical systems. Recommended prerequisites: AUT 101, AUT 102, AUT 103, AUT 107.

Credits: 2 Lecture: 1 Lab: 3

AUT 105 DIESEL PERFORMANCE I

Introduces principles of diesel systems and basic diagnosis. Includes engine analysis, cooling and exhaust systems, fuel

management systems and diesel engines. Recommended prerequisites: AUT 101, AUT 102, 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

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. Recommended prerequisite: AUT 106.

Credits: 3 Lab: 9

AUT 108

AUTOMOTIVE-HUMAN RELATIONS

Explores career making tools in the area of human relations. Student 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. Recommended prerequisites: WR 60, AUT 106.

Credits: 1 Lab: 3

AUT 110

SMALL GAS ENGINES

Designed to study and apply the theory, operation, diagnoses, and repair of small gas engines and their use in the world today. A self-paced course. Recommended prerequisites: AUT 106 and MTH 10.

Credits: 3 Lab: 9

AUT 111

COMPUTERIZED ENGINE CONTROLS

Studies advanced electrical systems found on late-model vehicles. Provides solid understanding of computerized automotive engine control systems and how they operate and the ability to diagnose, troubleshoot and repair computerized engine control systems. Recommended prerequisites: AUT 101, AUT 102, AUT 103, AUT 106, AUT 107, AUT 205 and MTH 20.

Credits: 5 Lecture: 3.5 Lab: 4.5

AUT 199

SELECTED TOPICS: AUTOMOTIVE

Credits: 1 to 4

AUT 201

AUTOMOTIVE ENGINES

Provides information on the construction, operation and design of the internal combustion engine. Teaches the concepts and procedures of engine work to cover the proper procedure in rebuilding a four-cycle internal combustion engine. Includes a combination of guided lecture and laboratory applications, stressing safety, accuracy of measure, proper usage of tools, and application of repair manuals through actual overhaul of engines. Recommended prerequisites: AUT 106, AUT 107, AUT 110 and MTH 10.

Credits: 4 Lecture: 2 Lab: 6

AUT 202

MANUAL DRIVE TRAINS I

A self-paced course that studies standard transmissions and transaxles. Students will learn on college-owned component. The students will learn operating principles, diagnosis, construction, approved repair procedures, and overhaul of current transmission types on manual transmissions and transaxles. Recommended prerequisites: AUT 106, AUT 107, AUT 101, AUT 110.

Credits: 3 Lab: 9

AUT 203

MANUAL DRIVE TRAINS II

Second part of a manual transmission sequence. A study of standard transmission and the relationship to clutches, driveshafts, rear axle assembly, transaxle, shift controls and four-wheel drive components. Students will learn on college-owned components. The student will learn operating principles, diagnosis and approved repair procedures on manual transmissions and related power train components. Includes emphasis on diagnosis, service, and procedure to conform to current service manuals. Recommended prerequisites: AUT 106, AUT 107, AUT 101, AUT 110.

Credits: 2 Lecture: 1 Lab: 3

AUT 204

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. Recommended prerequisites: AUT 106, AUT 107, AUT 101, AUT 110, AUT 208 and MTH 10.

Credits: 3 Lecture: 1.5 Lab: 4.5

AUT 205

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, AUT 107, AUT 110.

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 103, AUT 107, AUT 111, AUT 205.

Credits: 2 Lecture: 1 Lab: 3

**AUT 208
AUTOMOTIVE BRAKES**

Studies the theory, operation, diagnosis and repair of the modern braking systems of both domestic and import vehicles. Includes an introduction to anti-lock brake systems. Recommended prerequisites: AUT 106, AUT 107, AUT 110, AUT 101 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. A self-paced course. Recommended prerequisites: AUT 101, AUT 106, AUT 107, AUT 110 and MTH 20.

Credits: 3 Lab: 9

**AUT 252
AUTOMATIC TRANSMISSIONS II**

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. Recommended 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. Recommended prerequisites: AUT 102, AUT 106, AUT 111 and MTH 20.

Credits: 3 Lecture: 1.5 Lab: 4.5

AVIATION-PROFESSIONAL PILOT**AV 101
INTRODUCTION TO AVIATION**

Designed to help students explore various career options and prepare for a career in aviation. A variety of employment opportunities are investigated, including commercial, business, corporate, military and general aviation-related business. Emphasis will be given to careers in operations and flight technology. Airplane and helicopter pilot careers will be emphasized.

Credits: 3 Lecture: 3

**AV 104
INTRODUCTION TO AIRCRAFT SYSTEMS**

Introduces the student to the training aircraft that are used in general aviation, and will look in detail at those aircraft used in this program. Aircraft in current use for training by industry will be studied and emphasis placed on basic aircraft systems operations, including emergencies. Applicable aviation regulations, including the use of minimum equipment lists, will be studied.

Credits: 4 Lecture: 4

**AV 108
METEOROLOGY I**

A survey course in atmospheric science that covers weather basics and atmospheric circulations. Included is a systematic development of the following: the atmosphere, energy and temperature, wind, atmospheric moisture, horizontal and vertical pressure patterns, clouds, atmospheric circulation, stability, air masses, fronts, fog, icing, thunderstorms, jet streams and turbulence. Students will study surface weather observations, routine weather reports and forecasts, surface maps and constant pressure maps.

Credits: 4 Lecture: 4

**AV 110
PRIVATE PILOT**

Provides initial ground instruction in aeronautical skills and knowledge for the private pilot rating. Involves an introduction to fundamentals of flight, aerodynamics, flight operations, airspace, weather and weather products, flight planning, decision-making, human factors, human factors in aviation, and crew resource management. Comprehensive course that prepares student for the Private Pilot written exam. Five hours of flight simulator or advanced training device time required. Recommended prerequisite: MTH 20.

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.

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**AERODYNAMICS**

An in-depth study of aerodynamics, beginning with a brief history of the development of flight and flight theory. The physics of lift, drag, weight and thrust are related to airfoil and 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 85.

Credits: 4 Lecture: 4

AV 199**SELECTED TOPICS: AVIATION**

Credits: 1 to 8

AV 204**ADVANCED AIRCRAFT SYSTEMS**

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 the 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**METEOROLOGY II**

Focuses on application of meteorology theory and the availability, understanding and use of available weather products. Emphasis is placed on maximizing aircraft performance and minimizing exposure to weather hazards. Includes examining the weather forecasting models, detailed use and interpretation

of graphic weather products, access to telephone and internet weather briefing sites, and utilization of weather products. Recommended prerequisite: AV 108 or instructor approval.

Credits: 4 Lecture: 4

AV 210A**INSTRUMENT-AIRPLANE**

The instrument rating ground school prepares students for the FAA instrument written exam and an FAA Instrument rating. Includes 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. Ten hours of flight simulator or advanced training device time required. 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. Includes 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. Ten hours of flight simulator or advanced training device time required. 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. Covers night flight, aviation physiology, advanced aerodynamics, aircraft performance, weight and balance, complex aircraft operations, advanced airplane 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. Five hours of flight simulator or advanced training device time required. Recommended prerequisite: AV 110 and/or FAA Private Pilot Rating.

Credits: 4 Lecture: 4

AV 225**COMMERCIAL HELICOPTER**

Reviews the principles of flight, aircraft systems, pertinent federal aviation regulations and airman publications and service in order to prepare the student for the FAA Commercial Helicopter Pilot written exam. Five hours of flight simulator or advanced training device time required. 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. Requires four hours of advanced training device instruction. Five hours of flight simulator or advanced training device time required. 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 are required to complete this course.

Credits: 4 Lecture: 4

**AV 246
AVIATION SAFETY**

A detailed introduction into aspects of aviation safety, intended to promote flight safety in the general aviation and training environment. Topics include risk management, pilot psychology, human factors, accident trends and analysis of accident reports.

Credits: 3 Lecture: 3

**AV 255
CERTIFIED FLIGHT INSTRUCTOR-HELICOPTER**

Teaches techniques of flight and ground instruction, analysis of maneuvers, aircraft performance and federal aviation regulations applicable to flight instructors. Some practice teaching will be required. Preparation for the FAA written exam included. Requires five hours of simulator instruction. Recommended prerequisites: AV 225 and/or Commercial Pilot certificate.

Credits: 5 Lecture: 5

**AV 256
CERTIFIED FLIGHT INSTRUCTOR GROUND SCHOOL**

Provides 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. Requires five hours of simulator instruction. Recommended prerequisite: AV 220 or FAA Commercial Pilot Certificate and Instrument 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
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. Recommended prerequisite: BI 101.

Credits: 4 Lecture: 3 Lab: 3

**BI 103
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 co-evolutionary adaptations among organisms and interactions with environmental factors/resources. Recommended prerequisite: BI 101.

Credits: 4 Lecture: 3 Lab: 3

**BI 121
ANATOMY AND FUNCTION I**

Covers body organization, cell, skin, blood, heart and circulation, immunity, respiration, bones and skeletal 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 122
ANATOMY AND FUNCTION II**

Covers the nervous system, eyes, ears, reproduction, genetics, digestion, urinary system, hormones and diabetes. 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

SCIENTIFIC TERMINOLOGY: LATIN AND GREEK ROOTS

Designed for majors in natural science and social science wishing to enhance their understanding of the basic Latin and Greek prefixes, suffixes and language roots that are applicable to study and reading in science-related fields. Develops skill in how words are formed, the history, meaning, pronunciation and spelling of scientific terms.

Credits: 3 Lecture: 3

BI 211

PRINCIPLES OF BIOLOGY I

Introduces basic principles common to all living organisms. Emphasizes cellular morphology and physiology, genetics, evolution and ecology. Designed for majors in the life sciences. Recommended prerequisites: LIB 127 and CH 221, or concurrent enrollment.

Credits: 5 Lecture: 4 Lab: 3

BI 212

BIOLOGY OF PLANTS II

Surveys diversity of bacteria, protists, 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

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 prerequisite: BI 211 or CH 223 or equivalent.

Credits: 4 Lecture: 3 Lab: 3

BI 231

HUMAN ANATOMY AND PHYSIOLOGY I

Examines the structure and function of the human body utilizing a systems approach. Emphasizes body organization, cells, tissues, as well as microscopic and gross anatomy of the integumentary skeletal and muscular systems. Concurrent labs include hands-on dissections of a variety of tissues, organs, fetal pigs and/or cats. For students in pre-nursing and other pre-professional health programs. Recommended prerequisite: basic knowledge of chemistry.

Credits: 4 Lecture: 3 Lab: 3

BI 232

HUMAN ANATOMY AND PHYSIOLOGY II

Continuation of examination of the structure and function of the human body utilizing a systems approach. Emphasis on gross and microscopic anatomical and physiological relationships between nervous, endocrine and cardiovascular systems. Concurrent labs include hands-on dissections of a variety of tissues, organs, fetal pigs and/or cats. For students in pre-nursing and other pre-professional health programs. Recommended prerequisite: BI 231.

Credits: 4 Lecture: 3 Lab: 3

BI 233

HUMAN ANATOMY AND PHYSIOLOGY III

Continuation of examination of the structure and function of the human body utilizing a systems approach. Emphasis on gross and microscopic anatomical and physiological relationships between lymphatic/immune, respiratory, digestive, urinary and reproductive systems. Concurrent labs include hands-on dissections of a variety of tissues, organs, fetal pigs and/or cats. For students in pre-nursing and other pre-professional health programs. Recommended prerequisite: BI 232.

Credits: 4 Lecture: 3 Lab: 3

BI 234

MICROBIOLOGY

Introduces microorganisms, especially bacteria and viruses that cause serious infectious diseases, and introduces the study of those diseases and the defenses against them. Designed especially for pre-nursing students and other pre-professional health programs.

Credits: 4 Lecture: 3 Lab: 3

BI 280

CO-OP WORK EXPERIENCE BIOLOGY

Credits: 1 to 4

BI 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 212 or instructor approval.

Credits: 4 Lecture: 3 Lab: 3**BUSINESS ADMINISTRATION****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 Other: 3**BA 81****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****INTRODUCTION TO BUSINESS**

Provides basic understanding of components of business. Introduces economic and legal environments affecting business. Includes discussions on management, marketing and finance. Term-long projects supporting team presentation using instructor-specified technology.

Credits: 4 Lecture: 4**BA 104****BUSINESS MATH**

Designed to equip students with skills to handle everyday arithmetic problems relative to a business environment and lay the foundation for other business courses including computer classes that use basic business math as examples and assignments. Topics include ratio, proportion, percent, interest, time value of money, markup and discounts, payroll, stocks and bonds, and depreciation. Recommended prerequisite: MTH 20.

Credits: 3 Lecture: 3**BA 111****APPLIED ACCOUNTING I**

Designed to acquaint students with the basic functions of the bookkeeping and accounting process—journalizing transactions into the journal, posting to the general ledger, analyzing and adjusting the ledger, preparing simple financial statements for a service business and gaining an understanding and working knowledge of the overall payroll function. No previous accounting is required. Recommended prerequisite: MTH 60.

Credits: 3 Lecture: 3**BA 112****APPLIED ACCOUNTING II**

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****APPLIED ACCOUNTING III**

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 the 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 required.

Credits: 1 to 3

**BA 188
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
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
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
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
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
MANAGERIAL ACCOUNTING**

Introduces managerial accounting theory, including cost-volume-profit analysis, product costing, budgeting, capital investing and cost management in manufacturing and service organizations.

Recommended 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 non-business 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 220
MATH FOR BUSINESS DECISIONS**

Designed to develop mathematical analytical skills in performing the daily tasks of a manager or salesperson. Course has a threefold focus: strengthening understanding and use of business terminology in regard to financial information; developing spreadsheet skills in evaluating the costing, pricing and financing strategies of products and services; and developing skills in evaluating and making budgeting, financial and investment decisions. This is a hands-on, skills-oriented course. Recommended prerequisites: BA 113, BA 104 and CIS 125E.

Credits: 4 Lecture: 3 Other: 2

**BA 222
BUSINESS FINANCE**

Targets the 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
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
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
BUSINESS LAW I**

Introduces general concepts, principles and individual conduct of business. The overview of law presented by this course introduces the general concepts of contract law which forms the foundation for the general conduct of business. Covers contract formation, dispute resolution, warranties, legal forms of business, and credit and collections. Emphasizes managing risk in the business environment. Recommended 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: 2 Other: 2

**BA 229
QUICKBOOKS**

Introduces students to QuickBooks accounting software. It is designed to give students the basic skills to effectively use QuickBooks and to reinforce the concepts students learned in their first accounting course. Students will get hands-on experience using the software, including recording a variety of accounting transactions and creating financial statements and other financial reports useful in making business decisions. Recommended prerequisites: CIS 131 and BA 111 or BA 211.

Credits: 3 Lecture: 2 Lab: 2

**BA 238
SELLING AND NEGOTIATION**

Covers the 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**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 prerequisite: BA 101.

Credits: 4 Lecture: 4

BA 261**CONSUMER BEHAVIOR**

Explores the determinants of consumer buying behavior and the process consumers use to make buying decisions. Study includes psychological and sociological principles and their impact on purchasing behaviors. Understanding of these behaviors and the purchase process are used to help design marketing strategies.

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 3

BA 285**BUSINESS HUMAN RELATIONS**

Examines the sociological and psychological aspects of the workplace with practical applications. Based on the premise

that the practice of sound human relations is essential to success in any context. Group exercises, discussion, and lecture are the pedagogies used, in that order of importance. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

BA 286**MANAGING BUSINESS PROCESSES**

Introductory course in understanding and managing business processes. Develops understanding of general concepts and principles of process management. Includes implementation procedures and specific tools used in analyzing processes, uncovering problems and finding solutions to those problems. Recommended 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**CAREER PLANNING**

Introduces students to the value of self-awareness and effective decision making when developing educational and career plans. Through group discussion, lectures and the completion of assessment tools students identify interest, skills, values, and preferences and integrate with current labor market information to begin the life-long process of making life and career decisions.

Credits: 2 Lecture: 2

HD 114**LIFE PLAN FOR WOMEN**

Credits: 2 Lecture: 2

HD 190**LATINO LEADERSHIP**

Provides high school students with experiences designed to foster leadership, teamwork and positive communication skills. College mentors model and encourage students to value higher education, make positive choices, show respect for self and others, and accept personal responsibility. Course requirements enable students to experience college expectations.

Credits: 2 Lab: 6

CASCADE CULINARY INSTITUTE

CCI 71 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 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 93 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 of 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 101 CHEF WORLD INTRODUCTION

Prepare to embark on a journey of the culinary world, from tasting regional cuisines and spices to the fundamentals of making a flavorful stock. Hands-on labs will include basic knife skills, the Mother sauces, kitchen safety, sanitation, plating design and dessert production. Trips to local restaurants and resorts will give you a glimpse into the fast-paced work environment of a professional kitchen.

Credits: 2 Lecture: 1 Other: 2

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 viewpoints of supervision practices.

Credits: 3 Lecture: 3

CCI 121 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 Other: 4

CCI 122 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. Recommended prerequisite: CCI 121 with grade of "C" or higher.

Credits: 4 Lecture: 2 Other: 4

CCI 123 HOT FOOD PRODUCTION III

Continuation of fundamentals of food preparation learned in Hot Food Production 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 sauteing. Recommended prerequisite: CCI 122 with grade of "C" or higher.

Credits: 4 Lecture: 2 Other: 4

CCI 141 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 Other: 4

CCI 142 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. Recommended prerequisite: CCI 141 with grade of "C" or higher.

Credits: 4 Lecture: 2 Other: 4

**CCI 143
BAKING III**

Teaches production of classical tortes and cakes, plated desserts, Danish dough, puff pastry and brioche dough, sourdoughs, croissant dough and pâté, butter creams, pastry creams, meringues and different cake methods. Recommended prerequisite: CCI 142 with grade of “C” or higher.

Credits: 4 Lecture: 2 Other: 4

**CCI 151
GARDEMANGER I**

Teaches basic principles of garde-manger, 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 dressings by type, recipes and techniques; and sandwich breads and fillings. Instructor approval required.

Credits: 4 Lecture: 2 Other: 4

**CCI 152
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. Recommended prerequisite: CCI 151 with grade of “C” or higher.

Credits: 4 Lecture: 2 Other: 4

**CCI 153
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. Recommended prerequisite: CCI 152 with grade of “C” or higher.

Credits: 4 Lecture: 2 Other: 4

**CCI 161
DINING ROOM I**

Hands-on table setting for differing meal periods and 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 Other: 4

**CCI 162
DINING ROOM II**

Teaches American, French and Russian service; tableside 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 and 1000 people. Recommended prerequisite: CCI 161 with grade of “C” or higher.

Credits: 3 Lecture: 1 Other: 4

**CCI 163
DINING ROOM III: MANAGEMENT**

Students gain proficiency in running a fine dining room. The students rotate and assume responsibilities of headwaiter, sommelier, tableside captain, maitre d’hotel. Recommended prerequisite: CCI 162 with grade of “C” or higher.

Credits: 3 Lecture: 1 Other: 4

**CCI 199
SELECTED TOPICS CULINARY
Credits: 1 to 3****CCI 280A
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. Students must take CCI 280A, B and C for a total of 9 credits and 300 employment hours.

Credits: 3 Other: 10

**CCI 280B
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. Students must take CCI 280A, B and C for a total of 9 credits and 300 employment hours.

Credits: 3 Other: 10

**CCI 280C
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. Students must take CCI 280A, B and C for a total of 9 credits and 300 employment hours.

Credits: 3 Other: 10

CHEMISTRY

CH 104

INTRODUCTION TO CHEMISTRY I

Introduces basic principles of general chemistry, including atomic theory, chemical formulas and equations, bonding, stoichiometry, acid/base chemistry, and solutions. Supporting laboratory work included. Recommended prerequisite: one year of high school algebra or MTH 60 equivalent. Not designed for science majors.

Credits: 4 Lecture: 3 Lab: 3

CH 105

INTRODUCTION TO CHEMISTRY II

Introduces basic principles of general and organic chemistry, including bonding in carbon compounds, equilibrium, stereochemistry and functional group chemistry. Supporting laboratory work included. Recommended prerequisite: CH 104 or equivalent. Not designed for science majors.

Credits: 4 Lecture: 3 Lab: 3

CH 106

INTRODUCTION TO CHEMISTRY III

Introduces basic principles of general and biochemistry, including consideration of protein, carbohydrate and lipid structure and metabolism, bioenergetics, enzymes and nucleic acid chemistry. Recommended prerequisite: CH 105 or equivalent.

Credits: 4 Lecture: 3 Lab: 3

CH 188

SPECIAL STUDIES: CHEMISTRY

Credits: 1 to 4

CH 221

GENERAL CHEMISTRY I

Explores experimental and theoretical principles of chemistry including matter, measurement, atomic structure, periodicity, stoichiometry, solutions, molecular structure, bonding, oxidation/reduction, and thermochemistry. The course is algebra-based, and includes supporting laboratory work. Recommended prerequisite: MTH 95 or equivalent. High school chemistry recommended.

Credits: 4 Lecture: 3 Lab: 3

CH 222

GENERAL CHEMISTRY II

Explores experimental and theoretical principles of chemistry including gases, liquids, solids, solutions, kinetics, equilibrium, acids and bases. The course is algebra-based, and includes supporting laboratory work. Recommended prerequisites: MTH 95 or equivalent, CH 221 or equivalent.

Credits: 4 Lecture: 3 Lab: 3

CH 223

GENERAL CHEMISTRY III

Explores experimental and theoretical principles of chemistry including solubility equilibria, acid-based equilibria, electrochemistry, nuclear chemistry, metals and organic compounds. The course is algebra-based, and includes supporting laboratory work. Recommended prerequisites: MTH 95 or equivalent, CH 222 or equivalent.

Credits: 4 Lecture: 3 Lab: 3

CH 241

ORGANIC CHEMISTRY I

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 242

ORGANIC CHEMISTRY II

Explores bonding, structure, nomenclature, properties, syntheses and reactions of the major classes of organic molecules. Alkenes, alkynes, aromatics, alkyl halides, alcohols, ether, amines and carbonyl compounds are included, as well as discussions of resonance and spectroscopy. Supporting labwork is included. Recommended prerequisite: CH 241 or equivalent.

Credits: 5 Lecture: 4 Lab: 3

CH 243

ORGANIC CHEMISTRY III

Explores bonding, structure, nomenclature, properties, syntheses and reactions of the major classes of organic molecules. Carbonyl compounds, polymers, and major classes or biomolecules are included. Supporting labwork is included. Recommended prerequisite: CH 242 or equivalent.

Credits: 5 Lecture: 4 Lab: 3

CH 288

SPECIAL STUDIES: CHEMISTRY

Credits: 1 to 4

COMPOSITE MANUFACTURING TECH

(Not all courses offered every year)

CMT 99

ST: SPECIAL TOPICS CMT

Credits: 1 to 7

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
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 plan a detailed operational plan to be executed in the practicum. Recommended prerequisites: CMT 101, CMT 102.

Credits: 4 Lecture: 2 Other: 6

**CMT 110
COMPOSITES OCCUPATIONAL TOPICS**

Presents a survey of the composites industry and career options available to students. Examples of how and why composite materials are used 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 and power tools for processing will be given. General concepts of business principles, cost estimating and bid preparation will be introduced. Job seeking and employability skills and the importance of work ethic and craftsmanship will be covered. 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: 4

**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
COMPOSITES PRACTICUM SEMINAR**

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 of or co-enrollment in CMT 103 is required.

Credits: 7 Lecture: 2 Other: 15

**CMT 188
SS: SPECIAL STUDIES CMT
Credits: 1 to 7**

**CMT 199
ST: SELECTED TOPICS CMT
Credits: 1 to 7**

**CMT 288
SS: SPECIAL STUDIES
Credits: 1 to 7**

**CMT 299
ST: SELECTED TOPICS CMT
Credits: 1 to 7**

COMPUTER & INFORMATION SYSTEMS

CIS 10

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 Other: 2

CIS 70

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. Pass/No pass grading.

Credits: 2 Lecture: 1 Other: 2

CIS 75

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. Prerequisites: keyboarding skills and computer experience.

Credits: 2 Lecture: 1 Lab: 2

CIS 85

INTRODUCTION TO AUTOCAD

An introductory course in AutoCAD designed for the non-CAD user. Students will be exposed to basic AutoCAD fundamentals focusing on drawing. Students will gain confidence in the use of AutoCAD through short lectures and practical hands-on experience. Topics include navigating the AutoCAD system, drawing, viewing and printing.

Credits: 2 Lecture: 2

CIS 99

SELECTED TOPICS: COMPUTER AND INFORMATION SYSTEMS

Credits: 1 to 4

CIS 120

COMPUTER CONCEPTS

Follows the Internet and Computing Core Certificate (IC3) national standard for digital literacy used at numerous colleges and universities across the country as well as industry. The course objectives are broken down into three modules: computer fundamentals, key applications, and living online. This class

provides students with the knowledge and skills needed to use computers successfully at the college level. Recommended prerequisites: keyboarding, CIS 70 or equivalent computer skills.

Credits: 4 Lecture: 3 Other: 2

CIS 122

INTRODUCTION TO PROGRAMMING

Introduction to computer programming for those with little or no programming experience. Provides a strong, fundamental understanding of Visual Basic for Applications, a programming language used in the Microsoft Office applications as well as several non-Microsoft 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 prerequisite: CIS 120 and CIS 131.

Credits: 4 Lecture: 3 Other: 2

CIS 125A

ACCESS

Introduction to the most popular desktop database software, Microsoft Access. This course will help students prepare for the latest Microsoft certification for Access (#77-605) which helps students validate the skills industries require. The course teaches users how to create and modify database tables, forms, queries and reports. The focus is on optimizing the databases for efficient data entry and generating comprehensive reports. Database design issues are discussed but not emphasized in this course. Recommended prerequisites: CIS 135DB and CIS 131.

Credits: 4 Lecture: 3 Other: 2

CIS 125A1

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: 4 Lecture: 3 Lab: 3

CIS 125A2

AUTOCAD II

Second course in a three-term sequence covering intermediate AutoCAD commands including dimension styles, templates, CAD standards, attribute blocks, attribute extraction, external references, object linking/embedding, advanced drawing setup and plotting, and the program parameter file. Work will be completed with AutoCAD. Recommended prerequisite: CIS 125A1.

Credits: 4 Lecture: 3 Lab: 3

**CIS 125A3
AUTOCAD III**

Third course in a three term sequence covering advanced AutoCAD commands including customizing AutoCAD environment, profiles, custom user interface, tool palettes, work spaces, user coordinate system, 3D modeling, 3D rendering and presentation. Work will be completed with AutoCAD. Recommended prerequisite: CIS 125A2.

Credits: 4 Lecture: 3 Lab: 3

**CIS 125DW
INTRODUCTION TO DREAMWEAVER**

Explores the skills necessary to become an Adobe Certified Associate (ACA) in Web communication using Adobe Dreamweaver CS3. Outcomes include an overall understanding of Dreamweaver as well as setting project requirements and identifying, building, and evaluating rich communication elements. Recommended prerequisite: CIS 120 or instructor approval.

Credits: 4 Lecture: 3 Other: 2

**CIS 125E
EXCEL**

Covers intermediate and advanced features of Excel 2007 such as lists, pivot tables, 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. Recommended prerequisites: CIS 120 and CIS 131.

Credits: 4 Lecture: 3 Other: 2

**CIS 125FL
INTRODUCTION TO FLASH**

Explores the skills necessary to become an Adobe Certified Associate (ACA) in rich media communication using Adobe Flash CS3. Outcomes include an overall understanding of Flash as well as setting project requirements and identifying, building and evaluating rich media elements. Recommended prerequisite: CIS 120 or instructor approval.

Credits: 4 Lecture: 3 Other: 2

**CIS 125G
PHOTOSHOP**

Covers the learning objectives as outlined by Adobe to become an Adobe Certified Associate (ACA) in visual communication using Adobe Photoshop CS3. Outcomes include an overall understanding of Photoshop as well as setting project requirements, identifying design elements, manipulating images and evaluating digital images. Recommended prerequisite: CIS 120 or instructor approval.

Credits: 4 Lecture: 3 Other: 2

**CIS 131
SOFTWARE APPLICATIONS**

Course outcomes focus on learning Word and Excel competencies as defined by the industry standard Microsoft Certified Application Specialist (MCAS) certification. A brief introduction to other components of the “office suite” such as PowerPoint and Access is included. Recommended prerequisites: CIS 120 or IC3 certification and MTH 60/85 or BA 104.

Credits: 4 Lecture: 3 Other: 2

**CIS 135A1
AUTODESK REVIT 1**

Introduces fundamental aspects of architectural drafting with AutoDESK Revit software. Covers drafting of residential and light commercial buildings, sections and elevations, schedules, design layouts, details and working drawings. Recommended prerequisite: CIS 125A1.

Credits: 3 Lecture: 2 Lab: 3

**CIS 135A2
AUTODESK REVIT 2**

Continues with AutoDESK Revit, covering construction drawing sets, commercial planning, residential remodeling, drawing details and drawing production. Term culminates with targeted project covering aspects studied in Revit. Recommended prerequisite: CIS 135A1.

Credits: 3 Lecture: 2 Lab: 3

**CIS 135C1
AUTOCAD CIVIL 3D**

Will learn basic civil drafting theory along with developing drawings that include plats, related civil infrastructure, public utilities, contours and roads. Work will be completed with AutoCAD Civil 3D. Recommended prerequisites: CIS 125A2, AutoCADII.

Credits: 3 Lecture: 2 Lab: 3

**CIS 135DB
DATABASE THEORY/SQL**

Using coursework developed by Oracle Academy, students learn to analyze complex business scenarios and create a data model, a conceptual representation of an organization’s information. Then students implement their database design by creating a physical database using SQL, the industry standard database programming language. Recommended prerequisites: CIS 120 or IC3 certification and MTH 60/85 or BUS 104.

Credits: 4 Lecture: 3 Other: 2

CIS 135M1 AUTODESK INVENTOR I

First course in a two-course sequence introducing mechanical drafting with AutoDESK Inventor. Will develop fundamental knowledge in the areas of part and sheet metal modeling, data management and layout presentation. Recommended prerequisites or recommended corequisites: CIS 125A1, AutoCAD I.

Credits: 3 Lecture: 2 Lab: 3

CIS 135M2 AUTODESK INVENTOR II

Second course in a two-course sequence introducing mechanical drafting with AutoDESK Inventor. Will continue learning Inventor aspects of comprehensive assemblies, working drawing sets, motion analysis, content reuse, design for manufacturability and Inventor Studio. Recommended prerequisite: CIS 135M1, AutoDESK Inventor I.

Credits: 3 Lecture: 2 Lab: 3

CIS 140 A+ ESSENTIALS

For anyone who owns a computer or is interested in a job supporting microcomputers as well as those seeking the vendor neutral CompTIA A+ Essentials certification (220-601). 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 and CIS 131.

Credits: 4 Lecture: 3 Other: 2

CIS 145 PC TECHNICIAN

Course reviews the skills and knowledge associated with the CompTIA's A+ PC Technician Exam (220-602) objectives. Completion of the course preps the student for an entry-level Technical Support Specialist position supporting personal computer hardware and software. Recommended prerequisites: CIS 120 and CIS 140.

Credits: 4 Lecture: 3 Other: 2

CIS 151C CISCO INTERNETWORKING

First of a three-course sequence of preparation for 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 field experience.

Credits: 4 Lecture: 3 Lab: 3

CIS 152C CISCO ROUTER CONFIGURATION

Second of a three-course sequence of preparation for 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 CISCO VLAN AND WAN TECHNOLOGIES

Third of a three-course sequence of preparation for the Cisco Certified Network Associate (CCNA) certification exam. VLAN and WAN Technologies implements 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 COMPUTER SCIENCE II

Continuation of CIS 161. Emphasizes data structures, algorithm analysis and software engineering methods. Recommended prerequisite: CIS 161 or instructor approval.

Credits: 4 Lecture: 3 Lab: 3

**CIS 178
INTERNET IN DEPTH**

Explores the history and philosophy of the Internet as well as its use as a tool for research, communication and entertainment. Students will demonstrate use and understanding of online applications (productivity software, image editing, education, etc.), communication tools (blogs, discussion boards, social networking, e-mail, IM, etc.), and basic Web development concepts (Microsoft Expression Web, usability/design, FTP, etc.). Recommended prerequisite: CIS 120 or instructor approval.

Credits: 4 Lecture: 3 Other: 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 (N10-003, 2007 Edition). Also provides information for those who support or administer networks. Recommended prerequisites: CIS 120 and CIS 140.

Credits: 4 Lecture: 3 Other: 2

**CIS 195
WEB DEVELOPMENT I**

Explores the use of development tools, HTML/XHTML and CSS to create valid Web sites for a variety of topics. Topics include site planning, design, navigation, usability and publishing. Recommended prerequisite: CIS 120 or instructor approval.

Credits: 4 Lecture: 3 Other: 2

**CIS 198
COMPUTER AND INFORMATION SYSTEMS PROJECTS**

Students are placed in local businesses working on small projects that a local business might need. Student is responsible for project, documentation and users' manuals, if necessary. Student is sponsored by a CIS instructor. Recommended 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
IT IN BUSINESS**

Uses advanced software (Word 2007, Excel 2007, PowerPoint 2007 and Access 2007) to solve and analyze business problems using integration of the applications in a business environment. Recommended prerequisites: CIS 120 and CIS 131.

Credits: 4 Lecture: 3 Other: 2

**CIS 244
INFORMATION SYSTEMS ANALYSIS**

Explores the skills necessary for a systems analyst, consultant or project manager who 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 prerequisites: CIS 120 and CIS 131.

Credits: 4 Lecture: 3 Other: 2

**CIS 279NE
MANAGING A WINDOWS 2003 NETWORK ENVIRONMENT**

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**

For anyone who wants to learn how to configure, manage and troubleshoot a Windows 2003 network infrastructure as well as those seeking Microsoft certification 70-291. Key concepts covered are DHCP, DNS, RRAS and SUS. Recommended prerequisites: CIS 120 and CIS 131 or CIS 140, CIS 179 and CIS 279NE or CIS 279XP or instructor approval.

Credits: 4 Lecture: 3 Lab: 3

**CIS 279V
WINDOWS VISTA**

Prepares the student for the Microsoft Certified Technology Specialist examination on the Vista operating system (70-620). Includes the beginning information and hands-on practice students need to build the knowledge and skills needed for IT professional certifications such as Enterprise Support Technician, Network Systems Administrator or Network Systems Engineer. Recommended prerequisites: CIS 120, CIS 131, CIS 140 and CIS 179 or instructor approval.

Credits: 4 Lecture: 3 Lab: 3

CIS 279XP WINDOWS XP PROFESSIONAL

For anyone who wants to learn how to install, configure, customize and troubleshoot Microsoft Windows XP Professional as well as those seeking Microsoft certification 70-290.

Recommended prerequisites: CIS 120 or CIS 131, CIS 140 or instructor approval.

Credits: 4 Lecture: 3 Lab: 3

CIS 280 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 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 generating dynamic content (MySQL). Recommended prerequisite: CIS 195 or instructor approval.

Credits: 4 Lecture: 3 Other: 2

CRIMINAL JUSTICE

CJ 100 SURVEY OF THE CRIMINAL JUSTICE SYSTEM

Introductory survey of the functional components of the U.S. criminal justice system. Includes law enforcement, the courts and corrections. Typically offered every term.

Credits: 3 Lecture: 3

CJ 101 INTRODUCTION TO CRIMINOLOGY

Interdisciplinary approach to theoretical perspectives on the causes, treatment and prevention of crime.

Credits: 4 Lecture: 4

CJ 110 LAW ENFORCEMENT

Surveys the roles and responsibilities of local, state and federal law enforcement agencies in American society. Looks at historical development, role concept and conflicts, professionalization, current enforcement practices and career opportunities.

Credits: 3 Lecture: 3

CJ 120 JUDICIAL PROCESS

Examines the history and development of court systems and processes in the American justice system. Organization, administration and roles of the federal and state courts are examined, as well as distinctions between civil, criminal and appellate courts.

Credits: 3 Lecture: 3

CJ 123 SPANISH FOR LAW ENFORCEMENT PERSONNEL

Designed for students who are interested or are currently enrolled in the criminal justice program as well as current criminal justice employees. Emphasizes important daily phrases that someone in the criminal justice fields may encounter. Students' basic skills in listening, reading, writing and speaking are developed as well as exposure to the culture of Spanish-speaking citizens and their customs that directly affect interaction with criminal justice professionals. Recommended prerequisite: SPAN 101.

Credits: 2 Lecture: 2

CJ 188 SPECIAL STUDIES: CRIMINAL JUSTICE

Instructor approval required.

Credits: 1 to 12

CJ 199 SPECIAL TOPICS: CRIMINAL JUSTICE

Presents selected topics of study in criminal justice offered on a temporary or experimental basis.

Credits: 1 to 4

CJ 201 INTRODUCTION TO JUVENILE JUSTICE

Introduces the historical reason for establishment of juvenile courts in the United States, current juvenile justice process, and the functions of various components within the system. Prevention, intervention and rehabilitation aspects are covered in terms of Oregon's juvenile court law, as well as potential alternatives for change.

Credits: 3 Lecture: 3

CJ 204 CONTROVERSIES IN CRIMINAL JUSTICE

This course defines, describes and evaluates the crises and conflicts which face law enforcement agencies today. Topics include use of force, police pursuits, recruitment and the death penalty.

Credits: 3 Lecture: 3

CJ 207 SEMINAR IN CRIMINAL JUSTICE

Examines current controversial issues, questions and procedures within the criminal justice system.

Credits: 3 Lecture: 3

CJ 210**CRIMINAL INVESTIGATION I**

Examines history, fundamentals and scientific resources involved in criminal investigation. Emphasizes practical aspects of the investigator's approach to criminal acts, crime scene, gathering facts and information, seizing evidence, reporting the total investigation and presenting evidence within court.

Credits: 3 Lecture: 3

CJ 211**CRIMINAL INVESTIGATION II**

Reviews fundamental and scientific resources involved in criminal investigations. Examines in-depth criminal investigation techniques and skills necessary to conduct investigations into the more serious and complex crimes.

Credits: 3 Lecture: 3

CJ 220**INTRODUCTION TO SUBSTANTIVE LAW**

Examines basic concepts of substantive law and criminal procedural law. Explores effects of substantive laws upon the lives of American citizens through topics such as crimes involving property, fraud and deception, or against persons, state and public order.

Credits: 3 Lecture: 3

CJ 222**SEARCH AND SEIZURE**

Study of procedural aspects of criminal law, i.e., how criminal law is enforced and administered by agents of the criminal justice system. Emphasis on examining the law of arrest, searches and seizures, and interrogation of suspects.

Credits: 3 Lecture: 3

CJ 230**JUVENILE CORRECTIONS**

Studies historical and contemporary perspectives on juvenile offenders, juvenile code and juvenile court procedures. Describes treatment programs and differences between adult and juvenile court procedures.

Credits: 3 Lecture: 3

CJ 243**DRUGS AND CRIME IN SOCIETY**

Introduction to problems of substance abuse, including alcohol, in our society. Equips criminal justice, social service and other human service workers with increased awareness of today's drug technology and options for dealing with substance abusers.

Credits: 3 Lecture: 3

CJ 253**CORRECTIONS**

Focuses on historical background, current practices and contemporary issues within correctional processes, institutions and policies pertaining to offenders. Emphasizes the goals of corrections, including deterrence and rehabilitation and the role of local, state and federal corrections in the criminal justice system, including community corrections.

Credits: 4 Lecture: 4

CJ 280**CO-OP WORK EXPERIENCE CRIMINAL JUSTICE**

Provides an opportunity to work for a local agency in a field of criminal justice applying classroom theory with on-the-job experience. Credit given based on total workload of 60 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 for 6 credits. Students must pass a criminal history background check. Recommended prerequisites: sophomore standing and a minimum of 12 credit hours completed in criminal justice courses or instructor approval.

Credits: 1 to 3

DENTAL ASSISTING**DA 110****BASIC DENTAL ASSISTING**

General overview of the Dental Assisting profession through lecture, discussions, demonstrations, laboratory activities and on-site clinic visitation. Includes examining dentistry as a profession, charting and data collection, taking and recording vital signs, four-handed dentistry and equipment use and maintenance. Laboratory portion gives students initial skills for the clinical experience in the areas of instrument identification and transfer, oral-evacuation and use of the air-water syringe. Infection control protocols established by the Oregon Board of Dentistry and the Centers for Disease Control and Prevention will be implemented. Prerequisite: entrance into the Dental Assisting program.

Credits: 4 Lecture: 2 Lab: 4

DA 115**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.

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, PowerPoint 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. Corequisites: DA 110, DA 115, DA 145.

Credits: 3 Lecture: 3

DA 130**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. Corequisites: DA 120, DA 134, DA 160, DA 181, DA 190.

Credits: 3 Lecture: 2 Lab: 3

DA 131**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 and their indications and contraindications are also covered. Prerequisite: DA 130. Corequisites: DA 135, DA 150, DA 151.

Credits: 3 Lecture: 2 Lab: 3

DA 134**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 X-ray film. Prerequisite: entrance into the Dental Assisting program. 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**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 120, DA 130, DA 134.

Credits: 3 Lecture: 3

DA 150**DENTAL OFFICE MANAGEMENT**

Covers key competencies related to office practices and administrative responsibilities of the dental assistant as identified by the American Dental Association. Covers dental record preparation and maintenance, applicable computer applications, legal issues, general office management principles and professionalism in the dental office. Provides related instruction in computation. Teaches cover letter and resume writing, interviewing skills and HIPAA regulations. Prerequisite: entrance into the Dental Assisting program. Corequisites: DA 131, DA 135, DA 151.

Credits: 3 Lecture: 3

**DA 151
DENTAL COMPUTING**

Computers are an integral part of today's dental offices. They have become the method of choice for managing patient dental records, appointment scheduling, charting, processing insurance claims and establishing financial arrangements. Computer systems allow for the generation of reports, patient statements, professional and patient correspondence, treatment plans and fees for service. This course is designed to give students the training necessary to successfully complete these front-office tasks. Prerequisite: entrance into the Dental Assisting program. Corequisites: DA 131, DA 135, DA 150.

Credits: 1 Lecture: 1

**DA 160
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. Corequisites: DA 120, DA 130, DA 134, DA 181, DA 190.

Credits: 3 Lecture: 3

**DA 181
DENTAL SEMINAR I**

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. 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.

Credits: 1 Lecture: 1

**DA 190
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 and DA 110, DA 115, DA 125. Corequisites: DA 120, DA 130, DA 134, DA 160, DA 181.

Credits: 1 to 5

**DA 191
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 and DA 190.

Credits: 5 to 10

**DA 199
SELECTED TOPICS: DENTAL ASSISTING
Credits: 4****DIETARY MANAGEMENT****DM 111
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
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
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
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. This course is open to students not enrolled in the Dietary Management program and is especially useful for nursing majors.

Credits: 2 Lecture: 2

**DM 211
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

EARLY CHILDHOOD EDUCATION**ED 140
INTRODUCTION TO EARLY CHILDHOOD EDUCATION**

Beginning course in early childhood education which focuses on the teacher as a professional (advocacy, ethical practices, work-force issues, associations); provides strategies to manage an effective program operation; how to plan a safe, healthy learning environment; and gives an overview of the philosophy and history of ECE. Three hours of supervised weekly field placement required. Recommended prerequisites: Writing placement test score that places the student in WR 121; reading placement score that places the student in WR 75 or higher.

Credits: 4 Lecture: 3 Other: 3

**ED 150
ENVIRONMENTS & CURRICULUM IN EARLY CHILDHOOD EDUCATION**

Utilizes knowledge in child development to design, implement and evaluate activities in the major domains of development for children ages birth to 8 years. Three hours of supervised weekly field placement required. Offered fall term. Recommended prerequisites: Writing placement test score that places the student in WR 121; reading placement score that places the student in WR 75 or higher; and ED 140.

Credits: 4 Lecture: 3 Other: 3

**ED 151
OBSERVATION & GUIDANCE IN EARLY CHILDHOOD EDUCATION LEARNING**

Introduces observation techniques and tools to accurately collect data on children and how to use assessments to make appropriate decisions about the child's needs regarding programming and the early childhood education environment. Three hours of supervised weekly field placement required. Offered fall or winter term. Recommended prerequisites: Writing placement test score that places the student in WR 121; reading placement score that places the student in WR 75 or higher, ED 140 and ED 150.

Credits: 4 Lecture: 3 Other: 3

**ED 172
LANGUAGE AND LITERACY IN EARLY CHILDHOOD EDUCATION**

Covers language and literacy development as it relates to early childhood education. Also covers the history of literacy development, the family's role, how young children learn to read and write, using books with children, concepts of print, comprehension, differing abilities in literacy development, and the role of observation and assessment. Three hours of supervised weekly field placement required. Offered once per year. Recommended prerequisites: Writing placement test score that places the student in WR 121; reading placement score that places the student in WR 75 or higher.

Credits: 3 Lecture: 2 Other: 3

**ED 173
MOVEMENT, MUSIC AND THE ARTS IN EARLY CHILDHOOD EDUCATION**

Introduces physical education, rhythmic activities, visual arts and performing arts in the early childhood years. Covers basic motor skills and artistic processes from a developmental perspective. Three hours of supervised weekly field placement required. Offered once per year. Recommended prerequisites: Writing placement test score that places the student in WR 121; reading placement score that places the student in WR 75 or higher.

Credits: 3 Lecture: 2 Other: 3

**ED 174
MATH, SCIENCE, AND TECHNOLOGY IN EARLY CHILDHOOD EDUCATION**

Introduces program and curricular activities that enhance a child's development of math, science, and technology understanding and skills. Processes explored are constructivist in nature, with a focus on interdisciplinary approaches. Three hours of supervised weekly field placement required. Offered once per year. Recommended prerequisites: Writing placement test score that places the student in WR 121; reading placement score that places the student in WR 75 or higher.

Credits: 3 Lecture: 2 Other: 3

ED 188**SPECIAL STUDIES: PRACTICUM****Credits: 1 to 3****ED 199****SELECTED TOPICS: EARLY CHILDHOOD EDUCATION****Credits: 1 to 4****ED 250****ADVANCED CURRICULUM DEVELOPMENT & TEACHING METHODS IN EARLY CHILDHOOD EDUCATION**

Compares and contrasts various teaching methods for children ages 3 to 8 years. Focuses on constructivist teaching methodology and strategies, based on best practices in early childhood education. Three hours of supervised weekly field placement required. Recommended prerequisites: WR 121, ED 140, ED 150 and ED 151.

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 workplace. 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. Typically offered every term.

Credits: 3 Other: 9**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 workplace. Students select, with their COCC practicum supervisor, an appropriate pre-kindergarten or early primary (K-3) practicum placement. Typically offered every term. Recommended prerequisite: ED 261.

Credits: 3 Other: 9**ED 265****CHILDREN AT RISK**

Issues of child abuse are presented from the multidisciplinary perspectives of education, criminal justice and psychology. Topics covered include definition and prevalence of child abuse, lifelong effects, prevention, identification and intervention. The course will focus on biopsychosocial outcomes and education concerns, as well as legal processes and implications from criminal justice.

Credits: 3 Lecture: 3**ED 269****EXCEPTIONAL CHILDREN IN EARLY CHILDHOOD EDUCATION**

Acquaints students with the exceptional child and his/her family. Local resources 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****SELECTED TOPICS: EARLY CHILDHOOD EDUCATION****Credits: 1 to 4****ECONOMICS****EC 188****SPECIAL STUDIES: ECONOMICS****Credits: 1 to 3****EC 199****SELECTED TOPICS: ECONOMICS****Credits: 4****EC 201****MICROECONOMICS**

Presents theoretical analysis of the market system in capitalism and analyzes how the market operates under various degrees of competition. Studies supply, demand, price determination, production, monopoly power, allocation of resources, distribution of income and environmental economics. Typically offered every term. 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. Studies unemployment, inflation, economic growth, fiscal, monetary and growth policies, money, banking and international economics. Typically offered every term. 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. Offered fall term. Recommended prerequisites: WR 121 and LIB 127.

Credits: 3 Lecture: 3

ED 210

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. Offered spring term. Recommended prerequisites: WR 121, LIB 127 and ED 200 or instructor approval.

Credits: 3 Lecture: 1 Other: 6

ED 216

PURPOSE, STRUCTURE AND FUNCTION OF EDUCATION IN A DEMOCRACY

Analyzes the system of education in a democratic society—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. Offered winter term. 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. Offered spring term. Recommended prerequisites: WR 121 and LIB 127.

Credits: 3 Lecture: 3

ED 253

LEARNING ACROSS THE LIFESPAN

Explores how learning occurs at all ages from early childhood through adulthood, major and emerging learning theories, individual learning styles including one's own learning styles, self-reflection on implications of how learning occurs, and

the impact of these issues on the development and delivery of instruction. Offered spring term.

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. Upon successful completion of the two-term (140-hour) program, candidate will be eligible for Oregon DHS EMS testing at National Registry EMT Basic level. Prerequisites: must meet requirements of enrollment regarding entrance testing and vaccinations records. Only students who successfully pass EMT Basic Part A are allowed to enroll in EMT Basic Part B.

Credits: 5 Lecture: 4 Lab: 3

EMT 152

EMERGENCY MEDICAL TECHNICIAN BASIC PART B

Follows the approved Oregon Department of Human Services-EMS 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. Prerequisites: Successful completion of EMT 151 (grade of 75% and 80% attendance), students must maintain current immunizations and hold current American Heart Association CPR card.

Credits: 5 Lecture: 4 Lab: 3

EMT 165

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 EMT-B 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 vaccinations records. Only students who successfully

pass EMT Intermediate Part A are allowed to enroll in EMT Intermediate Part B.

Credits: 4 Lecture: 3 Lab: 3

**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. 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 vaccinations records. Only students who successfully pass EMT Intermediate Part A (75% grade and 80% attendance) are allowed to enroll in EMT Intermediate Part B.

Credits: 4 Lecture: 3 Lab: 3

**EMT 170
EMERGENCY RESPONSE COMMUNICATION/
DOCUMENTATION**

Covers principles of therapeutic communication, verbal, written, and electronic communications in the provision of EMS, documentation of elements of patient assessment, care and transport, communication systems, radio types, reports, codes, and correct techniques.

Credits: 2 Lecture: 2

**EMT 171
EMERGENCY RESPONSE PATIENT TRANSPORT**

Covers ambulance operations, laws, maintenance and safety, emergency response driving and route planning.

Credits: 2 Other: 4

**EMT 175
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: 3 Lecture: 3

**EMT 188
SPECIAL STUDIES: EMERGENCY MEDICAL
TECHNICIAN**

Credits: 5

**EMT 195
CRISIS INTERVENTION**

Prepares the student to deal with situations facing both the patient and caregiver. Included are all facets of crisis intervention techniques and recent advances in critical incident stress debriefing intervention. Offered fall and spring term.

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
SPECIAL STUDIES: EMERGENCY MEDICAL
TECHNICIAN**

Credits: 5

**EMT 290
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 coursework, 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. 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 291

EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 1 CLINICAL

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. This 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. Concurrent enrollment in EMT 290 Paramedic Part 1 required.

Credits: 3 Other: 9

EMT 292

EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 2

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. This 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. Prerequisites: successful completion of EMT 290, maintain proof of current immunizations. Concurrent enrollment in EMT 293 Paramedic Lab required.

Credits: 8 Lecture: 6 Lab: 6

EMT 293

EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 2 CLINICAL

These courses make up the core of the paramedic course requirements. Includes 300+ hours of didactic, 240 hours of clinical and 350+ 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. This course will include required weekend coursework, 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. Prerequisite: EMT 291 EMT Paramedic Part 1 Clinical. Concurrent enrollment in EMT 292 required.

Credits: 3 Other: 9

EMT 294

EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 3

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. This 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. Prerequisites: successful completion of EMT 292, maintain proof of current immunizations. Concurrent enrollment in EMT 295 required.

Credits: 8 Lecture: 6 Lab: 6

EMT 295
EMERGENCY MEDICAL TECHNICIAN PARAMEDIC
PART 3 CLINICAL

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. This course will include required weekend coursework, 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. Prerequisite: EMT 293. Concurrent enrollment in EMT 294 required.

Credits: 3 Other: 9

EMT 299
SELECTED TOPICS: EMERGENCY MEDICAL
TECHNICIAN
Credits: 5

ENGINEERING & ENGINEERING
TECHNOLOGY

ENGR 188
SPECIAL STUDIES: ENGINEERING

Provides an opportunity to explore an area of engineering by doing a special project or to gain practical experience by working with a professional engineer.

Credits: 1 to 6

ENGR 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 pre- or corequisites: MTH 252, PH 202/212.

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
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
ENGINEERING ORIENTATION

Provides orientation to concepts and methods of engineering.

Credits: 3 Lecture: 2 Lab: 2

GE 102
ENGINEERING PROBLEM SOLVING AND
TECHNOLOGY

Introduces the use of Microsoft Excel for the solution of engineering problems and familiarizes students with the decision making and report preparation process in engineering design. Development of spreadsheets for analyzing engineering problems and preparation of final design reports that outline in detail design evaluation, recommendation and implementation. Recommended prerequisite: MTH 112.

Credits: 3 Lecture: 2 Lab: 2

FOREIGN LANGUAGES

FR 101
FIRST YEAR FRENCH I

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. If you have previously learned French, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

FR 102
FIRST YEAR FRENCH II

Continues the development of reading, writing, listening and speaking skills. Students are expected to have completed FR101 material, and are encouraged to review French 101 concepts and vocabulary prior to class. Recommended prerequisites: FR 101, one year of high school French or instructor approval. Course

should be taken in sequence. If you have previously learned French, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

**FR 103
FIRST YEAR FRENCH III**

Continues the development of reading, writing, listening and speaking skills. Students are expected to have completed FR102 material, and are encouraged to review the concepts of FR 101 and 102 prior to class. Recommended prerequisites: FR 102, two years of high school French or instructor approval. Course should be taken in sequence. If you have previously learned French, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

**FR 199
SELECTED TOPICS: FRENCH**

Credits: 1 to 4

**FR 201
SECOND YEAR FRENCH I**

Continues the work of First Year French, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Emphasis on writing and reading skills. Incorporates culture in all aspects of course; class taught mostly in French. Recommended prerequisite: FR 103 or equivalent, or instructor approval. It is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>. Course should be taken in sequence.

Credits: 4 Lecture: 4

**FR 202
SECOND YEAR FRENCH II**

Continues the work of FR 201, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Incorporates culture in all aspects of course; class taught mostly in French. Recommended prerequisite: FR 201 or equivalent, or instructor approval. You may also wish to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>. Course should be taken in sequence.

Credits: 4 Lecture: 4

**FR 203
SECOND YEAR FRENCH III**

Continues the work of FR 202, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Incorporates culture, regionalisms, and argot; class taught mostly in French. Recommended prerequisite: FR 202 or equivalent, or instructor approval. You may

also wish to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>. Course should be taken in sequence.

Credits: 4 Lecture: 4

**FR 211
FRENCH CONVERSATION AND CULTURE I**

Intended for students who wish to maintain and continue mastering fluency in the acquisition of French. Also an excellent option for the non-degree seeking student. Counts only as an elective. Recommended prerequisite: FR 103 or equivalent or instructor approval.

Credits: 3 Lecture: 3

**FR 212
FRENCH CONVERSATION AND CULTURE II**

Intended for students who wish to maintain and continue mastering fluency in the acquisition of French. Also an excellent option for the nondegree-seeking student. Counts only as an elective. Recommended prerequisite: FR 211 or FR 201 or equivalent or instructor approval.

Credits: 3 Lecture: 3

**FR 213
FRENCH CONVERSATION AND CULTURE III**

Intended for students who wish to maintain and continue mastering fluency in the acquisition of French. Also an excellent option for the nondegree-seeking student. Counts only as an elective. Recommended prerequisite: FR 212 or FR 202 or equivalent or instructor approval.

Credits: 3 Lecture: 3

**GER 101
FIRST YEAR GERMAN I**

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. If you have previously learned German, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

**GER 102
FIRST YEAR GERMAN II**

Continues the development of reading, writing, listening and speaking skills. Students are expected to have completed GR 101 material, and are encouraged to review German 101 concepts and vocabulary prior to class. Recommended prerequisite: GER 101, one year of high school German or instructor approval. Course should be taken in sequence. If you have previously learned German, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

GER 103**FIRST YEAR GERMAN III**

Continues the development of reading, writing, listening and speaking skills. Students are expected to have completed GR102 material and are encouraged to review the concepts of GER 101 and 102 prior to class. Recommended prerequisites: GER 102, two years of high school German or instructor approval. Course should be taken in sequence. If you have previously learned German, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

GER 188**SPECIAL STUDIES: GERMAN**

Credits: 1 to 4

GER 201**SECOND YEAR GERMAN I**

Continues the 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. Culture, regionalisms and history incorporated; course taught mostly in German. Should be taken in sequence. Recommended prerequisites: GER 103 or equivalent. If you have previously learned German, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

GER 202**SECOND YEAR GERMAN II**

Continues the work of GER 201, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in German. Recommended prerequisite: GER 201 or equivalent, or instructor approval. Course should be taken in sequence. If you have previously learned German, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

GER 203**SECOND YEAR GERMAN III**

Continues the work of GER 202, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in German. Recommended prerequisite: GER 202 or equivalent, or instructor approval. Course should be taken in sequence. If you have previously learned German, it is recommended to take the “self-test” located at: <http://web.cocc.edu/mbellavia/tests.htm>.

Credits: 4 Lecture: 4

GER 211**GERMAN CONVERSATION AND CULTURE I**

Intended for students who wish to maintain and continue mastering fluency in the acquisition of German. Excellent option for nondegree-seeking students. Does not meet baccalaureate degree language requirements. Counts only as elective. Recommended prerequisite: GER 103 or instructor approval.

Credits: 3 Lecture: 3

GER 212**GERMAN CONVERSATION AND CULTURE II**

Intended for students who wish to maintain and continue mastering fluency in the acquisition of German. Excellent option for nondegree-seeking students. Does not meet baccalaureate degree language requirements. Counts only as elective. Recommended prerequisite: GER 211 or 201, or instructor approval.

Credits: 3 Lecture: 3

GER 213**GERMAN CONVERSATION AND CULTURE III**

Intended for students who wish to maintain and continue mastering fluency in the acquisition of German. Excellent option for nondegree-seeking students. Does not meet baccalaureate degree language requirements. Counts only as elective. Recommended prerequisite: GER 212 or 202, or instructor approval.

Credits: 3 Lecture: 3

GER 299**SPECIAL STUDIES: GERMAN**

Credits: 1 to 4

IT 101**FIRST YEAR ITALIAN I**

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 102**FIRST YEAR ITALIAN II**

Continues the development of reading, writing, listening and speaking skills. Students are expected to have completed IT 101 material, and are encouraged to review Italian 101 concepts and vocabulary prior to class. Recommended prerequisite: IT 101, one year of high school Italian or instructor approval. Course should be taken in sequence.

Credits: 4 Lecture: 4

IT 103**FIRST YEAR ITALIAN III**

Continues the work of IT 202, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in Italian. Recommended prerequisite: IT 202 or equivalent. Should be taken in sequence. May not be offered every year.

Credits: 4 Lecture: 4

IT 199**SELECTED TOPICS: ITALIAN**

Credits: 4

IT 201**SECOND YEAR ITALIAN I**

Continues the work of First Year Italian, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in Italian. Recommended prerequisite: IT 103 or equivalent. Should be taken in sequence. May not be offered every year.

Credits: 4 Lecture: 4

IT 202**SECOND YEAR ITALIAN II**

Continues the work of IT 201, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in Italian. Recommended prerequisite: IT 201 or equivalent. Should be taken in sequence. May not be offered every year.

Credits: 4 Lecture: 4

IT 203**SECOND YEAR ITALIAN III**

Continues the work of IT 202, reviewing, expanding and perfecting pronunciation, structure and vocabulary for the purpose of active oral and written communication. Increasing emphasis on writing and reading skills. Culture, regionalisms and history incorporated; course taught mostly in Italian. Recommended prerequisite: IT 202 or equivalent. Should be taken in sequence. May not be offered every year.

Credits: 4 Lecture: 4

IT 299**SELECTED TOPICS: ITALIAN**

Credits: 4

SPAN 101**FIRST YEAR SPANISH I**

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 includes 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 www.cocc.edu/spt.

Credits: 4 Lecture: 4

SPAN 102**FIRST YEAR SPANISH II**

Continues the development of reading, writing, listening and speaking skills. Focuses on irregular and stem-changing verbs, questions, ser vs. estar, reflexive verbs, indirect object pronouns, present progressive, obligation, the verbs estar, ir, hacer, salir, jugar, saber, poder, pensar and vocabulary which includes the following categories: prepositions, university, city, foods, holidays, daily routines, physical and mental states, classroom activities and workplaces. Class begins with a review of Spanish 101. Students are encouraged to review Spanish 101 concepts and vocabulary prior to class. Recommended prerequisite: SPAN 101, one year of high school Spanish, placement test score of 176-225 (www.cocc.edu/spt) or instructor approval.

Credits: 4 Lecture: 4

SPAN 103**FIRST YEAR SPANISH III**

Continues the development of reading, writing, listening and speaking skills. Focuses on the concepts of comparisons, preterite (past) tense, direct object pronouns (lo, la), hacer as a past expression, negative statements, impersonal se, the verbs conocer, pedir, servir and vocabulary which includes these categories: house, furniture, neighborhood, chores, comparisons, nature, restaurant, foods, measurements and kitchen. Class begins with an overview of SPAN 101 and 102, however, students are encouraged to review the concepts of SPAN 101 and 102 prior to class. Recommended prerequisite: SPAN 102, two years of high school Spanish, placement test score of 226-280 (www.cocc.edu/spt) or instructor approval.

Credits: 4 Lecture: 4

SPAN 188**SPECIAL STUDIES: SPANISH**

Credits: 1 to 4

SPAN 199**SELECTED TOPICS: SPANISH**

Credits: 4

**SPAN 201
SECOND YEAR SPANISH I**

Continues, after SPAN 103, with the development of reading, writing, listening and speaking skills. Focuses on the concepts of the imperfect (past) tense (with and without the preterite tense), the present perfect tense, past participles, exclamations, por and para, creating adverbs, polite commands, the present tense of the subjunctive mood, the imperfect progressive and vocabulary which includes the following categories: family and relatives, childhood activities, geography, climate, transportation, ecology, environment, animals, automobiles, driving, and trips. Recommended prerequisite: SPAN 103, three years of high school Spanish, placement test score of 281-360 (www.cocc.edu/spt) or instructor approval.

Credits: 4 Lecture: 4

**SPAN 202
SECOND YEAR SPANISH II**

Continues with the development of reading, writing, listening and speaking skills. Focuses on the concepts of the verb haber, changes in states, indirect object pronouns with commands, unplanned occurrences, narrating past experiences, adjectives used as nouns, demonstrative pronouns, por and para, two object pronouns together and vocabulary which includes the following categories: the human body, illnesses, symptoms, health, medicines, medical professions, accidents, emergencies, materials that things are made of, clothing and jewelry, shopping and appliances. Recommended prerequisite: SPAN 201, four years of high school Spanish, placement test score of 361-430 (www.cocc.edu/spt) or instructor approval.

Credits: 4 Lecture: 4

**SPAN 203
SECOND YEAR SPANISH III**

Continues with the development of reading, writing, listening and speaking skills. Focuses on the concepts of reciprocal pronouns, polite and informal commands, subjunctive mood in softened commands, future tense, subjunctive mood in adjectival clauses, subjunctive mood in time clauses, doubt, conditional, past subjunctive in if clauses, and vocabulary which includes the following categories: personal relationships, reciprocal actions, opinions, general lists of nouns, verbs, adverbs, adjectives and review of and additions to past vocabulary topics. Recommended prerequisite: SPAN 202, four years of high school Spanish, placement test score of 431-550 (www.cocc.edu/spt) or instructor approval.

Credits: 4 Lecture: 4

**SPAN 211
SPANISH CONVERSATION AND CULTURE I**

Designed for students who wish to continue mastering fluency in the speaking of Spanish. Objective is to study various Spanish-speaking cultures. Taught exclusively in Spanish and some

student participation is required. Does not meet baccalaureate degree language requirements. Recommended pre- or corequisite: SPAN 203 or instructor approval.

Credits: 3 Lecture: 3

**SPAN 212
SPANISH CONVERSATION AND CULTURE II**

Designed for students who wish to continue mastering fluency in the speaking of Spanish. Objective is to study various Spanish-speaking cultures. Taught exclusively in Spanish and some student participation is required. Does not meet baccalaureate degree language requirements. Recommended pre- or corequisite: SPAN 203 or instructor approval.

Credits: 3 Lecture: 3

**SPAN 213
SPANISH CONVERSATION AND CULTURE III**

Designed for students who wish to continue mastering fluency in the speaking of Spanish. Objective is to study various Spanish-speaking cultures. Taught exclusively in Spanish and some student participation is required. Does not meet baccalaureate degree language requirements. Recommended pre- or corequisite: SPAN 203 or instructor approval.

Credits: 3 Lecture: 3

**SPAN 288
SPECIAL STUDIES: SPANISH**

Credits: 1 to 4

**SPAN 299
SELECTED TOPICS: SPANISH**

Credits: 1 to 4

**FOREST RESOURCE TECHNOLOGY/
FORESTRY**

**FOR 100
FORESTRY PROGRAM ORIENTATION**

Provides students with an orientation to the Forest Resources Technology program. The course is designed to give students the knowledge and tools to succeed in the Forest Resources AAS, the natural resources work force, and in an academic career beyond COCC. The course is required of all students seeking the Forest Resources Technology AAS degree, and is highly recommended for students in the Wildland Fire program.

Credits: 1 Lecture: 1

**FOR 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
WILDLAND FIRE SCIENCE I**

Focuses on the effects of wildland fire policy, current fire suppression strategies and tactics, weather, topography, fuel models and how each interact to affect fire behavior. Additional topics include the wildland fire environment as it relates to situational awareness and personal safety. An overview of modern wildland firefighting with an emphasis on understanding and applying fireline safety. Course cannot be challenged, but will be waived for those with proof of Wildland Fire Single Resource status.

Credits: 2 Lecture: 1 Lab: 3

**FOR 111
FORESTRY PERSPECTIVES**

Introduction to the entire discipline of forestry, including the history of forest use and management, North American forest regions, forest ecology, mensuration and management, forest products and the importance of forest resources other than wood fiber. Also provides overview of state, regional and local employment opportunities.

Credits: 4 Lecture: 3 Lab: 3

**FOR 126
FIELD STUDIES PACIFIC NW FORESTS**

This course examines the ecology, management and human uses of Pacific Northwest forests. Field experience takes place during a 4-day field trip to the Oregon coast and Northern California and includes visiting forest environments, forest product manufacturing facilities, field lectures and guided tours, as well as individual and small-group exercises.

Credits: 1 Lab: 3

**FOR 127
PLANTS OF THE PACIFIC NORTHWEST**

Identification, classification and distribution of shrubs, forbs, and grasses found in low-, mid- and high-elevation Oregon habitat types. Emphasis is placed upon proper field identification through use of terminology and taxonomic keys. Also discusses sensitive plants and noxious weeds.

Credits: 1 Lab: 3

**FOR 130
CHAINSAW USE AND MAINTENANCE**

Covers basic tree falling, bucking and limbing techniques. Equipment safety, use, maintenance and repairs of saws is covered. Designed for inexperienced or novice chainsaw operators or can be used as refresher course for experienced saw operators.

Credits: 2 Lecture: 1 Lab: 3

**FOR 180
CO-OP WORK EXPERIENCE FORESTRY**

Provides opportunity for on-the-job training in forestry field operations, forest products manufacturing or work related to

these areas. Normally undertaken during summer months on a full-time basis but can occur any term.

Credits: 1 to 7

**FOR 188
SPECIAL STUDIES: FORESTRY**

Credits: 1 to 3

**FOR 195
WILDERNESS CONCEPTS**

Introduction to concepts of wilderness and wilderness management principles. Introduction to the history of wilderness and the national wilderness preservation system.

Credits: 2 Lecture: 2

**FOR 199
SELECTED TOPICS: FORESTRY**

Provides opportunity for students with exceptional background or need to continue beyond normal program content. Content and credit earned by mutual agreement between instructor and student and detailed in written agreement. Instructor approval required. Maximum of three credits may be applied to degree.

Credits: 1 to 3

**FOR 202
FOREST ENTOMOLOGY/PATHOLOGY**

Emphasizes the recognition and effects of diseases, insects and mammals affecting forest ecosystems in the Pacific Northwest. Course will examine the role of insects, diseases and animals in forest functioning, health and management, as well as control measures and integrated pest management. Lab work is largely field-based and emphasizes identification of damaging forest insects and diseases common in Oregon.

Credits: 3 Lecture: 2 Lab: 3

**FOR 203
APPLIED FOREST ECOLOGY**

Applies principles of forest ecology to develop a basic understanding of forest stand dynamics and silvicultural principles. Emphasis is placed on stand development, regeneration and stand analysis. Students will develop a practical understanding of stand establishment, maintenance and stand data collection.

Credits: 3 Lecture: 2 Lab: 3

**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 processes 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: 3 Lab: 6

FOR 208

SOILS: SUSTAINABLE ECOSYSTEMS

Focuses on the basics of Soil Science, ranging from physical properties to use and management. Soils with respect to traditional agricultural, wildlands and rangelands, watersheds and modern environmental perspectives will be discussed. New and current events of soils applications and the science of soils in the world around us will be reviewed to better understand the role soil has in our everyday lives. Lab component will include in- and out-of-classroom lab work and field trips.

Credits: 4 Lecture: 3 Lab: 3

FOR 209

FIRE ECOLOGY AND EFFECTS

Discusses the role of fire in Pacific Northwest ecosystems. Identifies effects on flora, fauna, soils, water; fire and cultural/visual resource management; fire and insect interactions. Covers the effects of fire on different forest and range ecosystems.

Credits: 3 Lecture: 2 Lab: 3

FOR 210

WILDLAND FIRE SCIENCE II

A study of hazardous fuel management and treatment practices. Incorporates current fuel measurement and analysis techniques, fire behavior prediction models and hazardous wildland fuel mitigation methods.

Credits: 2 Lecture: 1 Lab: 3

FOR 211

SUPERVISION AND LEADERSHIP

Covers basic human relations and management skills as applied to first-line supervision in forestry, fire science and EMS. Defines work environment. Identifies and discusses subordinate, peer and supervisory relationships. Case studies including students' own work experiences will be used.

Credits: 3 Lecture: 3

FOR 215

FOREST RESOURCE CAPSTONE

Students conduct a sample survey of a large area and present their findings, along with recommendations for management of the area, in a written report. Oral presentation also made to department staff. Limited to second-year students or those who have fulfilled a majority of Forest Resources Technology Degree requirements. Instructor approval required.

Credits: 3 Lecture: 1.5 Lab: 4.5

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.

Recommended prerequisite: FOR 230B.

Credits: 3 Lecture: 2 Lab: 3

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. Corequisite enrollment in MTH 86 recommended. Instructor approval required.

Credits: 4 Lecture: 2.5 Lab: 4.5

FOR 220C

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. Recommended prerequisite: FOR 220A.

Credits: 4 Lecture: 2.5 Lab: 4.5

FOR 230A

MAP, COMPASS AND GPS

Teaches the basic skills of field and forest navigation with compass and GPS. Competency obtained in pacing, paper and computer map use, compass and basic GPS use.

Credits: 3 Lecture: 2 Lab: 3

FOR 230B

FOREST SURVEYING

Studies basic surveying techniques and equipment emphasizing traversing, differential leveling, profiling, GPS mapping and basic coordinate geometry. Recommended prerequisite: FOR 230A or instructor approval.

Credits: 3 Lecture: 2 Lab: 3

FOR 240A

FOREST ECOLOGY

Provides students with an overview of basic plant structure and function and introduces students to functioning of forest ecosystems. Class will examine the physical environment and how it affects growth and distribution of organisms and ecological processes. Course concludes with an examination of communities, disturbance and succession.

Credits: 3 Lecture: 2 Lab: 3

**FOR 240B
WILDLIFE ECOLOGY**

Explores wildlife ecology and biodiversity in context of forest and range management. Focuses on relationship between wildlife and forest and range ecosystems, and examines the role of forest and range management in wildlife habitat management. Recommended prerequisite: FOR 240A.

Credits: 3 Lecture: 2 Lab: 3

**FOR 241A
FIELD DENDROLOGY**

Identification, classification and distribution of common trees and shrubs found in the Western United States and major tree species of North America. The course emphasizes botanical nomenclature and proper identification using plant keys and field characteristics.

Credits: 3 Lecture: 1 Lab: 6

**FOR 241B
DENDROLOGY**

Covers identification, classification and distribution of plant communities (tree, shrub, forb and grass) found within Oregon and major North American plant communities. This class covers in lecture format the structure and function of the primary organs and tissues that comprise woody plants. This course is the classroom portion of FOR 241A. Course does not need to follow FOR 241A.

Credits: 3 Lecture: 3

**FOR 251
RECREATIONAL RESOURCE MANAGEMENT**

Overview of recreational resource management including study of land and water resources used for outdoor recreation. Includes planning and management of natural and cultural resources for long-term resource productivity.

Credits: 3 Lecture: 2 Lab: 3

**FOR 255
RESOURCE INTERPRETATION**

Introduces fundamental theories of interpretation and active and passive techniques of interpretation including activities, presentations, signage, brochures and information kiosks. Course allows optional certification as an interpreter.

Credits: 3 Lecture: 2 Lab: 3

**FOR 260
CONSERVATION OF NATURAL RESOURCES**

Examines current utilization and issues surrounding natural resources availability and management, as well as the effect of human population on resource use and the environment. Includes critical analysis of sustainable development and resource use concepts, including principles of conservation and management. Emphasis placed on current issues. Two-day field trip required. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 2 Lab: 3

**FOR 262
URBAN FORESTRY**

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 265
WOOD TECHNOLOGY & 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: 3

**FOR 299
SELECTED TOPICS: FORESTRY**

Credits: 1 to 5

**FW 199
SELECTED TOPICS: FISH/WILDLIFE**

Provides students with hands-on field experience and aids students in acquiring experience which may meet basic qualification standards required by federal agencies. Content and credit earned by mutual agreement between instructor and student in detailed written agreement. Instructor approval required. Maximum of three credits may be applied toward a degree.

Credits: 1 to 4

**FW 218
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 basic life history. Labs emphasize survey techniques and identification of bird and mammals. Recommended prerequisite: BI 102 or BI 213 or FOR 241A.

Credits: 3 Lecture: 1.5 Lab: 4.5

**FW 251
WILDLIFE CONSERVATION**

Introduces fundamentals of wildlife ecology and management and their role in wildlife conservation. Examines history of wildlife management, current issues and case examples in wildlife conservation. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

GENERAL SCIENCE

GS 104

PHYSICAL SCIENCE: PHYSICS

Energy is used as the theme to develop basic understanding of introductory principles of physics. Energy topics include mechanical, acoustic, heat, electric, radiant and nuclear.

Emphasis placed on practical application of various energy forms. Recommended 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 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

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. Currently offered online only.

Credits: 4 Lecture: 3 Lab: 2

GEOGRAPHIC INFORMATION SYSTEMS

GEOG 191

CO-OP WORK EXPERIENCE GIS

Credits: 1 to 3

GEOG 211

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. Recommended prerequisite: FOR 230A. Usually offered winter term.

Credits: 4 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: 3 Lab: 3

GEOG 266

ARC GIS

Provides working knowledge of ArcGIS. In addition, students undertake designing and developing a GIS database, performing spatial analysis, creating maps, and generating a report using the desktop products. Usually offered fall term. Corequisite: 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. The focus is on proper utilization of Global Positioning System (GPS) receivers and data collection. Usually offered fall term. Recommended prerequisite: FOR 230A or instructor approval.

Credits: 5 Lecture: 4 Lab: 2

**GEOG 275
GIS CAPSTONE**

Culmination GIS project. Students are presented with a set of criteria and perform all steps necessary to complete the project including project planning, designing and developing a GIS database, data collection and editing, performing spatial analysis, creating maps, generating reports and presenting of project output. See instructor for details. Recommended prerequisite: GEOG 285 or instructor approval. Usually offered spring term.

Credits: 5 Lecture: 4 Other: 2

**GEOG 280
CO-OP WORK EXPERIENCE GIS**

Provides opportunity for on-the-job experience in the GIS field. Normally taken summer term, but may occur during any term. See instructor for details. Instructor approval required.

Credits: 1 to 3

**GEOG 284
GIS CUSTOMIZATION**

Utilizes Visual Basic for Applications (VBA) to program the user interface for ArcGIS software. Emphasis is placed on creating customized applications. Recommended prerequisite: CIS 122 or instructor approval. Usually offered winter term.

Credits: 5 Lecture: 4 Lab: 2

**GEOG 285
DATA CONVERSION AND DOCUMENTATION**

Covers a variety of techniques to collect and convert data between various formats, projections and coordinate systems, etc. Cultivates student's ability to research and experiment with data and enhance problem-solving skills. Stresses use of Metadata which allows the data user to determine whether a particular data set is suitable for its proposed use. Usually offered winter term. Recommended prerequisite: GEOG 266 or instructor approval.

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. Recommended prerequisite: FOR 220A or instructor approval.

Credits: 5 Lecture: 4 Lab: 2

**GEOG 287
ANALYSIS OF SPATIAL DATA**

Leads students through the analytical capabilities of GIS. Course begins with the more elementary, but useful, techniques involving locating and describing features, then proceeds to more advanced techniques based on higher-level spatial objects. Lab exercises utilize

the GRID syntax of ArcInfo and Spatial Analyst Extension of ArcGIS to perform analysis of raster datasets. Usually offered spring term. Recommended prerequisite: GEOG 266 or instructor approval.

Credits: 5 Lecture: 4 Lab: 2

GEOGRAPHY**GEOG 100
INTRODUCTION TO GEOGRAPHY**

Designed to examine the key themes, concepts and ideas in geography and to develop a geographical perspective of the contemporary world. A basic foundation of the fundamental themes in geographic education will be extended to the study of places and regions. Emphasis will be placed on the development of cartographic and map interpretation skills.

Credits: 4 Lecture: 4

**GEOG 106
ECONOMIC GEOGRAPHY**

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. Generally offered winter term. Recommended prerequisites: writing placement test score that places the student in WR 65 or WR 75; reading placement test score that places the student in WR 75 or higher.

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. Generally offered fall and spring terms. Recommended prerequisites: writing placement test score that places the student in WR 65 or WR 75; reading placement test score that places the student in WR 75 or higher.

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. Offered winter term. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4

**GEOG 195WC
THE WILDERNESS CONCEPT**

Introduction to concept of wilderness and management principles and issues associated with applying that concept to National Wilderness Preservation System units, using the Three Sisters Wilderness as example.

Credits: 1 Lecture: 1

GEOG 198**FIELD GEOGRAPHY OF CENTRAL OREGON**

Field course that examines natural and cultural landscapes of Central Oregon sub-regions such as the Bend Core, Sisters Country, High Desert, and Upper and Lower Deschutes Basins. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

GEOG 199**SELECTED TOPICS: GEOGRAPHY**

Series of mini-courses focusing on selected geographical topics including the following: an invitation to geography and natural regions of the world (deserts, mountains, humid tropics) and thematic topics.

Credits: 1 to 4

GEOG 201**WORLD REGIONAL GEOGRAPHY I**

Introductory geography course that explores the following regions: Europe, the former Soviet Union, Anglo-America, Australia and Japan. Evaluate how culture, politics, economics, history and the physical environment help create differences across regions. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4

GEOG 202**WORLD REGIONAL GEOGRAPHY II**

Introductory geography course that explores the following regions: Latin America, Middle East/North Africa, Sub-Saharan Africa, East, South and Southeast Asia. Evaluate how culture, politics, economics, history and the physical environment help create differences across regions. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4

GEOG 207**GEOGRAPHY OF OREGON**

Survey of the state of Oregon focusing on natural environment, economic developments and human geography. Special emphasis on historical geography and demographic changes. Includes studies of major regions of Oregon. Recommended prerequisites: WR 121 and LIB 127.

Credits: 3 Lecture: 3

GEOG 208**PHYSICAL GEOGRAPHY: LANDFORMS AND WATER**

Introduction to the science of landforms and the processes which form them. We will study the surface of the earth and the internal and external forces which affect different types of landform development. We will survey different landform types, such as fluvial, Aeolian, glacial, volcanic, coastal, karst and periglacial landforms and identify where, on a global basis, these landforms are likely to occur.

Credits: 4 Lecture: 4

GEOG 209**PHYSICAL GEOGRAPHY: WEATHER AND CLIMATE**

Introduction to the science of meteorology and climatology; a study of the factors that affect weather and climate both locally and globally, and climatic relationships with natural vegetation and human activity.

Credits: 4 Lecture: 4

GEOG 212**TOURISM AND RECREATION**

Includes a study of various components of the tourist industry and an analysis of the economic and environmental impacts of tourism and recreation upon communities. Examines tourism and recreation in Central Oregon and in other selected parts of the world. Offered fall term. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

GEOG 213**GEOGRAPHY OF PACIFIC NORTHWEST**

General introduction to geographical characteristics of the Pacific Northwest and, through this regional emphasis, to some of the basic principles and concepts of geography as a discipline. Comprises three broad sections dealing in turn with historical geography, physical geography and economic geography. Recommended 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 Lab: 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**MAP INTERPRETATION AND DESIGN**

Looks at the world of maps and 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 272
GEOGRAPHY FOR TEACHERS

Designed for public and private school teachers in Geography and for all teachers wishing to include geographic content and concepts in their social studies classes. Emphasizes how to teach Geography at any grade level and incorporates the benchmarks and curriculum goals of the state of Oregon Department of Education as well as National Geography standards.

Credits: 3 Lecture: 3

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 295
WILDERNESS AND SOCIETY

Cultural and historical overview of the changing attitudes toward wilderness as reflected through literature and the history of federal land legislation. Attempt to define the social and economic values of wilderness lands and where they occur geographically.

Credits: 4 Lecture: 4

GEOG 299
SELECTED TOPICS: GEOGRAPHY

Credits: 1 to 4

GEOLOGY

G 162
REGIONAL GEOLOGY

Consists of field studies of selected areas with emphasis on the relationship between rock type, geologic setting and topography. Includes lectures, laboratory and weekend field trips. Topic areas include Cascade Volcanoes (G 162 CV), Geology of the Pacific Northwest (G 162 NW) and Geology of Oregon (G 162 OR).

Credits: 3 Lecture: 1 Lab: 6

G 162CV
CASCADE VOLCANOES

Credits: 3 Lecture: 1 Lab: 6

G 162NW
GEOLOGY OF THE PACIFIC NORTHWEST

Credits: 3 Lecture: 1 Lab: 6

G 162OR
GEOLOGY OF OREGON

Credits: 3 Lecture: 1 Lab: 6

G 199
SELECTED TOPICS: GEOLOGY

Credits: 1 to 6

G 201
GEOLOGY I

Examines the nature and origins of igneous metamorphic and sedimentary rocks, volcanism and volcanic hazards, geological resources, interior of the earth and plate tectonics.

Credits: 4 Lecture: 3 Lab: 3

G 202
GEOLOGY II

Examines the nature of earthquakes, mass wasting, rivers, glaciers, groundwater, deserts and rock deformation. Need not be taken in sequence.

Credits: 4 Lecture: 3 Lab: 3

G 203
GEOLOGY III

Examines earth history, geologic time, fossils and the origin of earth. Need not be taken in sequence.

Credits: 4 Lecture: 3 Lab: 3

G 232
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: coastal environments (rocky shores, beaches, estuaries), biology of common coastal marine organisms; geology of coasts and coastal sea floor structures and materials, sedimentation processes and regional plate tectonics; 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: 4 Lab: 3

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 Lab: 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: G 106 or G 201.

Credits: 3 Lecture: 2 Lab: 3

HEALTH AND HUMAN PERFORMANCE: ACTIVITY CLASSES

HHP 185AB**ADVANCED BASEBALL**

Allows students to learn and understand the rules and strategy of advanced baseball and to learn to communicate with teammates on the field, demonstrating sportsmanship. Helps improve the student's overall physical conditioning, game strategies and master situational drills. Students will learn the philosophy of the game and be expected to implement assignments in game situations.

Credits: 1 Lab: 3

HHP 185BB**SNOWBOARDING I**

For beginning snowboarders. Students will learn the fundamentals of snowboarding with qualified instructors. Equipment must be provided by the student.

Credits: 1 Lab: 3

HHP 185BC**SNOWBOARDING II**

For intermediate to advanced snowboarders. Students will be provided instruction to enhance their current skill level.

Credits: 1 Lab: 3

HHP 185BE**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**

Accommodates all skill levels of basketball and will focus on fundamentals of the game as well as team play.

Credits: 1 Lab: 3

HHP 185BJ**BRAZILIAN JIJITSU**

Modified version of traditional Japanese Jujitsu 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**

Students will learn or increase their skills in throwing, batting, fielding, base running and pitching as related to baseball. Rules of the game, appreciation and application of teamwork, and conditioning specific to baseball will be taught.

Credits: 1 Lab: 3

HHP 185BS**SWIMMING I: SWIM FITNESS & TECHNIQUE**

Swim Fitness and Technique helps students 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 185BW**BOOT CAMP FOR WOMEN**

Introduces a variety of exercises that will increase cardiovascular, endurance, strength and flexibility in a team atmosphere. Focus will be on improving strength and aerobic fitness in one workout, utilizing interval training, core strength, plyometrics, running, games and weights.

Credits: 1 Lab: 3

HHP 185CT**CIRCUIT TRAINING**

General, core and cardio. 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**

Three types of cycling modes are offered at varying times throughout the year: road cycling, indoor studio cycling, or mountain biking on local trail systems.

Credits: 1 Lab: 3

HHP 185DA**AEROBIC DANCE I**

Kickboxing class incorporating traditional aerobic moves along with some resistance and abdominal training. Turbokick provides cross-training incorporating non-contact martial arts aerobic exercises.

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
AEROBIC DANCE III-HIP HOP

Explains the growing awareness of hip hop as a mind-body dance style aerobic movement. Includes choreographed moves with each class and building into a sequenced routine.

Credits: 1 Lab: 3

HHP 185DD
DANCERCISE

High-energy class emphasizing dance movements including jazz, contemporary and salsa styles.

Credits: 1 Lab: 3

HHP 185DM
ADVANCED SCUBA DIVER

Credits: 2 Lecture: 1 Lab: 3

HHP 185GL
GOLF

Held at local golf courses and taught by local pro instructors. Instruction of all skill levels will be accommodated.

Credits: 1 Lab: 3

HHP 185GM
GOLF ADVANCED

Designed for skilled golfers looking to improve on the fundamentals of golf. This course will also place emphasis on the mental game of golf, rules and etiquette of golf, as well as increasing skills on irons, woods, sand play, putting, and chipping/pitching.

Credits: 1 Lab: 3

HHP 185JG
JOGGING

Focuses on improving running skills through various running activities. Students will run at both on- and off-campus sites.

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). Can accommodate all levels.

Credits: 1 Lab: 3

HHP 185KB
ADVANCED KI-AIKIDO

More closely explains the martial arts of Aikido and its application and 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
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

For beginning downhill skiers. Students will learn the fundamentals of skiing with qualified instructors. Equipment must be provided by the student.

Credits: 1 Lab: 3

HHP 185SB
SKI ALPINE II

For intermediate to advanced skiers. Students will be provided instruction to enhance their current skill level.

Credits: 1 Lab: 3

HHP 185SF
SOFTBALL

Focuses on fundamental skill development and team play for all levels of players.

Credits: 1 Lab: 3

HHP 185SG
ADVANCED SOFTBALL

Students will continue to learn the philosophy of the game and be expected to understand the rules and strategy of advanced softball.

Credits: 1 Lab: 3

HHP 185SH
STRETCH AND RELAXATION

Introduces students to progressive stretching activities, including the value of stretching to the overall relaxation process.

Credits: 1 Lab: 3

HHP 185SK
SKI CONDITIONING (NORDIC)

General, Performance

Two levels of conditioning: 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

Focuses on fundamental skill development and team play for all levels of players.

Credits: 1 Lab: 3

**HHP 185SS
SOCCER ADVANCED**

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 185SX
SKI X-COUNTRY I**

For beginning cross-country skiers with little or no experience. Students will learn the fundamentals of skate-skiing with a qualified instructor. Skate equipment must be provided by the student.

Credits: 1 Lab: 3

**HHP 185SY
SKI X-COUNTRY II**

Focus on skate-skiing for intermediate to advanced skiers. Students will improve technique and overall fitness required for groomed trail skiing or racing. Skate equipment must be provided by student.

Credits: 1 Lab: 3

**HHP 185TA
TENNIS I**

Focuses on skill development for beginning tennis players. Students will learn through various drills and court games.

Credits: 1 Lab: 3

**HHP 185TB
TENNIS II**

Geared toward students with intermediate or advanced tennis skills. 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
TAI CHI/QIGONG**

Introduces the basic techniques of Tai Chi Yang style simplified form and three Qigong exercises, as well as theories and concepts for better health and relaxation through meditation in movement. Can accommodate all levels.

Credits: 1 Lab: 3

**HHP 185TJ
TAI CHI/QIGONG-INTERMEDIATE**

Introduces Tai Chi Chaun Yang Style 48 form and several additional 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 (ADVANCED)**

Geared toward students demonstrating an advanced skill level. Recommended prerequisite: HHP 185VB or HHP 185VC.

Credits: 1 Lab: 3

**HHP 185VB
VOLLEYBALL (BEGINNING)**

For beginning volleyball players and focuses on fundamental skill development and team play.

Credits: 1 Lab: 3

**HHP 185VC
VOLLEYBALL ALL LEVELS**

Focuses on fundamental skill development and team play for beginning students and continuing students who want to enhance their skill level.

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 group class designed to prepare and progressively maintain health and fitness at a target heart rate through walking.

Credits: 1 Lab: 3

**HHP 185WE
WATER AEROBICS**

Introduces water aerobics which improves cardiovascular endurance, muscular strength and flexibility.

Credits: 1 Lab: 3

**HHP 185WN
WILDERNESS TRAINING**

Classes under the HHP 185WN Wilderness Training course number include the following: Wilderness Training Beginning, Orienteering, Hiking and Backpacking, Snowshoeing, Beginning Rock Climbing, Intermediate Rock Climbing, and Back Country Skiing. Recommended prerequisite for Intermediate Rock Climbing: Beginning Rock Climbing or instructor approval. See the footnote in the class schedule for further course descriptions.

Credits: 1 Lab: 3

**HHP 185WT
WEIGHT TRAINING**

Covers the basic principles of weight training and proper use of weight room equipment and safety. The course includes a variety of weight training methods and incorporates core strength and flexibility activities. Students will develop their own weight lifting program throughout the term.

Credits: 1 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. Classes vary according to instructor offerings, which include Ashtanga, Hatha, Vinyasa and Kundalini.

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 185YI
YOGA/PILATES BLEND**

Focuses on a blend of two modalities, with the flexibility of yoga and core strength training of Pilates.

Credits: 1 Lab: 3

**HHP 188
SPECIAL STUDIES: HHP**

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

**HEALTH AND HUMAN
PERFORMANCE: EXERCISE SCIENCE****HHP 131
INTRODUCTION TO EXERCISE/SPORT SCIENCE**

Introduces students to the profession of exercise science including an overview of basic concepts and careers in exercise physiology, athletic training, personal training, coaching, sports medicine, physical therapy and fitness management. Provides a comprehensive introduction to any student who is considering a career in the area of health, fitness, wellness, exercise physiology and sports medicine. Also includes guest speakers currently working in the profession, as well as tours of local fitness facilities. Various fitness certifications are compared and contrasted.

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 pre- or corequisites: WR 123 and BI 121.

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. Recommended pre- or corequisites: WR 123 and BI 121.

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. Three hand-on labs include the assessment of power, body composition, maximal oxygen consumption, and lactate threshold.

Credits: 3 Lecture: 3

HHP 262**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 (personal training). Initial client consultation, required paperwork, risk factor stratification, and legal implications are also discussed.

Credits: 3 Lecture: 3

HHP 270**SPORT AND EXERCISE PSYCHOLOGY**

Introduces broad range of topics relevant to sport and exercise psychology, including sport personality, motivation, psychological skills training, energy management, attention, imagery, competitive anxiety and mental relaxation. Content is relevant for coaches, athletes and others interested in psychology of sport.

Credits: 3 Lecture: 3

HEALTH AND HUMAN PERFORMANCE: HEALTH CLASSES

HHP 212**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. Through the American Heart Association. Course meets the Medical and Dental Assisting standards.

Credits: 1 Lecture: 1

HHP 212A**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. Through the American Heart Association. Course meets the Allied Health and Nursing standards.

Credits: 1 Lecture: 1

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. Offered as needed. 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 121.

Credits: 3 Lecture: 3

HHP 242**STRESS MANAGEMENT**

Helps students develop a comprehensive approach to the management of stress. Examines the historical, emotional, intellectual, spiritual, psychological and physiological foundations of the stress concept. This broad understanding of stress will be the basis for the study of the role that stress plays in health and disease. Students will experiment with a wide variety of stress management and relaxation techniques. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

HHP 248 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 healthcare system. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

HHP 252 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 pre- or corequisites: WR 75, WR 60 and/or WR 65 and MTH 20.

Credits: 3 Lecture: 3 Lab: 1

HHP 252A FITNESS/FIRST AID

Introduces both first aid and wellness topics, such as immediate and temporary care for injury and illness, control of bleeding, care for poisoning, splinting, bandaging and transportation, as well as fitness, nutrition and stress management. Students earn first aid and CPR cards in both adult and infant from the National Safety Council upon completion of course. Recommended pre- or corequisites: WR 75, WR 60 and/or WR 65 and MTH 20.

Credits: 3 Lecture: 3

HHP 258 HOLISTIC WELLNESS

Examines how lifestyle choices affect immunity and the development of chronic diseases. Disorders covered include cardiovascular diseases, cancer, diabetes, osteoporosis, autoimmune disorders, depression and other chronic diseases. Discusses the impact that lifestyle plays on health and illness, models of health behavior change, the biomedical model flaws, and alternative healthcare options in managing and preventing chronic disease. Recommended prerequisite: WR 121.

Credits: 3 Lecture: 3

HHP 266 NUTRITION FOR HEALTH

Introduces the basics of nutrition for a physically active, healthy lifestyle. The course emphasizes nutrient function, energy production, weight management, body composition, psychosocial health, global impact of nutrition, prevention of nutrition-related diseases, food guide pyramid, ergogenic aids, fad diets, dieting, and nutritional research. Course also includes a computerized nutritional assessment.

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 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 WATER SAFETY INSTRUCTOR

Provides participants with the ability to teach swimming and water safety skills and a logical progression for aquatic skill development. Students receive Ellis & Associate Pool Lifeguard certificate upon successful completion of course.

Credits: 2 Lecture: 1 Lab: 2

HHP 295 HEALTH AND FITNESS

Introduces a comprehensive overview of wellness concepts including fitness, nutrition, stress, disease prevention, and various other lifestyle factors that improve the quality of life. Each student's health and fitness is individually evaluated through a series of tests measuring cardiovascular endurance, strength, body composition, flexibility, blood pressure, nutrition, stress levels and blood lipid and blood glucose. Recommended pre- or corequisites: WR 121, MTH 20.

Credits: 3 Lecture: 3

HEALTH AND HUMAN PERFORMANCE: OUTDOOR LEADERSHIP

HHP 111 INTRODUCTION TO OUTDOOR LEADERSHIP

Designed to introduce students to the field of outdoor recreation, outdoor education, adventure education, therapeutic recreation, and experiential education. Upon completion of this course, students should have a good understanding of the differences between the subspecialties in the field. Includes the history of programs, an introduction to theories, current topics, career options and preparation needed for those careers. Course may help students decide if an educational path in outdoor leadership is something they wish to pursue. Guest speakers representing various careers/areas will present their experiences to the class. This is a foundation course and a recommended prerequisite to Outdoor Leadership program courses.

Credits: 3 Lecture: 3

HHP 194MA MOUNTAINEERING I

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 MOUNTAINEERING II

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 207 SEMINAR IN OUTDOOR LEADERSHIP

Discussion and examination of current trends and job opportunities in outdoor leadership. Preparatory work for practicum including resume writing and professional portfolio unique to the field of outdoor leadership. Gives support to practicum students, and therefore is to be taken prior to or concurrently with HHP 280 Practicum in Outdoor Leadership. Instructor permission required.

Credits: 2 Lecture: 2

HHP 244 PSYCHOLOGY OF RISK AND ADVENTURE

Introduces students to psychological theories and topics relevant to adventure and risk including perception, motivation, anxiety, arousal and risk taking. Provides a theoretical and skills based approach to understanding why the psychological components of risk and adventure play a pinnacle role as an outdoor leader.

Credits: 3 Lecture: 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. Recommended pre or corequisites: WR 60 and/or WR 65 and MTH 20.

Credits: 3 Lecture: 3 Lab: 1

HHP 255 OUTDOOR LIVING SKILLS

Educates the student on how to travel safely for extended periods in the backcountry. Presents essentials of life (water, food and shelter/clothing) and how they can be provided in an outdoors setting. Also discusses navigation, backcountry medicine and wilderness use/wilderness concepts. Lecture, discussion and lab (demonstration, practical application and practice) used. Students conduct one solo overnight and one group weekend outing. Recommended prerequisites: MTH 20 and WR 121.

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 prerequisites: WR 121 and instructor approval.

Credits: 3 Lecture: 2 Lab: 3

HHP 273 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 prerequisites: WR 121 and instructor approval.

Credits: 3 Lecture: 2 Lab: 3

HHP 294CC **CHALLENGE COURSE PRACTICES**

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 prerequisites: WR 121 and instructor approval.

Credits: 3 Lecture: 1.5 Lab: 4.5

HHP 294RC **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 **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 and oar 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

See page 131, Allied Health, for a description of AH 111, Medical Terminology I, and AH 112, Medical Terminology II.

HIT 103 **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 20.

Credits: 5 Lecture: 4 Lab: 3

HIT 104 **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. Recommended prerequisite: HIT 103.

Credits: 5 Lecture: 4 Lab: 3

HIT 131A **DOCUMENT MANAGEMENT AND TECHNOLOGY**

Provides specific fundamental experience in the identification and application of inpatient and outpatient records and reports. 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 **MEDICAL TRANSCRIPTION APPLICATIONS**

Provides training and practical experience in the transcription of various medical reports and is designed to instill accuracy and perfection. Students will spend twelve 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: completion of HIT program first-year curriculum.

Credits: 4 Lab: 12

HIT 180 HIPAA MANAGEMENT

Presents a medical-legal foundation with respect to HIPAA (Health Insurance Portability and Accountability Act), federal legislation enacted in 1996. HIPAA encompasses the privacy, security, and electronic transaction standards for maintaining and transmitting protected health information. This course is designed to provide a basis for understanding the impact this legislation imposes on the health care industry and on health information management. Offered spring term.

Credits: 2 Lecture: 2

HIT 182 INTRODUCTION TO MEDICAL CODING

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. Basic coding guidelines by body system and/or payor requirements will be explored and applied including reporting of ICD9CM/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 healthcare facility and experience planned activities in the environment of the actual workplace. Provision for technical experiences is an integral component of curriculum. Provides for lecture preparation and application of classroom and laboratory objectives in supervised affiliation site in Oregon, typically. Performed under leadership of a registered health information administrator or registered health information technician. Fulfills 60 of the 120 total clinical hours distributed in the curriculum at various points of program completion. Forty hours of actual clinical and 20 hours of preparatory instruction. Offered summer term between the first and second year. Prerequisite: completion of first-year HIT curriculum or permission of the HIT director.

Credits: 2 Other: 6

HIT 199 SELECTED TOPICS: HEALTH INFORMATION TECHNOLOGY

Credits: 4

HIT 201 LEGAL ASPECTS 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. Prerequisite: completion of first-year HIT program curriculum.

Credits: 4 Lecture: 4

HIT 203 HEALTHCARE DELIVERY AND TECHNOLOGY

Provides analysis of the common terms and procedures related to the development and implementation of information systems: 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. Prerequisite: completion of first-year HIT program curriculum.

Credits: 3 Lecture: 3

HIT 272 HEALTH INFORMATION MANAGEMENT

Studies organization and management principles in order to develop effective skills in 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 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. Enrollment limited to HIT majors. Offered winter term. Recommended prerequisite: MTH 20.

Credits: 3 Lecture: 2 Lab: 2

HIT 282**QUALITY IMPROVEMENT IN HEALTH CARE**

Application and analysis of quality management, utilization management, risk management and other related studies. Also covered is the analysis of clinical data to identify trends that demonstrate quality, safety and effectiveness of health care. Abstraction of data for facility-wide quality management and performance improvement programs is also utilized. Skills in the review of registries (cancer, disease, diabetes, etc.), indexes and databases are attained. Enrollment limited to HIT majors. Offered spring term. Prerequisite: HIT 283.

Credits: 4 Lecture: 3 Lab: 2

HIT 283**CODING CLASSIFICATIONS**

Places major emphasis on coding guidelines and application of codes for diseases and operations in the ICD9CM 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**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 second-year program students and as skill upgrade. Strongly recommend ICD9CM coding skills. Offered spring term. Recommended prerequisites: MTH 20 and HIT 283.

Credits: 4 Lecture: 4

HIT 288**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 curriculum. Provides for application of classroom and laboratory objectives in supervised affiliation sites in Oregon, typically. Performed under leadership of a registered record administrator or accredited record technician. Fulfills 60 of the 120 total DP clinical hours for the program. Total of 40 clinical hours plus 20 preparatory instruction hours distributed in curriculum at various points of program completion. Offered summer term

between the first and second year and summer term following graduation. Prerequisite: must have completed first year and second year of HIT curriculum or have permission of HIT director.

Credits: 2 Other: 6

HIT 294**RHIT EXAM PREPARATION**

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****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. Offered fall term. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

HST 102**HISTORY OF WESTERN CIVILIZATION**

Surveys development of European civilization from the high Medieval period through the 1700s. 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. Offered winter term. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

**HST 103
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. Offered spring term. 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. Offered fall term. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

**HST 105
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, Middle East and Western Europe's first worldwide expansion. Need not be taken in sequence. Offered winter term. 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. Offered spring term. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

**HST 188
SPECIAL STUDIES: HISTORY**

Credits: 1 to 3

**HST 199
SELECTED TOPICS: HISTORY**
Credits: 1 to 4

**HST 201
HISTORY OF THE UNITED STATES**

Surveys the development of America through the end of the Civil War. Examines the interaction of Native American nations with the culturally diverse European settlers. This time period includes the colonial period, Revolutionary War, birth of a new nation, expansion from ocean to ocean, and unexpected disintegration into a Civil War pitting brother against brother. Typically offered every term. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

**HST 202
HISTORY OF THE UNITED STATES**

Surveys rapid industrialization, impact of new immigration and resulting cultural diversity, from the end of the Civil War to the gradual emergence of the U.S. as a world power during the 20th century. Typically offered every term. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

**HST 204
HISTORY OF THE CIVIL WAR**

Examines problems of the Civil War period including politics, military leadership, troop life and activity, civilians, Native Americans, African-Americans, technology and unique geographic challenges in order to better understand the impact of the war on the entire nation of this "brothers' war." Typically offered every other year. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

**HST 207
HISTORY OF THE AMERICAN WEST**

Examines Native American tribal life, the emergence of a multicultural frontier, the problems, failures, and success of new settlement patterns in the growing commercial development of the West's unique assets. Typically offered every other year. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

**HST 218
NATIVE AMERICAN HISTORY**

Examines Native American (or First Peoples) lifestyles before and after contact with European settlers. With increasing demands by whites and new immigrants for land, Native Americans struggled for survival implementing various tactics to retain control of their homelands and retain their unique cultures. Typically offered every other year. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

HST 225**US WOMEN'S HISTORY**

Survey of the problems and achievements of U.S. women from the 16th to the 20th century, including issues of race, ethnicity, and class. Recommended pre- or corequisite: WR 121.

Credits: 4 Lecture: 4

HST 230**GREAT AMERICANS IN THOUGHT AND ACTION**

Credits: 2 Lecture: 2

HST 231**GREAT AMERICANS IN THOUGHT AND ACTION**

Credits: 2 Lecture: 2

HST 232**GREAT AMERICANS IN THOUGHT AND ACTION**

Credits: 2 Lecture: 2

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**HISTORY OF THE PACIFIC NW**

Overview of Native American societies of the Pacific Northwest, patterns of white movement into the area, acquisition of the region by the United States, the long road to statehood, and the impact of national politics on this unique region. Recommended 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 260**HISTORY OF THE MIDDLE EAST**

The Middle East is considered to be home of the three great monotheisms of Western Theology and much of today's philosophy. This course will cover the 4000 years of history from origins to the modern era, providing students with a foundation to evaluate current events in the context of Middle Eastern influences.

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: 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/or WIC designation. Recommended prerequisites: WR 121 and LIB 127.

Credits: 4 Lecture: 4

HST 292**EAST ASIAN HISTORY**

Late Imperial China, Japan and Korea and their evolution/revolution into modern nation-states. Recommended that HST 290, HST 291 and HST 292 be taken in sequence, but not required. May be taught with a MIC and/or WIC designation. Recommended prerequisites: WR 121 and LIB 127.

Credits: 4 Lecture: 4

HST 299**SELECTED TOPICS: HISTORY**

Credits: 1 to 4

HOSPITALITY, TOURISM & RECREATION

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

SPECIAL STUDIES: HOSPITALITY, TOURISM AND RECREATION

Credits: 1 to 3

HTRM 233

EVENT PLANNING

Introduces students to special event planning processes and techniques. Emphasis is on the designing, planning, marketing and staging events. Additional topics will focus on management, legal compliance, risk management, financial control and successful event evaluation.

Credits: 3 Lecture: 3

HUMAN DEVELOPMENT

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

HD 155

MENTORING FOR OREGON LEADERSHIP INSTITUTE I

Provides a theoretical and practical framework for exploring the mentoring process as well as intercultural skills and effective

communication strategies. Mentors learn and practice skills required that promote lifelong learning and leadership. They demonstrate and share these skills with minority youth in the tri-county area at nine intensive day-long sessions one Saturday per month. The mentoring relationship requires a three-quarter commitment.

Credits: 3 Lecture: 2 Other: 2

HD 156

MENTORING FOR OREGON LEADERSHIP INSTITUTE II

The Oregon Leadership Institute helps college students build on the skills required to promote lifelong learning and leadership and to apply these skills to their own lives as well as to convey them to high school student mentees, who are primarily of Latino/a descent. Practice of the mentoring process, communication and presentation skills, development of and modeling teambuilding skills are covered.

Credits: 3 Lecture: 2 Other: 2

HD 157

MENTORING FOR OREGON LEADERSHIP INSTITUTE III

The Oregon Leadership Institute helps college students build on the skills required to promote lifelong learning and leadership and to apply these skills to their own lives as well as to convey them to high school student mentees, who are primarily of Latino/a descent. Practice of the mentoring process, communication and presentation skills, development of and modeling teambuilding skills are covered as well as formal reflection upon the experience gained from exploring and building upon theoretical applications in a cultural context.

Credits: 3 Lecture: 2 Other: 2

HD 188

SPECIAL STUDIES: HUMAN DEVELOPMENT

Credits: 1 to 3

HD 190

LATINO LEADERSHIP

Provides high school students with experiences designed to foster leadership, teamwork and positive communication skills. College mentors model and encourage students to value higher education, make positive choices, show respect for self and others, and accept personal responsibility. Course requirements enable students to experience college expectations.

Credits: 2 Lab: 6

HD 199

SELECTED TOPICS: HUMAN DEVELOPMENT

Credits: 1 to 4

HD 299

SELECTED TOPICS: HUMAN DEVELOPMENT

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: 3

FA 257

LITERATURE INTO FILM

Implements analysis of the structure of motion pictures to teach about the 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.

Credits: 4 Lecture: 4

HUM 211

CULTURE AND LITERATURE OF AFRICA

Introductory study of representative oral arts, literature, film and related creative arts, in English or in translation, of sub-Saharan African peoples, examined in context of their histories and cultural traditions. May be taught with a MIC and/or WIC designation.

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.

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.

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.

Credits: 4 Lecture: 4

HUM 240

NATIVE AMERICAN LITERATURE AND CULTURE

Introduction to traditional oral and contemporary Native American texts with an emphasis on cultural contexts and continuity. May be taught with a MIC and/or WIC designation.

Credits: 4 Lecture: 4

HUM 256

INTRODUCTION TO AFRICAN-AMERICAN LITERATURE

Survey of African-American literature (selected fiction, autobiography, poetry and drama of the 19th and 20th centuries), placed in the context of major African-American achievements in the visual arts, music and film. May be taught with a MIC and/or WIC designation.

Credits: 4 Lecture: 4

HUM 261

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.

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.

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.

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.

Credits: 4 Lecture: 4

HUM 265**POPULAR CULTURE: NOIR FILM AND FICTION**

Historical, thematic and technical study of film noir and related fiction as a subversive force in popular culture. May be taught with a WIC designation.

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.

Credits: 4 Lecture: 4

HUM 299**SELECTED TOPICS: HUMANITIES**

Credits: 1 to 4

WS 101**INTRODUCTION TO WOMEN’S AND GENDER STUDIES**

Explores impact of women’s and gender studies in many academic fields. Examines women’s status and achievements, and the issues raised for men and women by feminism and the women’s movement. May be taught with a MIC and/or WIC designation.

Credits: 4 Lecture: 4

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**REPORTING 1**

A beginning class in news writing. 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 2**

A continuation of Reporting 1 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**

Community work experience in journalism (may include internships in local media).

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

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.

Credits: 4 Lecture: 4

ENG 105**INTRODUCTION TO LITERATURE: DRAMA**

Examines drama as literature, through its traditions, imaginative purposes and organizing visions, such as tragedy, comedy and realism. Close reading and interpretation of selected plays with attention to the cultural contexts of their creation and to the literary dimensions of character, dialogue, plot, setting, language and theme. Need not be taken in sequence.

Credits: 4 Lecture: 4

ENG 106**INTRODUCTION TO LITERATURE: POETRY**

Explores critical and personal pleasures of poetry as a powerful and compact means to express feelings and ideas and respond to the varieties of human experience. Close reading of a wide range of poetry with attention to poets' roles, literary traditions and poetic strategies expressed through tone, speaker, situation and event, theme, irony, language, images, sounds, rhythms, symbols, open and closed poetic forms. Need not be taken in sequence.

Credits: 4 Lecture: 4

ENG 107**WESTERN WORLD LITERATURE: ANCIENT**

Explores origins of Western culture through a study of representative Greek, Roman and other literary philosophical and historical texts. Mythology and the hero's quest as incorporated in Homer and Virgil may form the core of the readings. Need not be taken in sequence.

Credits: 4 Lecture: 4

ENG 108**WESTERN WORLD LITERATURE: MIDDLE AGES**

Survey of representative texts explores Middle Ages, Renaissance, up to the 18th century Enlightenment, including rise of Christianity, chivalry and the vision quest. Need not be taken in sequence.

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.

Credits: 4 Lecture: 4

ENG 140**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.

Credits: 4 Lecture: 4

ENG 202**SHAKESPEARE**

The major plays of Shakespeare's middle and later periods. May also include selected study of his sonnets. Need not be taken in sequence.

Credits: 4 Lecture: 4

ENG 204**SURVEY BRITISH LITERATURE I**

Examines representative texts from the heroic age (Medieval) through the Enlightenment (18th century). Literary forms such as the 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.

Credits: 4 Lecture: 4

ENG 205**SURVEY BRITISH LITERATURE II**

Examines representative texts from the romantic period through contemporary literature. The romance of nature, industrial growth, urban experience, the rise of new class identities and alienation of the individual are themes in this period. Literary forms such as lyric and narrative poetry, short stories, the novel, and the drama of social realism and literature of the absurd are studied. Explores relations between texts and their cultural and historical contexts. Need not be taken in sequence. May be taught with a WIC designation.

Credits: 4 Lecture: 4

ENG 221**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.

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.

Credits: 4 Lecture: 4

**ENG 260W
INTRODUCTION TO WOMEN WRITERS**

Focuses on the achievements and perspectives of women writers through critical analysis of their literary works and literary strategies. Uses a chronological, stylistic or thematic approach.

Credits: 4 Lecture: 4

**ENG 288
SPECIAL STUDIES: LITERATURE**

Credits: 1 to 4

**ENG 299
SELECTED TOPICS: LITERATURE**

Credits: 1 to 4

MANUFACTURING TECHNOLOGY**MET 160
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
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 welding 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 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
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 the 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 semi-precision measuring, introduction to statistical process control, geometric dimensioning and tolerancing, and pneumatic gauging topics. Prerequisites: instructor approval.

Credits: 2 Lab: 6

**MFG 153
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
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. Prerequisite: 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. Prerequisite: 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. Prerequisite: 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. Prerequisite: instructor approval.

Credits: 2 Lab: 6

**MFG 213
CNC TURNING OPERATOR**

Computer numerical control turning center operator training. Includes safety, machine maintenance, coordinate systems, tool length offsets, controller editing and operations, overrides, tool setups and loading, carbide insert and holder selections, tool vectors, and part running. Prerequisite: 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. Prerequisite: 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
CAD/CAM LATHE**

CAD/CAM operations related to programming computer numerical control turning centers. Includes drilling, grooving and threading operations using wire frame and solids model geometry. A student considering this course should be familiar with CNC lathe operations and G & M programming. 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. Prerequisite: 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. Prerequisite: instructor approval.

Credits: 2 Lab: 6

MFG 251**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-to-point, 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**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**AUTOMATED WELDING AND CUTTING**

Cutting and welding steel shapes using numerically controlled processes. Includes cutting torch settings, setup, maintenance practices and plasma cutting exercises. Prerequisite: 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. Prerequisite: 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 short-circuiting 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. Prerequisite: 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**

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**

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**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**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**

An introduction and overview of the basic principles of kinesiology. Emphasis is placed on anatomical terminology, skeletal anatomy and function, and the study of the joints and their functions. Palpation skills will be emphasized. This is the first part of a four-part series of Kinesiology for massage therapists. Prerequisite: entrance into the Massage Therapy program.

Credits: 3 Lecture: 2 Lab: 3

LMT 118**KINESIOLOGY II**

The basic study of the muscles of the head, trunk and upper body that will include origin, insertions, actions, nerves and the bony landmarks. Palpation skills will be emphasized. This is the second of a four-part series of Kinesiology for massage therapists. Recommended prerequisite: successful completion of LMT 113 (with a minimum grade of 75 percent).

Credits: 4 Lecture: 3 Lab: 3

LMT 124**KINESIOLOGY III**

The basic study of the muscles of the lower body that will include origin, insertions, actions, nerves, and the bony landmarks. Palpation skills will be emphasized. This is the third of a four-part series of Kinesiology for massage therapists. Recommended prerequisite: successful completion of LMT 118 (with a minimum grade of 75 percent).

Credits: 3 Lecture: 2 Lab: 3

LMT 128**KINESIOLOGY IV**

A complete review of the muscles of the trunk and head, upper body and lower body that will include origin, insertions, actions, nerves and the bony landmarks. Increased emphasis on the application of kinesiology in a massage session. Palpation skills will be emphasized. This is the last of a four-part series of Kinesiology for massage therapists. Recommended prerequisite: LMT 124.

Credits: 3 Lecture: 2 Lab: 3

LMT 140**PATHOLOGY**

The study of the basic indications and the effects of massage therapy on the body systems. Contraindications to massage therapy will be discussed. The basic mechanisms of the

disease process and medical terminology will be reviewed.
Recommended prerequisites: BI 121 and BI 122.

Credits: 5 Lecture: 5

**LMT 145
MESSAGE 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
MESSAGE 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. Prerequisite: entrance into the Massage Therapy program.

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**

Designed to transition and assist the student from the classroom to the field of professional massage therapy. This course will examine the rules and laws, business, career options and other issues relating to the practice of massage therapy. Licensing exams applications will be completed. A review for the Oregon practical exam will be offered. Recommended prerequisites: BI 121, BI 122 or equivalent, LMT 145, LMT 150 and LMT 155.

Credits: 1 Lecture: 1

**LMT 170
PROFESSIONAL ETHICS AND RULES**

Introduces and examines the professional boundaries, ethics, rules and laws that govern the practice of massage therapy. Oregon Administrative Rules and Statutes that apply to licensed massage therapists will be discussed. Prerequisite: entrance into the Massage Therapy program.

Credits: 2 Lecture: 2

**LMT 175
CLINIC I**

Students will practice basic relaxation massage on the general public while demonstrating professionalism, client communication, client consent and client safety during this supervised 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 practice treatment and relaxation massage on the general public. SOAP charting, treatment plans and assessments will be practiced. Students will demonstrate professionalism, client communication, client consent and client safety during this supervised clinic. Recommended prerequisite: LMT 175.

Credits: 3 Lecture: 1 Lab: 6

**LMT 188
SPECIAL STUDIES: LMT**

Specific modules that relate to first-year courses.

Credits: 1 to 4

**LMT 199
SELECTED TOPICS: LICENSED MASSAGE THERAPY**

Selected topics related to massage therapy.

Credits: 4

**LMT 210
ADVANCED CLINIC**

Offers opportunities to experience massage therapy in different settings and career choices. A public clinic may be available for the students to practice their treatment skills. Proof of liability may be required if a student is licensed in massage therapy. Recommended prerequisite: one-year certificate, LMT, or other related health professional.

Credits: 2 Lecture: 1 Other: 3

LMT 240**ADVANCED TREATMENT I**

Advanced myofascial coursework that focuses on the treatment of specific injuries and conditions that fall within the scope of practice of a massage therapist. Treatment protocols will be practiced. Recommended prerequisite: one year certificate, LMT, or other related health professional.

Credits: 5 Lecture: 4 Lab: 3

LMT 250**ADVANCED TREATMENT II**

This is a Level I cranio-sacral therapy course. This course will include the Upledger CS1 class. Credit for Level I will be transferable to Upledger training. Emphasis will be on relevant anatomy. Recommended prerequisite: one year certificate, LMT, or other related health professional.

Credits: 5 Lecture: 4 Lab: 3

LMT 260**ADVANCED TREATMENT III**

This spa course will focus on wet and dry treatments commonly used in spa facilities. Hot stone, herbal linen wraps, body scrubs, reflexology, Feng Shui concepts and a variety of spa treatments will be practiced in class. Spa visits may be incorporated into this course. Contraindications, hygiene, sanitation, and spa etiquette will be included. Recommended prerequisite: one year certificate, LMT, or other related health professional.

Credits: 5 Lecture: 4 Lab: 3

LMT 270**CLINICAL ASSESSMENTS**

The evaluation and assessment of a client's range of motion, posture and gait and how this may pertain to the medical pathology of pain related to muscular or skeletal issues. In this non-treatment course a student will analyze and determine when it may be necessary to refer a client to other health care providers. Tools, tests and client charting will be incorporated into a client's evaluation and assessment. Recommended prerequisite: one year certificate, LMT, or other related health professional.

Credits: 4 Lecture: 3 Lab: 3

LMT 280**EFFECTIVE THINKING IN OFFICE DECISIONS**

This course will help the student to make office choices that enhance the viability of a massage practice. Insurance billing, retail selling, target marketing, credentialing and other issues a practice will encounter. Peer reviews, case management and research opportunities will be explored. Recommended prerequisite: one year certificate, LMT, or other related health professional.

Credits: 2 Lecture: 2

LMT 288**SPECIAL STUDIES: LMT**

Specific coursework related to massage therapy. Recommended prerequisite: one year certificate, LMT, or other related health profession.

Credits: 4

LMT 295**INTEGRATED THERAPIES**

A study of several different modalities that may include Thai, Energetic, Sound, Shiatsu, and Ayurveda. This is an in-depth exploration of the history, cultural aspects and benefits these modalities may play in a traditional massage therapy setting. Recommended prerequisite: one year certificate, LMT, or other related health professional.

Credits: 3 Lecture: 2 Lab: 3

LMT 299**SELECTED TOPICS: LMT**

Selected topics related to massage therapy. Recommended prerequisite: one year certificate, LMT, or other related health profession.

Credits: 7

MATHEMATICS

MTH 10**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 29**FRACTION REVIEW WORKSHOP**

Provides a concentrated experience for students needing a review of fractions and associated number theory skills. This course is not a replacement for students who place into or need to take MTH 10. May be taken concurrently with another math class.

Credits: 2 Lecture: 2

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
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
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 or TI-84 recommended. Recommended prerequisite: MTH 85 or equivalent.

Credits: 4 Lecture: 4

MTH 95
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 or TI-84 recommended.

Credits: 4 Lecture: 4

MTH 99
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 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. Prerequisite: "C" or better in MTH 95, MTH 95 equivalency met, appropriate placement exam score, or instructor approval.

Credits: 4 Lecture: 4

MTH 111
COLLEGE ALGEBRA

Introduces graphs and functions (linear, quadratic, polynomial, rational, exponential and logarithmic) using a graphing calculator. First term of a precalculus sequence for science students. Recommended prerequisite: MTH 95 or equivalent. Graphing calculator required. TI-83 or TI-84 recommended.

Credits: 4 Lecture: 4

MTH 111F
MATH FITNESS 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
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 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 or TI-84 recommended.

Credits: 4 Lecture: 4

MTH 198**PRACTICUM IN MATHEMATICS**

Allows students to gain exposure to an elementary classroom setting, gain experience in teaching/tutoring math to elementary school age children and gain an understanding of learning theory and processes as they apply to mathematics education.

Credits: 2 Lecture: 1 Other: 3

MTH 199**SELECTED TOPICS: MATHEMATICS**

Offers selected topics in mathematics for courses generally available only once. Topics and credits to be arranged.

Credits: 1 to 3

MTH 211W**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**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**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 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 or TI-84 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 or TI-84 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 two-sample 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. TI-83 or TI-84 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 maximum-minimum problems; antiderivatives and definite integrals. Topic presentation includes group discovery activities. Real applications, technical writing, group activities and group projects are emphasized. A graphing calculator is required. TI-83 or TI-84 is recommended. Computer literacy recommended. Recommended 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 or TI-84 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 or TI-84 is recommended. Computer literacy recommended. Recommended prerequisite: MTH 252.

Credits: 4 Lecture: 3 Lab: 3

**MTH 254
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 or TI-84 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 or TI-84 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, systems of linear first-order differential equations and applications appropriate for science and engineering; numerical, graphical, series, and analytical solutions are covered. Computer skills are recommended and a graphing calculator is required. TI-83 or TI-84 is recommended. Recommended prerequisite: MTH 253.

Credits: 4 Lecture: 3 Lab: 2

MEDICAL ASSISTANT**MA 113
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, pediatric care, immunization knowledge, and preparing and maintaining examination and treatment area. Math component includes basic skills review in preparation for understanding and calculating medication dosage. Must be enrolled in the Medical Assistant program to register in this course. Corequisite: MA 125

Credits: 2 Lecture: 1 Lab: 2

**MA 123
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. Prerequisites: MA 113 Introduction to Medical Assisting and MA 125 Medical Office Procedures I. Corequisite: MA 135

Credits: 4 Lecture: 3 Lab: 3

MA 125 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 enrolled in the Medical Assistant Program to register. Corequisite: MA 113, Introduction to Medical Assisting.

Credits: 4 Lecture: 4

MA 133 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; performing spirometry testing, teaching peak flow meters and initiating nebulizer treatments, performing and understanding purpose and significance of diagnostic testing (such as electrocardiogram) and screening, monitoring legislation related to current health care practices and applying advance pharmacology principles to understand purpose and significance of oral and parenteral medications. Math component includes applying methods of dosage calculation or prepare and administer medication as directed by physician. Prerequisites: MA 123, Medical Assisting Basic Procedures and MA 135, Medical Office Procedure II. Corequisite: 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 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. Prerequisites: MA 123 and MA 135.

Recommended prerequisite: CIS 120

Credits: 1 Lab: 2

MA 147 MEDICAL ASSISTANT PRACTICUM I

The clinical practicum is a required, supervised, unpaid learning experience which takes place on site at a prearranged clinical facility. 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 40 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

Focuses on a basic introduction to the military, the military grid reference system, and Army leadership. Classes consist of lecture, class participation and writing assignments. Class is open to any student in any course of study.

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. Further develops skills in map reading, land navigation and tactical maneuvering at team levels. Class is open to any student in any course of study.

Credits: 1 Lecture: 1

MS 103**MILITARY SCIENCE III**

Develops problem solving and assertiveness skills, goal setting, active listening and decision making skills. Lessons apply leadership to military tasks of map reading, navigation and tactics. Class is open to any student in any course of study.

Credits: 1 Lecture: 1

MS 180**ARMY PHYSICAL FITNESS**

Familiarizes student with the Army Physical Fitness Program FM 21-20 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. Class is open to any student in any course of study.

Credits: 1 Lab: 2

MS 201**BASIC MILITARY SKILLS**

Introduction 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 its effects on the military. Class is open to any student in any course of study.

Credits: 2 Lecture: 2

MS 202**LAND NAVIGATION**

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. Students will be given hands on training, incorporating basic topographic map reading skills, land navigation using a lensatic compass, terrain association and practical exercises. Class is open to any student in any course of study.

Credits: 2 Lecture: 2

MS 203**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. Class is open to any student in any course of study.

Credits: 2 Lecture: 2

MS 205**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 are 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**MUS 188****SPECIAL STUDIES: MUSIC**

Credits: 1 to 3

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 112**MUSIC THEORY IB**

Harmony of the common-practice period with attention to part writing (the melodic aspects of music). This sequence course should be taken by all students who intend to major or minor in music. Recommended prerequisite: MUS 111. Recommended corequisite: MUS 115.

Credits: 3 Lecture: 3

MUS 113**MUSIC THEORY IC**

Harmony of the common-practice period with attention to part writing (the melodic aspects of music). This sequence course should be taken by all students who intend to major or minor in music. Recommended prerequisite: MUS 112. Recommended corequisite: MUS 116.

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 115
MUSICIANSHIP IB**

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 Music Theory IB. Recommended prerequisite: MUS 114.

Credits: 2 Lecture: 2

**MUS 116
MUSICIANSHIP IC**

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. Course is designed to be taken concurrently with Music Theory IC. Recommended prerequisite: MUS 115.

Credits: 2 Lecture: 2

**MUS 199
SELECTED TOPICS: MUSIC**

Credits: 1 to 3

**MUS 201
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 202
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, MUS 203.

Credits: 3 Lecture: 3

**MUS 203
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, MUS 203.

Credits: 3 Lecture: 3

**MUS 205
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 212
MUSIC THEORY IIB**

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 211. Recommended corequisite: MUS 215.

Credits: 3 Lecture: 3

**MUS 213
MUSIC THEORY IIC**

A continuation of common practice period harmony (Music Theory I) with stress on chromatic resources and style analysis including an introduction to harmonic practices of the 20th century. Recommended prerequisite: MUS 212. Recommended corequisite: MUS 216.

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

**MUS 215
MUSICIANSHIP IIB**

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 214. Recommended corequisite: MUS 212

Credits: 2 Lecture: 2

**MUS 216
MUSICIANSHIP IIC**

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 215. Recommended corequisite: MUS 213.

Credits: 2 Lecture: 2

**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**

A select group of singers that focuses on various jazz idioms: blues, funk, Latin and straight-ahead. Enrollment is by audition. Recommended corequisite: MUS 197A College Choir. Contact choral program director for information about required audition.

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 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: 2 Lecture: 2

**MUS 194
BIG BAND JAZZ**

Study and performance of music for large jazz band. May be repeated; no limit. Contact ensemble conductor for information about required audition.

Credits: 1 Other: 3

**MUS 195
CONCERT BAND**

Study and performance of music for the concert band. One major concert is presented each term. May be repeated; no limit. Contact ensemble conductor for information about required audition.

Credits: 1 Other: 3

**MUS 196
SYMPHONY**

The study and performance of music for symphony orchestra. One major concert is presented each term. Instructor approval required. May be repeated; no limit. Contact ensemble conductor for information about required audition.

Credits: 1 Other: 3

**MUS 197
CASCADE CHORALE**

Study, rehearsal and performance of choral literature. Meets Tuesday evenings and welcomes both college students and community members. Performs a major concert each term. May be repeated; no limit. Please note: purchase of concert dress outfit required. Contact choral program director for information about required audition.

Credits: 1 Other: 3

**MUS 197A
COLLEGE CHOIR**

Focuses on preparation and performance of choral literature from a wide variety of styles and periods. Performs one major concert each term, and occasionally other concerts, that are often performed off campus. May be repeated; no limit. Contact choral program director for information about required audition.

Credits: 2 Lecture: 1 Lab: 3

**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

NURSING**NUR 88
SPECIAL STUDIES: NURSING**

Allows nursing students to pursue a special content area. Special study arrangements must be made through the nursing program coordinator.

Credits: 1 to 8

**NUR 95
NURSING ASSISTANT**

Covers basic nursing assistant level one care and effective communication skills for clients in acute and long-term care facilities. Issues of confidentiality, client rights and role of the nursing assistant are discussed. Students are eligible to sit for the Oregon State Board of Nursing sanctioned Certified Nursing Assistant Level One examination upon satisfactory performance of course outcomes and assessments; and completion of the minimum 150 mandatory student contact hours: 75 hours of lecture/lab and 75 hours of clinical experience. Clinic takes place in acute and long-term care facilities. To enroll in the course, students must hold a current Healthcare Provider CPR card, pass a criminal history check, and meet immunization and TB test requirements. Department approval is required.

Credits: 7 Lecture: 3 Lab: 4.5 Other: 7.5

**NUR 96
LEVEL 2 NURSING ASSISTANT - ACUTE CARE**

Provides an Oregon State Board of Nursing approved standardized curriculum and competency evaluation for the designation of Level 2 Nursing Assistant in Acute Care. This course focuses on technical skills, interpersonal skills and communication, safety, infection control, and documentation with the outcome of demonstrated proficiency in knowledge, skills and abilities in these areas. The course has a clinical component to be scheduled at an acute care facility. To enroll in the course, students must hold a current, unencumbered Oregon CNA 1 certificate, hold a current Healthcare Provider CPR card, pass a criminal history check, and meet immunization and TB test requirements. Department approval required.

Credits: 6 Lecture: 2 Lab: 3 Other: 6

**NUR 99
SPECIAL TOPICS: NURSING**

Allows nursing students to pursue a special content area.

Special study arrangements must be made through the nursing program director.

Credits: 1 to 8

**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 clients 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. Corequisite: enrollment in NUR 260.

Credits: 9 Lecture: 4 Lab: 6 Other: 9

**NUR 107
NURSING II**

Introduces students to the knowledge and skills that are necessary in providing nursing care to individual clients 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. Prerequisites: NUR 106, NUR 260.

Credits: 10 Lecture: 4 Lab: 4.5 Other: 13.5

**NUR 108
NURSING III**

Provides students with the opportunity to obtain the knowledge and skills that are necessary to implement the role of a practical nurse in providing care to acutely ill patients across the lifespan. Concepts of mental health 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 client-centered care based on established standards and contribute to and participate 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. The course concludes with a national board preparation exam. Prerequisite: NUR 107. Corequisite: enrollment in NUR 261.

Credits: 9 Lecture: 4 Lab: 3 Other: 12

NUR 110**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. Not currently offered.

Credits: 4 Other: 16

NUR 188**SPECIAL STUDIES: NURSING I**

Allows first-year nursing students to pursue a special content area in nursing. Special study arrangements must be made through the nursing program director.

Credits: 1 to 8

NUR 199**SELECTED TOPICS: NURSING I**

Presents selected topics of study in the field of nursing offered on a temporary or experimental basis.

Credits: 1 to 8

NUR 206**NURSING IV**

Focuses on the integration of knowledge and skills acquired in the first year of the Nursing program as the student transitions from the practical nurse to the registered nurse role. Nursing curriculum expands on the concepts of nursing process, caring, holism and professionalism at the registered nurse level. Emphasis is on the development of competency in critical thinking and caring interventions toward individuals and their significant others. Clinical skills lab focuses on the development of higher level assessment, 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 advanced placement requirements.

Credits: 11 Lecture: 6 Lab: 4.5 Other: 10.5

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 client teaching, client care planning and client care management skills. Clinical skills lab provides students with opportunities to simulate the care of complex, acutely ill clients. The clinical practicum focuses on applying the nursing process to provide and direct holistic, individualized client 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. Prerequisite: NUR 206.

Credits: 10 Lecture: 5 Other: 15

NUR 208**NURSING VI**

Focuses on refining clinical decision-making skills related to the complex health care needs of clients across the lifespan in a variety of health care 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 clients with life-threatening conditions are addressed in relation to clinical practice. Students participate in a four-week, full-time capstone clinical experience focusing on managing groups of clients or individual clients 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. Not currently offered.

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. Not currently offered.

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**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 client medication administration to the clinical setting in Nursing I. Corequisite: NUR 106.

Credits: 2 Lecture: 2

**NUR 261
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 client care setting in Nursing III. Prerequisite: NUR 107 and NUR 260. Corequisite: NUR 108.
Credits: 2 Lecture: 2

**NUR 288
SPECIAL STUDIES: NURSING**

Allows second-year nursing students to pursue a special content area in nursing. Special study arrangements must be made through the nursing program director.
Credits: 1 to 4

**NUR 299
SELECTED TOPICS: NURSING**

Presents selected topics of study in the field of nursing offered on a temporary or experimental basis.
Credits: 1 to 3

NUTRITION**FN 225
HUMAN NUTRITION**

In-depth introduction to the science of nutrition, stressing characteristics of nutrients and their food sources. Examines digestion, absorption and metabolism of nutrients. Includes individualized diet analysis and current interest topics including weight management and some disease therapies.
Credits: 4 Lecture: 4

OFFICE ADMINISTRATION**OA 116
OFFICE PROCEDURES PRACTICUM**

Introduces and applies typical office policies and procedures, including 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, e-mail, handling financial matters, conduction business research, and working effectively with others. Instructor approval required.
Credits: 3 Other: 9

**OA 121
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 Lab: 2

**OA 180
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: 1 to 3

**OA 188
SPECIAL STUDIES: OFFICE ADMINISTRATION**

Credits: 1 to 3

**OA 199
SELECTED TOPICS: OFFICE ADMINISTRATION**

Credits: 1 to 3

**OA 280
CO-OP WORK EXPER 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. Instructor approval required.
Credits: 1 to 4

PHARMACY TECHNICIAN**PHM100
INTRODUCTION TO PHARMACY TECHNICIAN**

This course orients students to the organization and practice of the pharmacy profession, providing an understanding of the regulatory agencies and laws that affect pharmacy practice. Emphasis is placed on the duties and responsibilities of the pharmacy technician. Course objectives explore employment opportunities, introduction to interpreting and processing prescriptions, pharmacy law, standards of practice and orientation to the skills required for the occupation of a pharmacy technician. Prerequisite: entrance to the Pharmacy Technician program or instructor approval.
Credits: 3 Lecture: 3

**PHM 110
PHARMACY CALCULATIONS**

This course reviews basic mathematics related to the application of math concepts to the duties of the pharmacy technician. This course covers the systems of weight, measurement and temperature and the conversion from one system to the other. Emphasis is placed on the math skills needed to calculate doses, drug quantity or volume, intravenous flow rates and percentage concentrations and to learn the mechanics of proportions related to pharmaceutical dosing. The basics of retail pricing and accounting are introduced. Prerequisite: entrance to the Pharmacy Technician program or instructor approval.

Credits: 3 Lecture: 3

**PHM 120
DRUG CLASSIFICATION AND THERAPEUTICS I**

This course introduces students to trade and generic names of commonly prescribed drugs used in prevention and treatment of various disease entities. Emphasis is placed on important contraindications, side effects, precautions and interaction of drugs and the process of drug utilization review. The course will provide a basic understanding of pharmacological categories and factors that can affect drug kinetics. Prerequisite: entrance to the Pharmacy Technician program or instructor approval.

Credits: 3 Lecture: 3

**PHM 130
DRUG CLASSIFICATION AND THERAPEUTICS II**

This course continues the introduction to trade and generic names of commonly prescribed drugs used in prevention and treatment of various disease entities. Emphasis is placed on important contraindications, side effects, precautions and interaction of drugs and the process of drug utilization review. The course will provide a basic understanding of pharmacological categories and factors that can affect drug kinetics. Prerequisite: entrance to the Pharmacy Technician program or instructor approval.

Credits: 3 Lecture: 3

**PHM 140
PHARMACY TECHNICIAN PROCEDURES**

This course provides students with the knowledge and skills to perform the tasks of a pharmacy technician, including interpreting, processing and distributing medications in the hospital and retail pharmacy. This includes preparation of non-compounded products, non-sterile compounded products, sterile compounded products, and the preparations and handling of cytotoxic and hazardous products. Students will have practice maintaining patient profiles and typing and filling drug orders. Students will be prepared to participate in the administration of a pharmacy practice. This course requires a one-credit (20 hour) face-to-face lab/lecture section. The lab will be provided at the COCC campus. The lab will be conducted over 2 weekends during the term and distance students will be required to travel to COCC. Prerequisite: entrance to the Pharmacy Technician program or instructor approval.

Credits: 4 Lecture: 3 Other: 2

**PHM 181
PHARMACY TECHNICIAN SEMINAR**

Seminar discussions on various aspects of the practicum. Students will share work-related experiences with the instructor and their peers. Students will prepare to take the Pharmacy Technician National Certification exam. Covers employment opportunities, resume writing, completing job applications and interviewing skills. Prerequisite: entrance to the Pharmacy Technician program or instructor approval. Corequisites: PHM 190, PHM 191.

Credits: 1 Lecture: 1

**PHM 190
PRACTICUM I: HOSPITAL/INSTITUTIONAL**

An unpaid learning experience which takes place on site at a prearranged clinical facility and supervised by a registered pharmacist. Provides student with the opportunity to perform clearly identified competencies within the clinical setting. Each credit is equivalent to 30 hours participation in the clinical setting. Students will be prepared to participate in the administration of a pharmacy practice, including filling drug orders. Prerequisite: entrance to the Pharmacy Technician program or instructor approval. Corequisite: PHM 181.

Credits: 2 Other: 6

**PHM 191
PRACTICUM II: RETAIL/COMMUNITY**

An unpaid learning experience which takes place on site at a prearranged pharmacy and supervised by a registered pharmacist. Provides student with the opportunity to perform clearly identified competencies within the clinical setting. Each credit is equivalent to 30 hours participation in the clinical setting. Prerequisite: entrance to the Pharmacy Technician program or instructor approval. Corequisite: PHM 181.

Credits: 3 Other: 9

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
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.

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.

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.

Credits: 3 Lecture: 3

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: 4 Lab: 3

PH 202
GENERAL PHYSICS II

Studies basic electrostatic and magnetic interactions. Builds on concepts from PH 201 and continues into electrostatic forces, electric field concepts, electric potential, basic DC circuit concepts, magnetic interactions and forces, sources of magnetic fields and Faraday's Law. Lab addresses concepts and measurements in thermal physics and continues to explore the processes by which science seeks answers to questions.

Meets the basic requirements for many pre-health and life science programs. Should be taken in sequence. Recommended corequisite: MTH 112.

Credits: 5 Lecture: 4 Lab: 3

PH 203
GENERAL PHYSICS III

Studies periodic behavior and topics from modern physics. Builds on concepts from previous terms and considers the physics of periodic motion, mechanical waves, wave interference, standing waves, acoustic waves, electromagnetic waves, geometric optics, diffractions and topics from special relativity to quantum mechanics. Lab includes basic optical experiences along with a long-term project to affirm student abilities to integrate investigative lab concepts from previous terms. Meets the basic requirements for many pre-health and life science programs. Should be taken in sequence.

Credits: 5 Lecture: 4 Lab: 3

PH 211
GENERAL PHYSICS I

Studies Newtonian Mechanics beginning with basic math concepts and continuing into kinematics, dynamics, uniform circular motion, energy, momentum, and rotational equivalents of some of these topics. At all stages, applications of calculus to the solving of problems will be explored. Lab addresses experiments and applied settings of Newtonian Mechanics along with explorations of diverse methods for analyzing and interpreting scientific data. Required for engineering students and most students planning programs in the physical sciences. Should be taken in sequence. Recommended prerequisite: MTH 251.

Credits: 5 Lecture: 4 Lab: 3

PH 212
GENERAL PHYSICS II

Studies basic electrostatic and magnetic interactions. Builds on concepts from PH 211 and continues into electrostatic forces, electric field concepts, electric potential, basic DC circuit concepts, magnetic interactions and forces, sources of magnetic fields and Faraday's Law. At all stages, applications of calculus to the solving of problems will be explored. Lab addresses concepts and measurements in thermal physics and continues to explore the processes by which science seeks answers to questions. Required for engineering students and most students planning programs in the physical sciences. Should be taken in sequence. Recommended prerequisites: MTH 252 and PH 211.

Credits: 5 Lecture: 4 Lab: 3

PH 213
GENERAL PHYSICS III

Studies periodic behavior and topics from modern physics. Builds on concepts from previous terms and considers the physics of periodic motion, mechanical waves, wave interference,

standing waves, acoustic waves, electromagnetic waves, geometric optics, diffractions and topics from special relativity to quantum mechanics. At all stages, applications of calculus to the solving of problems will be explored. Lab includes basic optical experiences along with a long-term project to affirm student abilities to integrate investigative lab concepts from previous terms. Required for engineering students and most students planning programs in the physical sciences. Should be taken in sequence. Recommended prerequisites: MTH 253 and PH 212.

Credits: 5 Lecture: 4 Lab: 3

PH 299

SELECTED TOPICS: PHYSICS

Credits: 1 to 4

POLITICAL SCIENCE

PS 188

SPECIAL STUDIES: POLITICAL SCIENCE

Credits: 1 to 3

PS 198

CO-OP WORK EXP POLITICAL SCIENCE INTERNSHIP

Credits: 1 to 15

PS 199

SELECTED TOPICS: POLITICAL SCIENCE

Credits: 1 to 4

PS 201

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 203

STATE/LOCAL GOVERNMENT

Examines the thousands of governments located at the state and local levels. Explores separation of powers among governors, legislatures and state court systems. Opportunity for individual involvement in the administration, innovation and promotion of democracy is investigated. May be taught with a WIC designation. Recommended pre- or corequisite: WR 121.

Credits: 3 Lecture: 3

PS 204

INTRODUCTION TO COMPARATIVE POLITICS

Surveys the field of comparative politics through in-depth analyses of countries in 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. Typically offered every other year. 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. Typically offered every other year. 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 207

POLITICS OF THE MIDDLE EAST

This course is intended as an introduction to politics in the Middle East and therefore provides a general overview of some of the chief issues of contemporary Middle Eastern politics. These include the impact of colonialism, nationalism and nation-state formation, regional crisis, the Arab-Israeli conflict, the politics of oil, Islamism, democratization, political economy, globalization and human rights, etc.

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

PSY 188

SPECIAL STUDIES: PSYCHOLOGY

Credits: 1 to 3

PSY 199

SELECTED TOPICS: PSYCHOLOGY

Credits: 1 to 4

PSY 201

MIND AND BRAIN

Introduces psychology as a scientific study of the biological bases of behavior. Includes history of psychology as a science and surveys methods of inquiry, statistics, sensation, perception, states of consciousness including drug effects, motivation, emotion, learning, memory, language, thinking and intelligence. The major theoretical approaches to psychology are included. Recommended prerequisite: placement scores that allow enrollment into college-level reading.

Credits: 4 Lecture: 4

PSY 202

MIND AND SOCIETY

Emphasizes psychology as a scientific process, surveying methods of inquiry. Overview of selected areas of psychological study including human development through the life span; human sexuality; health psychology; personality theories and assessment; psychological disorders; intervention and therapy; social psychology, and human factors psychology. The major theoretical approaches to psychology are included. Recommended prerequisite: placement scores that allow enrollment into college-level reading.

Credits: 4 Lecture: 4

PSY 207

APPLIED PSYCHOLOGY

Introduces the basic foundation of psychology to degree-seeking students and career and technical students. Focuses on practical applications of psychological principles in the workplace and everyday life. Topics include motivation, emotions, individual development, identifying problem behavior, coping resources, group dynamics and communication skills. This course is considered a human relations component. Offered fall term.

Credits: 3 Lecture: 3

PSY 214

PERSONALITY PSYCHOLOGY

Examines the major theoretical perspectives on personality formation, including biological, psychodynamic, humanistic, cognitive, behavioral and sociocultural influences. Personality tests and measures are also discussed. The major theoretical approaches to psychology are included. Offered winter term. Recommended prerequisites: placement scores that allow enrollment into college-level reading and PSY 201 or PSY 202.

Credits: 4 Lecture: 4

PSY 215

DEVELOPMENTAL PSYCHOLOGY

Comprehensive study of human development over the life span from prenatal through late adult development. Focuses on physical, cognitive and psychosocial changes throughout the human life cycle and emphasizes an interactionist approach to explain developmental processes and outcomes. The major theoretical approaches to psychology are included. This course is considered a human relations component. Recommended prerequisites: Placement scores that allow enrollment into college-level reading and 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. Offered fall term. Recommended prerequisites: placement scores that allow enrollment into college level-reading and PSY 202 or SOC 201.

Credits: 4 Lecture: 4

PSY 219

ABNORMAL PSYCHOLOGY

Introductory survey of the variety of emotional, mental and behavioral disorders experienced by humans. History, theoretical perspectives, diagnostic criteria and issues, etiology and treatment strategies are covered for major forms of psychopathology. Recommended prerequisites: placement scores that allow enrollment into college-level reading 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. Offered winter term. Recommended prerequisite: Placement scores that allow enrollment into college-level reading.

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. The major theoretical approaches to psychology are included. Not currently offered.

Recommended prerequisites: placement scores that allow enrollment into college-level reading 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. The major theoretical approaches to psychology are included. Not currently offered. Recommended prerequisites: placement scores that allow enrollment into college-level reading 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 4

READING

RD 099

SELECTED TOPICS: READING

Credits: 1 to 4

RD 117

COLLEGE READING

Offers instruction in flexible reading skills. Focuses on building reading speed and comprehension, and acquiring a repertoire of reading strategies suitable for understanding and retaining information acquired in typical college reading.

Credits: 3 Lecture: 3

RD 199

SELECTED TOPICS: READING

Credits: 1 to 3

SOCIOLOGY

SOC 141

FILM & SOCIETY: RACE, GENDER, AND CLASS

Examines the representation of race, social class and gender in film. Special attention is given to how particular representations reflect the broader historical context surrounding when the films were produced and culturally based audience sentiments. Anthropological and sociological analyses of the films will be provided to give a multi-disciplinary account on 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 the relationship between individuals and society from the sociological perspective, with focus on symbolic interactionism. Examines current social-psychological issues including aggression and prejudice, altruism and moral development, love and friendship, “groupthink” and social movements. Offered spring term. Recommended prerequisite: 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. Offered fall and winter term. Recommended prerequisites: WR 121, SOC 201 or instructor approval.

Credits: 4 Lecture: 4

**SOC 212
RACE, CLASS, ETHNICITY**

Examines the interrelationships between race, class, and gender and political and economic systems. Historical and contemporary issues are highlighted. Different levels of analysis are provided, including societal structures, representations and social interactions. Recommended prerequisites: WR 121, LIB 127, SOC 201 or instructor approval.

Credits: 4 Lecture: 4

**SOC 214
SOCIALIZATION**

Examines the lifelong processes by which people learn the norms and values of their society. Includes processes in primary and secondary socialization, resocialization and anticipatory socialization. Explores impacts of socialization agents, including media, culture and societal composition. Surveys classic and contemporary theories of socialization in the sociological and broader social science perspective. Recommended prerequisite: SOC 201.

Credits: 3 Lecture: 3

**SOC 215
SOCIAL ISSUES AND SOCIAL MOVEMENTS**

Applies sociological analysis to contemporary issues and movements. Examples include the environmental crisis, race and ethnic relations, sexual deviancy, drug abuse, health care and violence. Recommended prerequisites: WR 121, SOC 201 or instructor approval.

Credits: 4 Lecture: 4

**SOC 216
INTRODUCTION TO THE SOCIOLOGY OF WOMEN**

Examines gender as an organizing principle of societies, from the individual through families, groups and social institutions. Introduces the interconnections of gender with race, class and sexuality. Surveys the historical and cultural development of gender; the impact of gender on relationships, the workplace, crime, sex trades, religion, education, the state and mass media. Recommended prerequisite: SOC 201.

Credits: 3 Lecture: 3

**SOC 219
SOCIOLOGY OF RELIGION**

Surveys a variety of religious traditions and introduces the sociological perspective for the study of religion as part of a larger social order. Explores the nature of religious beliefs and practices, both historically and in contemporary context. Examines the relationship between religious traditions and the current globalization of the institute of religion in culture and society. Recommended prerequisite: SOC 201.

Credits: 3 Lecture: 3

**SOC 250
SOCIOLOGY OF POPULAR CULTURE**

Course applies a sociological perspective to the study of films, music, advertising and other forms of popular culture. Three separate elements of popular culture are examined: the production of culture, the reception of culture and the text or symbols themselves. Recommended prerequisite: WR 121.

Credits: 4 Lecture: 4

**SOC 299
SELECTED TOPICS: SOCIOLOGY**

Credits: 1 to 4

SPEECH**SP 111
FUNDAMENTALS OF PUBLIC SPEAKING**

Emphasizes enhancing the relationship between speaker and audience through the content, organization and delivery of short oral presentations. Helps relieve student speech anxiety.

Credits: 3 Lecture: 3

**SP 114
ARGUMENTATION AND CRITICAL DISCOURSE**

Explores theories of argumentation. Students will develop skills of inquiry and advocacy through oral and written discourse, including critical analysis and rules of evidence. Students will also practice planning, constructing and delivering persuasive arguments in a variety of extemporaneous formats. Through this course, students will learn how to more effectively influence others as well as raise their awareness of others trying to influence them.

Credits: 3 Lecture: 3

**SP 115
INTRODUCTION TO INTERCULTURAL COMMUNICATION**

Explores the 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
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
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.
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.
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.
Credits: 1 Lecture: 1

SP 270
COMMUNICATING LOVE
 Provides an overview of the bio-psychological roots of romantic/erotic love, a critique of media images of love and offers practical training in communication skills that maintain and enhance long-term love relationships. Recommended prerequisite: WR 121.
Credits: 3 Lecture: 3

SP 280
CO-OP WORK EXPERIENCE SPEECH INTERNSHIP
Credits: 1 to 3

SP 299
SELECTED TOPICS: SPEECH
 Explores an area of communication not included in the regular curriculum. Possible topics include gender communication, media issues and relational communication.
Credits: 1 to 3

STRUCTURAL FIRE SCIENCE

SFS 101
INTRODUCTION TO EMERGENCY SERVICES
 Provides an overview of fire protection and EMS; career opportunities within and related fields; philosophy and history of fire and EMS; fire loss analysis; organization and function of public and private fire and EMS services; fire department as part of local government; laws and regulations affecting the fire service; fire and emergency service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.
Credits: 3 Lecture: 3

SFS 102
FIRE SERVICE SAFETY AND SURVIVAL
 Creates a positive attitude toward firefighter safety. Student will recognize the seriousness of the firefighter injury and death problem. Student will recognize their responsibility for reducing future injuries and deaths; provide information for improving safety considerations; foster the belief that most firefighter injuries and deaths are preventable.
Credits: 2 Lecture: 2

SFS 110**BUILDING CONSTRUCTION FOR FIRE PERSONNEL**

Studies building construction with emphasis on how buildings fail when subjected to fire. Case studies used to illustrate points. Studies of roof and wall construction enable the student to predict failure points and adapt fire fighting strategies accordingly. Buildings under construction and those subjected to external forces will also be studied. Field trips take students into the community to study various construction techniques. Recommended prerequisites: SFS 101, SFS 102.

Credits: 3 Lecture: 3

SFS 112**PUBLIC EDUCATION AND FIRE PREVENTION**

Studies fundamentals of public relations pertaining to fire service including emergency operations, general public appearances, writing news releases, articles and speeches and general media contact. Students work in developing an effective public education campaign for delivery. Audience type and message content are 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.

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.

Credits: 1 Lecture: 1

SFS 188**SPECIAL STUDIES: STRUCTURAL FIRE SCIENCE**

Credits: 1 to 4

SFS 199**SELECTED TOPICS: SFS**

Credits: 1 to 4

SFS 205**FIRE BEHAVIOR AND COMBUSTION**

Explores the theories and fundamentals of how and why fires start, spread, and how they are controlled. Prerequisites: completion of first year of program and department approval required.

Credits: 3 Lecture: 3

SFS 210**FIRE INVESTIGATION**

Provides basic information in fire cause determination. Studies arson detection, protection of point of origin, fire indicators, motives and vehicle fire investigation. Field trips and classroom props aid the student in understanding the science of fire investigation. SFS 210 is a technical elective. Recommended prerequisites: SFS 101, SFS 102. Department approval required.

Credits: 3 Lecture: 3

SFS 211**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.

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.

Credits: 3 Lecture: 3

SFS 215**URBAN INTERFACE**

Designed to assist structure and wildland firefighters who will be making tactical decisions when confronting wildland fire that threatens life, property and improvements, in the wildland/urban interface. Instructional units include interface awareness, size-up, initial strategy and incident action plan, structure triage, structure protection tactics, incident action plan assessment and update, follow-up and public relations, and firefighter safety in the interface. Prerequisite: completion of first year of program and department approval required.

Credits: 3 Lecture: 2 Other: 2

SFS 230**RESCUE PRACTICES**

Explores techniques and applications of specialized rescue practices in modern fire service. Focuses on vehicle rescue, steep-angle rescue and swift-water rescue with basic overviews of ice rescue, electrical rescue and trench rescue techniques. Using modern tools and techniques, students apply classroom learning in several comprehensive and dynamic field exercises. Emergency Medical Technician - Basic training allows students to integrate fire and EMS activities at an emergency rescue scene. 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: 3 Lecture: 2 Lab: 3

SFS 232**FIRE PROTECTION HYDRAULICS AND WATER SUPPLY**

Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems. Recommended prerequisite: MTH 60.

Credits: 4 Lecture: 4

SFS 233**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. Department approval required.

Credits: 3 Lecture: 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 or program and department approval required.

Credits: 1 Lecture: 1

SFS 288**SPECIAL STUDIES:STRUCTURE FIRE**

Credits: 1 to 3

SFS 299**SELECTED TOPICS: STRUCTURAL FIRE SCIENCE**

Credits: 1 to 4

STUDY SKILLS**HD 100CL****INTRODUCTION TO COLLEGE LIFE**

Introduces students to college resources and student services that support successful academic growth and planning. The class discusses both study skills and personal characteristics (critical thinking, decision making, responsibility) a student needs to ensure a successful transition to college life. Designed to give new students a broad overview of college basics.

Credits: 1 Lecture: 1

HD 100CS**COLLEGE SUCCESS**

Addresses both study skills and personal characteristics (critical thinking, decision making and responsibility) a student needs to ensure a successful transition to college life. Will introduce students to college resources and student services that support successful academic growth and planning. Will explore learning styles, proactive communication strategies, and study skills such as note taking, memory techniques for positive class performance. Will introduce students to techniques for effectively managing their time and achieving balance between school, work and personal commitments. Will also identify essential college resources for the development of a realistic and workable academic plan. Designed to give new students a broad overview of college basics.

Credits: 2 Lecture: 2

HD 100NT**NOTE TAKING**

Introduces students to active listening and note taking for later recall of information from lectures, classroom and activities. Students will learn to identify key points, use the five most effective techniques for taking notes, use notes for class assignments and tests, and design a note-taking style for personal fit.

Credits: 1 Lecture: 1

HD 100OL**EXPLORING ONLINE LEARNING**

Introduces students to the world of online education. By taking into account personal characteristics, learning styles and knowledge of technology, students will determine if online courses fit their academic goals. Specific tools for evaluating the quality of online degree programs will be presented, while challenges and common misconceptions of online classes will be discussed.

Credits: 2 Lecture: 2

HD 100PM**PROCRASTINATION & MOTIVATION**

Introduces students to the characteristics of procrastinating behaviors. The class explores reasons for procrastination and how to self-negotiate to eliminate nonproductive behaviors. Specific tools to address individual styles of procrastination will be introduced with an emphasis on identifying personal values to motivate one to action and achieve defined goals.

Credits: 1 Lecture: 1

HD 100SC**SUCCESS IN THE CLASSROOM**

Introduces students to the skills and knowledge needed to perform effectively in the classroom to achieve academic goals. The class explores learning styles, pro-active assertive communication strategies, in-class resources for success, goal setting for positive class performance and mid-term strategies for personal assessment and evaluation. Characteristics of the successful student are integrated into class topics and assignments.

Credits: 1 Lecture: 1

HD 100TM**TIME MANAGEMENT**

Introduces students to techniques for effectively managing their time and achieving balance among school, work, and personal commitments. Students will define values and academic goals, assess where time is spent, and develop a plan to achieve academic success. Weekly, monthly and long-term schedules along with daily to-do and priority lists will be developed. Tools for evaluation will be introduced and a six-month plan developed.

Credits: 1 Lecture: 1

HD 100TT**TEST TAKING**

Designed for students challenged by tests or assessment materials. The class introduces students to the process of effective test taking including preparation for all types of tests and classroom assessment tools, study and relaxation techniques and actual test taking. Students will be introduced to pro-active strategies to address test anxiety, utilize test results for improved performance, and access instructors for guidance and performance.

Credits: 1 Lecture: 1

HD 101**STUDY STRATEGIES**

Emphasizes study skills, acquisition of college knowledge, resources and personal responsibility while building and using strategies for college and workplace success. Effective learning and study strategies are reviewed and practiced including text reading, note taking, test taking, listening strategies and time management. Learning styles are identified and connected to pro-active behaviors. College resources, campus protocol and ethical

student behavior are introduced and integrated with examination of self-talk and application of visualization processes to enhance confidence and self-esteem in the college environment.

Credits: 3 Lecture: 3

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 200**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.

Credits: 3 Lecture: 3

TA 207**READINGS IN THEATER**

Offers a study of selected plays, loosely grouped by country of origin, theme, era or playwrights. Emphasis placed on texts in performance rather than on literary analysis. May be repeated once for credit.

Credits: 3 Lecture: 3

TA 280**CO-OP WORK EXPERIENCE THEATER**

Credits: 1 to 3

WILDLAND FIRE/FUELS MANAGEMENT

WF 100 INCIDENT COMMAND SYSTEMS

Introduces students to the principles of the Incident Command System (ICS) associated with incident-related performance. Topics include leadership and management, delegation of authority and management by objectives, functional areas and positions, briefings, organizational flexibility, transitions and transfers.

Credits: 3 Lecture: 3

WF 101 INTRODUCTION TO FIRE BEHAVIOR AND FIREFIGHTER TRAINING

Trains new firefighters in basic firefighting skills and the basic fire behavior factors that will aid them in the safe and effective control of wildland fires. Students will receive NWCG certification in S-130, S-190, L-180 and S-133.

Credits: 3 Other: 6

WF 102 S-131 AND S-134

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

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 prerequisites: WF 100, WF 101.

Credits: 1 Lecture: 1

WF 134 S-134 LOOKOUTS, COMMUNICATION, ESCAPE ROUTES, SAFETY ZONES

Students become engaged in the process of designing their own safety program. The small group exercises will discuss and develop the L, C, E, S, creating a list of performance standards. The entire class will then work together to produce and edit a contract, based on consensus, which guides performance.

Credits: 2 Lecture: 2

WF 181 L-180 HUMAN FACTORS-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 SELECTED TOPICS: WILDLAND FIRE

Credits: 4

WF 200 S-200 INITIAL ATTACK INCIDENT COMMAND

Designed to meet the training needs of the ICT4. Presented in a lecture/discussion format and supplemented with group exercises. The six instructional units cover: readiness and mobilization, size-up, planning and ordering, deployment and containment, administrative requirements, and post-fire evaluation.

Credits: 2 Lecture: 2

WF 201 NFPA INSTRUCTOR 1

NFPA Instructor 1 is an intensive instructional methodology program. It addresses the job performance requirement of the National Fire Protection Agency, 1041 Standard for Fire Service Instructor Professional Qualifications and the National Wildfire Coordinating Group. The course prepares students for planning instruction, using a variety of instructional methods, teaching diverse learners, and evaluating course outcomes. The course also provides guidelines for addressing the critical issues of safety and the legal issues of training, and it provides opportunities for participants in application activities.

Credits: 3 Lecture: 3

WF 203 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: WF 131, WF 134.

Credits: 3 Lecture: 2 Lab: 3

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.

Credits: 3 Lecture: 3

WF 231**S-231 ENGINE BOSS**

Skill course designed to produce student proficiency in the performance of all duties associated with the single resource engine boss. Topics include tactical use and safety precautions required to establish an effective engine operation on a large incident.

Credits: 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**

This is an entry-level course providing training in the functional roles and responsibilities connected with firing operations. The course covers planning, ignition procedures and techniques, and equipment applicable to wildland and prescribed fire. This course addresses the role of the ignition specialist or firing boss as the organization manages escalation from a non-complex to a complex fire situation. Note: This course is not intended to qualify or certify any personnel in the use or transport of any firing device; rather, it is to provide the potential firing boss a description of available equipment and the requirements specific to each such device. Department approval required.

Credits: 2 Lecture: 2

WF 244**S-244 FIELD OBSERVER**

Provides students with the necessary skills to perform as a field observer (FOBS) and/or a prescribed fire effects monitor (FEMO). Topics include identifying and interpreting maps, making map calculations, using observation aids and instruments, performing field observations, and communicating information. There will be a daylong field trip.

Credits: 2 Lecture: 2

WF 260**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 261**S-261 APPLIED INTERAGENCY INCIDENT BUSINESS MANAGEMENT**

This course is designed to provide the prerequisite skills/knowledge necessary to perform the tasks of the entry-level finance positions, i.e., commissary manager, personnel time recorder, equipment time recorder, compensation for injury specialist, and claims specialist, in the Incident Command

System (ICS). It is designed to be taken after completion of Interagency Incident Business Management (S-260).

Credits: 2 Lecture: 2

WF 270

S-270 BASIC AIR OPERATIONS

Covers aircraft types and capabilities, aviation management and safety, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Recommended prerequisites: WF 131, WF 134.

Credits: 2 Lecture: 2

WF 281

L-280 FOLLOWERSHIP/LEADERSHIP

Training course designed as a self-assessment opportunity for individuals preparing to step into a leadership role. There is one day of classroom instruction followed by a day in the field with small teams of students working through a series of problem-solving events (Field Leadership Assessment course). Topic areas include leadership values and principles, transition challenges for new leaders, situational leadership, team cohesion factors, and ethical decision-making.

Credits: 2 Lecture: 2

WF 284

I-400 ADVANCED INCIDENT COMMAND SYSTEMS

This course directs the student toward an operational understanding of large single-agency and complex multi-agency/multi-jurisdictional incident responses. Topics include fundamentals review for command and general staff, major and/or complex incident/event management, area command, and multi-agency coordination. This course was developed in conjunction with the US Fire Administration (H467) and the Emergency Management Institute (G400). These courses are built on the same lesson objectives and content as the NWCG I-400 course and are interchangeable; they are all National Incident Management System (NIMS) compliant. Department approval required.

Credits: 2 Lecture: 2

WF 286

PACIFIC NORTHWEST ENGINE ACADEMY

Students attending the Pacific Northwest Engine Academy will receive training utilizing a variety of methods and techniques, which will provide information about water handling and will improve engine operation skills. These skills are applicable to both fuels management and fire suppression activities. The student will be instructed using ICS terminology.

Credits: 3 Lecture: 2 Lab: 3

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: WF 131, WF 260, WF 134.

Credits: 3 Lecture: 3

WF 291

I-300 INTERMEDIATE INCIDENT COMMAND SYSTEMS

This course provides description and detail of the Incident Command System (ICS) organization and operations in supervisory roles on expanding or type 3 incidents. Topics include ICS fundamentals review, incident/event assessment and agency guidance in establishing incident objectives, Unified Command, incident resource management, planning process, demobilization, transfer of command, and close out. Department approval required.

Credits: 2 Lecture: 2

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

Meets the training needs of the incident commander, type 3 (ICT3). Presented in a lecture/discussion format and supplemented with group exercises. There are six instructional units that cover information gathering, planning, supporting organization, operations, transitioning, and demobilization/administrative requirement.

Credits: 2 Lecture: 2

WF 295**S-330 TASK FORCE/STRIKE TEAM LEADER**

Prepares the student to perform in the role of task force leader (TFLD) or any strike team leader. Examples and exercises are specific to wildland fire suppression. If the student is expected to perform in another risk area, applicable examples and exercises in the area will be added.

Credits: 3 Lecture: 3

WF 296**S-336 SUPPRESSION TACTICS**

Meets 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**

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**SELECTED TOPICS: WILDLAND FIRE**

Credits: 1 to 4

WRITING

WR 60**RHETORIC AND CRITICAL THINKING I**

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: Reading and Writing placement test scores that place the student in WR 60.

Credits: 4 Lecture: 4

WR 65**RHETORIC AND CRITICAL THINKING II**

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: Reading and Writing placement test scores that place the student in WR 65; or a grade of "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: Reading and Writing placement test scores that place the student in WR 75; or a grade of "C" or higher in WR 60.

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**SELECTED TOPICS: WRITING**

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. Prerequisites: Writing and Reading placement test scores that place the student in WR 121; or a 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 and LIB 127.

Credits: 3 Lecture: 3

**WR 170
DOCUMENTATION**

Instruction emphasizes what constitutes plagiarism and how to avoid it by applying college-level documentation practices, using accepted discipline-appropriate academic and professional styles, in research-based writing assignments across the curriculum.

Credits: 1 Lecture: 1

**WR 188
SPECIAL STUDIES: WRITING**

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
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 prerequisites: WR 122 and LIB 127.

Credits: 3 Lecture: 3

**WR 240
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
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
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 288
SPECIAL STUDIES: MAGAZINE WRTG**

Credits: 1 to 3

**WR 299
SELECTED TOPICS: WRITING**

Credits: 1 to 3

BOARD OF DIRECTORS

DONALD V. REEDER (Zone 1)

Madras, term expires 2013

JOYCE LYNN GARRETT (Zone 2)

Prineville, term expires 2013

ANTHONY (TONY) DORSCH (Zone 3)

Redmond, term expires 2013

DAVID E. FORD (Zone 4)

Bend, term expires 2013

CONNIE LEE (Zone 5)

Bend, term expires 2011

CHARLEY MILLER (Zone 6)

Bend, term expires 2011

JOHN OVERBAY (Zone 7)

Sunriver, term expires 2011

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

MATTHEW J. McCOY

Vice President for Administration

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

DIANA K. GLENN

Instructional Dean

B.S. in Business Education, 1970, Oregon State University; Ed.M. in Business Education, 1979, Oregon State University. At COCC since 1986.

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

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.

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.

JACOB AGATUCCI

Assistant Professor I of English

B.A. in English, 1999, University of Oregon; M.A. in English, 2001, University of Oregon. At COCC since 2001.

THOMAS J. BARRY

Associate Professor 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, 2006, Kansas State University. 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. Forestry, 1987, Humboldt State University; Ph.D. in Wildland Resource Science, 1996, University of California, Berkeley. At COCC since 1999.

JON BOUKNIGHT

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

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. in Computer Science Education, 1987, University of Oregon. At COCC since 1983.

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

Associate Professor of Computer and Information Systems

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 1997.

KELLY DAVIS-MARTIN

Assistant Professor II of Health & Human Performance

B.S. in Sociology, 2002, Oregon State University; M.P.H., 2003, Portland State University. At COCC since 2006.

MICHELE D. DECKER

Associate Professor of Nursing

B.S. in Community Health Education, 1979, Oregon State University; B.S. in Nursing, 1983, and M.S. in Nursing Education & 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

Assistant Professor II Accounting/General Business

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.

CARLA ELMS**Assistant Professor and Program Director for Medical Assisting**

B.A. in Psychology and Spanish, 1992, Western Oregon State College; L.P.N. Program, 2002, Central Oregon Community College. At COCC since 2008.

BRUCE L. EMERSON**Professor of Physics**

B.S. in Physics, 1979, Montana State University; Ph.D. in Physics, University of Utah, 1992. At COCC since 1992.

CATHERINE L. FINNEY**Associate College Librarian Collections and Acquisitions Professor**

B.A. in English, 1983, Carleton College; M.L.S. in Library Science, 1988, University of Washington. At COCC since 1992.

MICHAEL P. FISHER**Associate Professor of Forest Resources Technology**

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; Ph.D. in Rangeland Resources, 2004, Oregon State University. At COCC since 1998.

THERESA FREIHOEFER**Assistant Professor I of Business**

B.A. in Business Economics, 1983, UCLA; M.B.A., 1987, Pepperdine University. At COCC since 2007.

MICHAEL C. GESME**Professor of Music**

B.A. in Music, 1992, Luther College; M.M. in Orchestral Conducting, 1994, University of Missouri-Columbia; M.A. in Music History, 1996, University of Missouri-Columbia. At COCC since 1996.

KEVIN D. GROVE**Assistant Professor I of Physical Science/Physics**

B.S. in Civil Engineering, 1997, Montana State University; M.S. in Chemical Engineering, 1999, Montana State University. At COCC since 2005.

AMY E. HARPER**Associate Professor 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**Associate Professor of Computer and Information Systems**

B.A. in Biology, 1975, State University of New York; M.S. in Information Systems, 1988, Naval Postgraduate School. At COCC since 1998.

M. SCOTT HAYS**Associate Professor of Business Administration**

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**Professor of Chemistry**

B.A. in Chemistry, 1992, Central College; Ph.D. in Biochemistry, 1996, Montana State University. At COCC since 1999.

MICHAEL HOLTZCLAW**Associate Professor of Geography**

B.A. in International Affairs, 1988, Lewis and Clark College; M.A. in Geography, 1993, Ohio State University; Ph.D. in Geography, 1997, Ohio State University. At COCC since 1997.

JULIE F. HOOD**Associate Professor 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**Associate Professor of Art**

B.A. in Art, 1967, St. John's University; M.F.A., Art/Painting, 1973, University of Washington. At COCC since 2000.

TINA HOVEKAMP**Associate College Librarian Collections and Acquisitions Professor**

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.

AMY VAN DUSEN HOWELL**Assistant Professor II of Education/Early Childhood Education**

B.A. in Psychology, 1997, Willamette University; Ph.D. in Educational Psychological Studies, 2007, University of Colorado. At COCC since 2004.

MARJORIE HOYE**Associate Professor of Composition and Technical Writing**

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.

KAREN HUCK**Professor of Speech**

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.

CHARLES R. HUTCHINGS**Associate Professor of Spanish**

B.A. in Spanish, 1986, California State University, Stanislaus; M.A. in Spanish, 1991, California State University, Fresno. At COCC since 1992.

BEVERLEE R. JACKSON**Associate Professor of Health Information Technology/
Program Director**

A.S. in Medical Record Technology, 1980, Central Oregon Community College; B.A. in Interpersonal Communications, 1986, Marylhurst College. At COCC from 1990-94 and since 2002.

EDWARD W. JOHNSON**Associate Professor of Human Biology**

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

JULIE A. KEENER**Professor of Mathematics**

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.

KELVIN T. KEMPFER**Associate Professor of Computer and Information Systems**

A.A.S. in Electronic Engineering Technology, 1979, Southern Illinois University. At COCC since 1988.

JAMES W. KNOX**Assistant Professor II of Music**

B.S. in Music, 2000, Portland State University; M.M. in Choral Conducting, 2003, Portland State University. At COCC since 2003.

SARA L. KREMPEL**Professor of Art**

B.A. in Art and Philosophy, 1974, University of Wisconsin; B.F.A. in Art, 1980, University of Wisconsin; M.F.A. in Art, 1985, University of Wisconsin. At COCC since 1990.

JAMES L. KRESS**Professor of Business**

B.B.A. in Business, 1976, University of Oregon; M.B.A. in Business Administration, 1993, Portland State University. At COCC since 1988.

TERRY KRUEGER**Professor of English**

B.A. in English, 1976, University of Montana; M.F.A. in English, 1981, University of Iowa.; Ph.D. in English, 1987, University of Iowa. At COCC since 1990.

LOWELL H. LAMBERTON**Professor of Business**

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.

LILLI ANN LINFORD-FOREMAN**Professor of Speech/Theatre**

A.B. in Drama, 1982, Stanford University; M.F.A. in Theatre, 1987, Pennsylvania State University. At COCC since 1987.

AARON K. LISH**Associate Professor of Health and Human Performance**

B.S. in Sport Science, 1993, Northern Michigan University; M.S. in Exercise Science, 1995, Northern Michigan University. At COCC since 1996.

DAVID H. LIU**Assistant Professor II of Mathematics**

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**Professor of English**

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.

ERIC MAGIDSON**Assistant Professor I of Computer Information Systems**

A.A.S. in Computer and Information Systems, 2002, Central Oregon Community College; B.S. in Information Technology, 2004, Oregon Institute of Technology. At COCC since 2008.

ROBIN MARTINEZ**Assistant Professor II of Spanish**

B.A. in Spanish, 1996, Colorado State University; M.A. in Spanish, 1998, Colorado State University. At COCC since 2004.

KENNETH W. MAYS**Professor of Automotive Technology**

A.S. in Automotive Technology, 1977, Southwestern College. At COCC since 1990.

KATHLEEN M. MCCABE**Assistant Professor II of Criminal Justice**

B.A. in Criminal Justice, 1980, Michigan State University; M.A. in Guidance and Counseling, 1987, Oakland University. At COCC since 2004.

BRET L. MICHALSKI**Associate Professor of Forest Resource Technology**

B.S. in Wildlife Management, 1988, Humboldt State University; M.S. in Wildlife Science, 1994, Oregon State University. At COCC since 1994.

LESLIE MINOR**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**Assistant Professor II of Nursing**

B.A. Nursing, 1983, Augustana College; M.N. and F.N.P., 2001, Washington State University. At COCC since 2003.

LYNN L. MURRAY**Assistant Professor II of Dental Assisting**

Registered Dental Assistant License, Radiation Certification, Certified Dental Assistant, Expanded Functions Dental Assistant. At COCC since 1997.

CHARLES T. NAFFZIGER**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. in Botany, 1974, Miami University. At COCC since 1993.

SANDOR D. (SEAN) PALAGYI**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 II of Computer and Information Systems**

B.A. in Finance, 1995, and M.A. in Business/Office Education, 1999, University of South Florida. At COCC since 2005.

REBECCA J. PLASSMANN**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.

RISÉ 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.

DONNA RAYMOND**Assistant Professor I of Mathematics**

B.S. in Economics and Math, 1990, University of Hartford; M.S. in Statistics, 1991, University of Cambridge; M.A. in Statistics, 1996, University of New Mexico. At COCC since 2006.

ROBERT W. REYNOLDS**Professor of Geology**

B.S. in 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.

VICKY J. RYAN**Assistant Professor I/EMS Program Director**

A.A.S., EMS, Paramedic, 2003, Central Oregon Community College. At COCC since 2007.

MARIKO SHIMIZU**Assistant Professor II 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**Associate Professor 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**

B.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.

DANA TOPLIFF**Assistant Professor I of Nursing**

A.D.N. in Nursing, 1983, Contra Costa College; B.S.N. in Nursing, 1992, California State University; M.P.A. in Nursing, 2001, California State University. At COCC since 2006.

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.

MONICA VINES**Assistant Professor II of Human Development and Program Director**

B.S. in Psychology, 1995, Washington State University; M.A. in Counseling Psychology, 1997, John F. Kennedy University. At COCC since 2004.

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.

REBECCA L. WALKER-SANDS**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. WODELL**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 ZIEGLER**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**BEVERLY ADLER****Adjunct Instructor Faculty Librarian**

B.A. in Special Education, 1972, Avila College; M.Ed in Education Learning Disabilities, 1974, Central Missouri State University; M.L.S. in Library Science, 1993, Emporia State University. At COCC since 2005.

ANNE ANKROM**Adjunct Instructor of Nursing**

A.D.N. in Nursing, 1988, Shoreline Community College; B.S.N. in Nursing, 1990, University of Washington; M.S.N. in CNS/Adult NP-Oncology, 1994, Duke University. At COCC since 2004.

MARLENA BELLAVIA**Adjunct Instructor of German/French**

B.A. in Language, 1972, Eastern Oregon State College; P.G.D. in Education, 1974, University of Mons. At COCC since 1981.

MICHELLE BUTCHER**Adjunct Instructor of Math**

B.S. in Math, 1999, Oregon State University; M.S.T. in Math, 2002, Portland State University; Minor in Spanish, Oregon State University. At COCC since 2004.

CARL CAVALLO**Adjunct Instructor of Automotive**

B.A. in Industrial Arts, 1966, California State University. At COCC since 2002.

JENNIFER CRUICKSHANK**Adjunct Instructor of Health and Human Performance**

B.S. in Exercise Sport Science, 1996, Colorado State University. At COCC since 2004.

JENNIFER DURAND**Adjunct Instructor of Social Science**

B.F.A. in Art History, 1993, State University of New York at Stony Brook; M.A.T. in Social Studies, 1997, Lewis & Clark College. At COCC since 2002.

ALAN EISENBERG**Adjunct Instructor of Social Science**

B.A. in History and Comparative Religion, 1972, Franklin College; M.A. in Asian and Middle Eastern History and Area Studies, 1975, New York University; M.B.A. in International Business and Marketing, 1982, Fordham University. At COCC since 2007.

TARA ENDRIES**Adjunct Instructor of Massage Therapy**

B.S. in Psychology, 1994, University of Oregon; M.S. in EMS-Sports, 1996, University of Oregon; License for Massage Therapy, Lane Community College; License for Massage Therapy, Cascade Institute of Massage and Body Therapies. At COCC since 2003.

JAMES ERICKSON**Adjunct Instructor of Psychology**

B.S. in Sociology, 1973, University of Washington; M.Ed. in Education/Psychology/Sociology, 1978, Oregon State University. At COCC since 2004.

SIGNY ERICKSON**Adjunct Instructor of Massage Therapy**

B.A. in Biology, 1978, Linfield College; D.C. in Chiropractic, 1989, Western States Chiropractic College. At COCC since 2006.

DENISE FAINBERG**Adjunct Instructor of Language**

A.B. in French, 1972, Brandeis University; M.A. of Russian Area Studies, 1972, Georgetown University; B.S. of Conservation, 1983, University of Maryland. At COCC since 1990.

JACK GALLAGHER**Adjunct Instructor of Math**

B.S. in Mathematics, 1965, Northern Montana College; M.A.T. in Math, 1970, Washington State University. At COCC since 1978.

DONALD GIBBS**Adjunct Instructor of Natural and Industrial Resources (Aviation)**

B.S. in Sociology, 1981, Portland State University; M.B.A. in Aviation, 1995, Embry-Riddle Aeronautical University. At COCC since 2007.

TERRY GLOECKLER**Adjunct Instructor of Art**

B.S. in Art, 1974, University of Wisconsin; M.F.A. in Art, 1991, University of Wisconsin. At COCC since 2001.

PATRICIA HAMMER**Adjunct Instructor of Math**

B.S. in Math, 2005, University of Oregon. At COCC since 1999.

JIM HAWES**Adjunct Instructor of Writing**

A.A. in Liberal Arts, 2001, Central Oregon Community College; B.A. in English, 2003, Eastern Oregon University. At COCC since 2001.

NATHAN HOVEKAMP**Adjunct Instructor of Biology**

B.S. in Biology, 1987, Kent State University; M.S. in Zoology, 1988, University of Wisconsin; Ed.D in Education, Oregon State University. At COCC since 1998.

KRISTY KELLER**Adjunct Instructor of Nursing**

A.A.S. in Nursing, Rogue Community College, 1995; B.S. in Nursing, University of Washington, 2001; Masters in Nursing, University of Washington, 2003; Post-Masters Certificate, Family Nurse Practitioner, Oregon Health Sciences University, 2006. At COCC since 2008.

DAWN LANE**Adjunct Instructor of Nursing**

A.A.S. in Nursing, 1980, Lakewood Community College; B.S. in Nursing, 2005, Oregon Health and Sciences University; M.S. in Nursing, 2009, Gonzaga University. At COCC since 1999.

MARY LELOUIS**Adjunct Instructor of Nursing**

B.S. in Nursing, 1958, University of Oklahoma; Masters in Nursing, University of Washington, 1966. At COCC since 2006.

DOROTHY LEMAN**Adjunct Instructor of Writing**

A.B. in History, 1984, Bryn Mawr College; Ph.D. in English, 1994, University of California. At COCC since 1995.

LESLIE LIM**Adjunct Instructor of Humanities**

B.A. in English, 2002, California State University; M.A. in English, 2007, California State University. At COCC since 2007.

JUSTIN MACKEY**Adjunct Instructor of Nursing**

L.P.N. in Nursing, 1980, Army Medical Center and School; A.A.S. in Nursing, 2000, Central Oregon Community College. At COCC since 2005.

WILIAM McCABE**Adjunct Instructor of Criminal Justice**

B.A. in Psychology Oakland University, 1976. At COCC since 2005.

MICHAEL McCANN**Adjunct Instructor of Social Science**

B.A. in Foreign Languages, 1980, Berry College; M.A. in Geography, 1990, Georgia State University. At COCC since 2001.

LINDA MEURER**Adjunct Instructor of Nursing**

Diploma in Nursing, 1971, St. Joseph School of Nursing; B.S.N. in Nursing, 1981, Oregon Health Science University. At COCC since 2003.

PETER MEYER**Adjunct Instructor of Art**

B.F.A. in Art, 1978, University of South Dakota; M.F.A. in Art, 1983, University of Oregon. At COCC since 1998.

JODEE PHILLIPS**Adjunct Instructor of Health and Human Performance**

B.S. in Recreation, Programming, and Supervision Administration, 1979, Illinois State University; M.B.A. in Organizational Management, Marylhurst University, 2005. At COCC since 2005.

VANESSA POLVI**Adjunct Instructor of Health and Human Performance**

B.S. in General Science/Biochemistry, 2003, Oregon State University; M.A. in Physical Education, 2005, Minnesota State University. At COCC since 2006.

JULIE SCHMIDT**Adjunct Instructor of Math**

M.S. in Math, 1999, University of Missouri; B.S. in Math and Secondary Education, 1997, Southeast Missouri State University. At COCC since 2001.

LARA SHIMEK**Adjunct Instructor of Massage Therapy**

B.A. in Interior Design, 1994, University of Georgia; Certificate in Massage Therapy, 2003, Community College of Southern Nevada; Master Herbalist and Aromatherapist Certificate, 2007, Australasian College of Health and Sciences. At COCC since 2008.

LEEANN STAHN**Adjunct Instructor of Health Information Technology**

A.A.S., Health Information Technology, 2006, Central Oregon Community College. At COCC since 2007.

PATRICIA SUNSET**Adjunct Instructor of Math**

B.A. in Mathematics, 1964, University of Oregon; M.S. in Education, 1970, Portland State University. At COCC since 1992.

GREGG TERHAAR**Adjunct Instructor of Health and Human Performance**

EMT I Certification, 1989, Central Oregon Community College. At COCC since 1989.

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 FRANSDEN-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 EMERITI

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. in 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**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**Professor of Mathematics**

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**Professor of Physical Education**

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**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**Professor of Music**

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**Associate Professor of Business and Accounting**

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**Associate Professor of Nursing**

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**Professor of Automotive Technology**

Graduate Oregon Technical Institute, 1956; ASE certified. A.S. in Automotive Technology, 1984, Central Oregon Community College; Certified Vocational Instructor. At COCC from 1981 to 1998.

RICHARD NIEDERHOF**Professor of Forestry**

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**Professor of Nursing**

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**Professor/Counselor**

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**Professor of Physical Science and Chemistry**

A.A., 1959, Central Oregon Community College; B.S. in General Science, 1961, Oregon State University; M.S. in Natural Science, 1965, New Mexico, Highlands. At COCC from 1967 to 1999.

DARLA J. QUESNELL**Professor of Psychology**

B.A. in Psychology, 1965, University of California, Berkeley; Ph.D. in Psychology, 1978, University of California, Berkeley. At COCC from 1975 to 1995.

MICHAEL A. SEQUEIRA**Professor of Mathematics**

B.S. in Mathematics, 1968 Stanford University; M.S. in Mathematics, 1969, Northwestern University. At COCC from 1982 to 2004.

VIRGINIA M. SHRAUGER**Professor of Reading and Study Skills**

B.S. in Education, 1954, University of Nebraska; M.Ed in Reading, 1969, University of Arizona. At COCC from 1970 to 1988.

DOUGLAS CAMPBELL SMITH**Professor of Art**

B.A. in Art, 1962, California State University, San Jose; M.A. in Art, 1967, California State University, San Jose. At COCC from 1973 to 1995.

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.

GENE TAYLOR**Professor of Computer and Information Systems**

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**Associate Professor of Art**

B.S. in Art Education, 1962, University of Oregon; M.S. in Art Education, 1963, University of Oregon. At COCC from 1971 to 1990.

R. LYNELLE THOMAS**Associate Professor of Health and Physical Education**

B.S., 1950, Abilene Christian College; M.S. in Health, P.E. and Recreation, 1954, North Texas University. At COCC from 1970 to 1994.

H. WARD TONSFELDT**Professor of English**

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.

CHARLES L. WACKER**Professor of Office Administration**

B.S. in Business Education, 1955, Oregon State University; M.Ed. in Business Education, 1959, Oregon State University. At COCC from 1958 to 1986.

BERN WISNER**Professor of Business**

B.A. in Economics, 1956, Duke University; M.B.A., 1975, California State University, Dominguez Hills. At COCC from 1982 to 2002.

JEROME J. YAHNA**Professor of Music**

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
 2008 Stacey L. Donohue, Professor of English
 2009 Karen Huck, Professor of Speech

ADMINISTRATION

SHARLA ANDRESEN

Financial and Contract Analyst

B.S. in Business, 1988, Lewis and Clark College; M.B.A., 2004, Marylhurst University. At COCC since 1991.

SEANA BARRY

Assistant Director of Admissions and Records

B.A. in Communication Studies, University of Kansas, 1990. At COCC since 2008.

DAVID D. BILYEU

Director of Library Services

B.A. in Philosophy, 1976, University of California at Santa Cruz; M.L.S. in Library Science, 1985, Syracuse University. At COCC since 1993.

LISA BLOYER

Accounting Director

B.S. in Business, 1983, Portland State University; M.P.A. 2003, Portland State University. At COCC since 1996.

MICHAEL BOWLING

Institutional Systems Analyst

B.S. in Computer Information Systems, 1992, Athens State College. At COCC since 2007.

ERIC BUCKLES

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.

LONNA K. CARNAHAN

Perkins Grant Coordinator

B.S. in Home Economics Education, 1975, Oregon State University; Ed.M. in Adult Education, 1980, Oregon State University. At COCC since 1985.

DANIEL CECCHINI

Director of Information Technology

B.A. in Computer Science, B.S. in Biology, 1978; M.B.S. in Science, 1995, University of Colorado; M.B.A. in Business Administration, 2001, Regis University. At COCC since 2006.

CARRIE COIL

Accountant, COCC Foundation

B.S. in Accounting, 1980, Oregon State University. At COCC since 2007.

DIANNE DEAN

Director of Adult Basic Education

B.A. in Academic Studies, 1979, Western New Mexico University; M.A. in English, 1984, Western New Mexico University. At COCC since 1989.

DAVID DONA

Associate Chief Financial Officer

B.S. in Business, 1980, Southern Oregon University; M.B.A. in Business Administration, 1981, Southern Oregon University; C.P.A., State of Oregon, 1989. At COCC since 2007.

SCOTT DONNELL

Web Designer

B.A. in Business/Marketing, 1988, Oregon State University. At COCC since 2008.

WILLIAM DOUGLASS

Director of Club Sports and Intramural Coordinator

A.A. in Liberal Arts, 1979, Central Oregon Community College; B.S. in History, 1989, University of Oregon. At COCC since 1995.

TRACY DULA

Career Services Coordinator

A.A. in Liberal Arts, 1988, Ocean County College, B.A. in Special Education, 1990, Georgian Court College. At COCC since 2009.

CHRISTOPHER EGERTSON

Research Analyst

B.S. in Biology and Environmental Science, 1996, Mankato State University; M.S. in Animal Ecology, 2003, Iowa State University. At COCC since 2006.

SHAWNA ELSBERRY

Academic Advisor

B.S. in Psychology, 1992, Eastern Oregon University. At COCC since 2004.

VICKI ERTLE

Director of Family Resource Center

B.A. in Political Science, 1968, University of California, Berkeley. At COCC since 1995.

ANDREA GIBSON

Development Officer, COCC Foundation

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 2003.

MARGIE GREGORY

Tutor Coordinator, Adult Basic Education

B.A. in History, 1968, University of California, Irvine; M.Ed. in Adult Education, 1996, Oregon State University. At COCC since 1990.

DEBORAH HAGAN**Curriculum and Distance Learning Specialist, Adult Basic Education**

B.A. in Journalism, 1981, University of Oregon; B.A. in English, 1983, Eastern Oregon University; Ed.M. in Adult Education and Distance Learning, 2004, University of Phoenix. At COCC since 1989.

DAVID HAGENBACH**Interpreter**

Interpreter Certification, American Sign Language, State of Hawaii. Attended Ohlone Jr. College, Genesis Bible College and Santa Rosa Junior College. At COCC since 2004.

CYNTHIA JEFFREYS**Systems Integrator**

A.A.S. in Business Administration Management Information Systems, 1992, Central Oregon Community College. At COCC since 1999.

NANCY E. JUMPER**Program Manager, Continuing Education**

B.S. in Communications, 1982, Southern Oregon State College. At COCC since 1997.

BARBARA KLETT**Instructional Technology Coordinator**

B.S. in Education, 1981, Oregon State University; M.A. in Education Technology, 1998, San Diego State University. At COCC since 1998.

RACHEL KNOX**Community Learning Program Manager**

B.A. in English/British Literature, Oakland University, 1989. At COCC since 2003.

GARY KONTICH**Network Administrator**

A.A. in Electronic Technology, 1981, Central Oregon Community College; B.A. in Business Information Systems, 1988, Linfield College. At COCC since 1981.

GLENDA L. LANTIS**Program Manager, Continuing Education**

B.S. in Home Economics Education, 1987, Oregon State University; M.S. in Family Studies, 1990, Oregon State University. At COCC since 2003.

JUSTINE R. LUCIA**Assistant Bookstore Director**

B.S. in Communication Arts, 1994, University of Wisconsin. At COCC since 2007.

ERIN MARLOWE**Student Newspaper Advisor, Broadside**

B.A. in Political Science, 2002, University of Oregon; M.A. in Journalism, 2005, University of Missouri. At COCC since 2006.

NEAL MATTSON**Custodial Supervisor—Night Shift**

B.A. in Elementary Education, 1978, Brigham Young University. At COCC since 2008.

SUSAN McCAMPBELL**Assistant Director of Student Financial Aid**

A.A. in Liberal Arts, 1986, University of Alaska, Anchorage, Matanuska-Susitna College; B.A., Psychology, 1989, University of Alaska, Anchorage. At COCC since 1998.

ROBERT McDILDA**Safety and Security Supervisor**

Attended Linn-Benton Community College; DPSST unarmed officer certification. At COCC since 2004.

AIMEE METCALF**Director of Admissions/Registrar**

B.A. in Political Science, 1993, Pacific University. At COCC since 1999.

JULIE MOSIER**Purchasing, Procurement and Facilities Scheduling Coordinator**

A.A. in Liberal Arts/Liberal Studies, 2006, Central Oregon Community College. At COCC since 1998.

KEVIN MULTOP**Director of Student Financial Aid**

B.S. in Humanities, 1993, Western Baptist College; Masters of Christian Studies in Theology, 2001, Regent College, Vancouver, BC. At COCC since 2001.

LORI ORTIZ**Payroll Specialist**

B.S. in Journalism, 1982, California Polytechnic State University; A.S. in Accounting, 1988, Central Oregon Community College. At COCC since 1991.

RONALD S. PARADIS**Director of College Relations**

B.S. in Journalism, 1977, University of Oregon; M.B.A., 1990, Plymouth State College. At COCC since 1991.

SCOTT PAULSON**Project Analyst/Developer**

B.S. in Computer Science, 1993, Oregon State University. At COCC since 2003.

JEFFREY PEDERSON**Systems Administrator**

Attended the University of Washington and Embry-Riddle Aeronautical University. Microsoft Certified Professional, Systems Administrator for Windows 2000 and Messaging-Windows 2000. At COCC since 2001.

BRYNN E. PIERCE**Institutional Researcher**

B.S. in Biology, 1995, Oregon State University; M.P.H., 1999, The George Washington University School of Public Health and Health Services. At COCC since 2001.

CHERYL PODESTA**Grant Writer**

B.S. in Journalism, 1961, University of Oregon. At COCC since 2006.

GORDON PRICE**Director of Student Life**

A.A. in General Studies, 1998, Truckee Meadows Community College; B.A. in Interdisciplinary Studies, 2004, Western Oregon University. At COCC since 2004.

JEFFREY L. RICHARDS**Coordinator of User Services**

A.A. in Theology, 1989, Ambassador College. At COCC since 2000.

KAREN ROTH**Diversity Coordinator, Student Life**

B.S. in Math, 1978, University of Wisconsin; M.A. in Guidance and Counseling, 1982, University of Wisconsin. At COCC since 2008.

DENNIS SIMENSON**Program Coordinator, Manufacturing and Applied Technology Center**

A.A.S. in Manufacturing Processes Technology, 1991, Central Oregon Community College. At COCC since 1996.

PAULA A. SIMONE**Structural and Wildland Fire Science Coordinator**

A.A., 1998, Central Oregon Community College; B.S. in General Science, University of Oregon, 2000. At COCC since 1999.

WILLIAM P. SIMPKINS**Database Administrator**

B.A. in Social Science, 1971, Biola College; M.A. in Linguistics, 1975, California State College at Fullerton. At COCC since 1983.

KELLIE L. SMITH**Tutoring and Testing Center Director**

B.S. in Political Science, 1984, Oregon State University; M.A. in History, 1989, Northern Arizona University. At COCC since 1997.

GAIL SORENSEN**Assistant Director of Human Resources**

B.A. in Political Science, 1987, University of California at Davis; Paralegal Certification, 1988, University of San Diego; SPHR Certification, 2006. At COCC since 2005.

PAUL STENNETT**Program Manager and Computers, Continuing Education**

B.A. in Psychology, 1980, Campbell University. At COCC since 2006.

JESSIE SUYEMATSU**Applications Analyst/Programmer**

A.A. in General Education, 1978, Monterey Peninsula College; B.S. in Business Administration, 1981, California Polytechnic State University. At COCC since 2005

BREANA SYLWESTER**Financial Aid Advisor**

A.A. in Business, 1999, Central Oregon Community College; B.S. in Psychology, 2005, University of Oregon. At COCC since 2008.

SHANNON TURNER**Student & Community Outreach Coordinator**

B.A. in Business Administration (Hotel Restaurant Resource Management), 2003, Southern Oregon University. At COCC since 2007.

TARAN UNDERDAL**Admissions Advisor/Recruiter**

B.S. in General Agriculture, 2005, Oregon State University. At COCC since 2006.

ALLEN VAN DYKE**Native American Program Coordinator**

B.A. in Wildlife Science, 1981, Oregon State University; A.A. in Environmental Studies, 1983, Oregon Institute of Technology. At COCC since 2008.

VICKERY VILES**Director of CAP Center**

B.A. in Art History, 1985, Mt. Holyoke College; Ed.M. in Adult Education, 2002, Oregon State University. At COCC since 1989.

JOSEPH VIOLA**Construction Project Manager**

B.S. in Business, 1980, University of Connecticut. At COCC since 2008.

MARY WAGNER**Project Manager, College Relations**

A.A. in Psychology, 1989, Central Oregon Community College. Completed Electronic Publishing Program, 1996, University of Oregon. At COCC since 1992.

ANNE WALKER**Disability Services Coordinator**

B.A. in Education, 1999, Eastern Washington University; M.S. in Physical Education, 2000, Eastern Washington University. At COCC since 2000.

JAMES F. WEAVER**Executive Director, COCC Foundation**

B.A. in Speech Communication, 1977, San Diego State University. At COCC since 2002.

PAUL WHEELER**Housing Coordinator**

B.S. in Mathematics, 2000, University of Idaho; M.Ed. in Counselor Education: Human Relations, 2006, Plymouth State University. At COCC since 2007.

BETH WICKHAM

**Director of Continuing Education and Business
Development Center
AA/EEO Officer**

B.S. in Community Service and Public Affairs, 1978, University of Oregon; M.S. in Public Administration, 1980, University of Oregon. At COCC since 1990.

JAMES W. WILCOX

Business Development Center, Counselor

A.A. 1976, West Shore Community College; B.S. in Business Administration, 1991, Portland State University; M.B.A. 1993, Portland State University. At COCC since 1998.

LORI A. WILLIS

Director of Bookstore and Copy Center

B.A. in Business Administration, 1992, Briar Cliff College. At COCC since 1997.

CODY YEAGER

**Director for Corrections Education, Deer Ridge
Correctional Institution**

B.A. in German, 1979, Clarion University; M.A. in English, 1983, Slippery Rock University; M.A. in German, 1986, University of Arkansas; M.A. in Comparative Literature, 1989, University of Oregon. At COCC since 1998.

GENE R. ZINKGRAF

Director of Campus Services

B.A. in Business, 1980, Western State College. At COCC since 1987.

ADMINISTRATORS EMERITI**HELEN PRUITT**

Registrar

A.A. in Liberal Studies, 1950, Mt. San Antonio College; B.A. in Liberal Studies, 1993, Oregon State University. At COCC from 1982 to 2003.

SARA PAULSON

Director of Information Technology

B.S. in Mathematics, 1965, University of Northern Iowa. At COCC from 1983 to 2004.

CONFIDENTIAL/SUPERVISORY STAFF

John Hoffman, Maintenance Supervisor-Buildings, Campus Services

Karen McKenzie, Administrative Assistant, Vice President of Instruction

Julie Smith, Executive Secretary, President's Office and COCC Board of Directors

CLASSIFIED STAFF

Linda Andrus, Business Administration
Michelle Baker, Admissions and Records
Brad Barnett, Campus Services
Arthur Belanger, Campus Services
Margaret Bodyfelt, Enrollment Services
Terri Botts, Office of Dean of Students
Daura Bowman, Print/Mail Services
Michael Boyd, Campus Services
Michael Boyle, Library
Diane Bradley, Deer Ridge Correctional Institution
Renee Brazeau-Asher, Math/Computer Science
Albert Brooks, Jr., Campus Services
Roxanne Burger-Wilson, Bookstore
Jodi Cashman, Financial Aid
Kent Cass, Campus Services
Noreen Clark, Bookstore
Katharine Condon, Continuing Education
Michael Cowger, Campus Services
Rosemary Cronenwett, Bookstore
Jack Curtis, Campus Services
Wade DeBaal, Information Technology
Michelle DeSilva, Library
Steven Draper, Campus Services
Katie Edwards, Enrollment Services
David Ekstrom, Campus Services
Kristine Elkin, College Relations
Carol Elwood, Campus Services
Dana Engel, Human Resources
Jonathan Esterman, Enrollment Services
Jessica Farbstein, Campus Services
Janis Fisher, Fiscal Services
Brian Flener, Campus Services
Michael Garrett, Information Technology
Theo Giannioses, Career and Technical Education (CTE) and Natural Resources
Patricia Givens, Bookstore
Joshua Glover, Maintenance
Stephanie Goetsch, Information Technology
Autumn Green, Instructional Deans
Mary Gregory, Science
Mary Beth Hamilton, Library
Jan Colette Hansen, Enrollment Services
Kenneth Harmon, Information Technology
Lynne Hart, Library
Patricia Hassey, Adult Basic Education, Redmond Campus
Karl Heeren, Campus Services
Eugen Helmbrecht, Information Technology
Pualani Helmbrecht, College Relations
Lydia Hernandez, Health and Human Performance
Norma (Sue) Holter, Enrollment Services
Shelley Huckins, Fiscal Services
Steven Huddleston, Print/Mail Services

Carol Hussion, Fiscal Services
 John (Jay) Jabson, Career and Technical Education (CTE)
 James Jensen, Campus Services
 Steven Julian, Campus Services
 Donald Kahle, Campus Services
 Mary Ann Kane, College Relations
 Bev Karitis, Enrollment Services
 Natalie Kimmell, Continuing Education
 Dianne Kristiansen, Perkins Grant Office
 Charles Lawrence, MATC
 Deborah Lehto, Financial Aid
 Samantha Loza, Campus Services
 Stella Mackey, Admissions
 Larry Marshall, Campus Safety and Security
 Nichole Martinez-Daniel, Disability Services
 Marcia McCullough, Information Technology
 Lynn McKoy, Financial Aid
 Floyd Mergel, MATC
 Deanna Metcalf, Enrollment Services
 Raquel Meyers, Nursing
 Kate Miles, Fine Arts
 Christina Mills, Enrollment Services
 Patricia Nelson, Office of Vice President/CFO
 Stephen Newcombe, Humanities
 Curtis Parks, Campus Services
 Eric Patton, Campus Services
 Mitchel Pautz, Campus Services
 Jennifer Peters, Office of VP for Administration
 Nicholas Pharr, Campus Services
 Kevin Quick, Campus Services
 Clifford Reid, Campus Services
 Dianne Reingold, Enrollment Services
 Wildee Reinmiller, Print/Mail Services

Sarah Roberts, MATC/DOL Grant
 J.C. Root, Information Technology
 Carolyn Schroeder, Continuing Education
 John Shannon, Information Technology
 Jan Siegrist, Health Information Technology Lab Assistant
 Elaine Simay-Barton, Science
 Linda Skladal, Library
 Emily Smith, Science
 Jesse Smith, Foundation
 Jared Starnes, Campus Services
 Cristi Steiert, Continuing Education
 Bonnie Steiner, Campus Services
 Leilani (Lani) Sykes, Redmond Campus
 Gail Tague, Bookstore
 Bruce Thompson, Information Technology
 Julie Townsend, Community Learning/Community Education
 John Traylor, Campus Services
 Jeannine Ufford, Financial Aid
 Heather Van Diest-Kolb, CAP Center
 Cynthia Viles, Adult Basic Education
 Debbie Volker, Allied Health
 Joan Westerfield, Family Resource Center
 Sallie Wetherbee, Social Science
 Pam Wheelchel, Library
 Christopher Whitman, Campus Services
 Linda Williams, College Relations
 Sarah Wilson, Campus Services
 Ruth Wolfe, Admissions, Redmond Campus
 Susan Wood, Continuing Education
 Beth Wright, CAP Center
 Eric Wright, Campus Services
 Janis Wright, Human Resources



COURSE INDEX

A

ABNORMAL PSYCHOLOGY 214
 ACCESS 152
 ACCOUNTING FUNDAMENTALS 146
 ACTING I, II, III 220
 ADDICTIVE BEHAVIOR 130
 ADVANCED AIRCRAFT SYSTEMS 141
 ADVANCED BASEBALL 177
 ADVANCED CLINIC 199
 ADVANCED CURRICULUM DEVELOPMENT & TEACHING METHODS IN EARLY 161
 ADVANCED DENTAL ASSISTING 158
 ADVANCED KI-AIKIDO 178
 ADVANCED SCUBA DIVER 178
 ADVANCED SOFTBALL 178
 ADVANCED TREATMENT I, II, III 200
 AERIAL PHOTO 171
 AEROBIC DANCE I 177
 AEROBIC DANCE II-BENCH/STEP 177
 AEROBIC DANCE III-HIP HOP 178
 AERODYNAMICS 141
 A+ ESSENTIALS 154
 AIDS AND ADDICTIONS 130
 ALGEBRA I, II 201
 AMBULATORY DATA SYSTEMS 186
 ANALYSIS OF SPATIAL DATA 174
 ANATOMY AND FUNCTION I, II 142
 APPLIED ACCOUNTING I, II, III 144
 APPLIED COMPOSITE TECHNOLOGY 151
 APPLIED DIFFERENTIAL EQUATIONS 203
 APPLIED FOREST ECOLOGY 170
 APPLIED PSYCHOLOGY 214
 ARC GIS 173
 ARCHAEOLOGY 132
 ARCHAEOLOGY OF OREGON 133
 ARCHAEOLOGY FIELD METHODS 133
 ARGUMENTATION AND CRITICAL DISCOURSE 216
 ARMY PHYSICAL FITNESS 205
 AUTOCAD CIVIL 3D 153
 AUTOCAD I, II, III 152-153
 AUTODESK INVENTOR I, II 154
 AUTODESK REVIT 1, 2 153
 AUTOMATED WELDING AND CUTTING 196
 AUTOMATIC TRANSMISSIONS I, II 140
 AUTOMOTIVE AIR CONDITIONING 140
 AUTOMOTIVE BRAKES 140
 AUTOMOTIVE ELECTRIC I, II, III 138
 AUTOMOTIVE ENGINES 139
 AUTOMOTIVE-HUMAN RELATIONS 139
 AUTOMOTIVE PROGRAM ORIENTATION 139
 AVIATION SAFETY 142

B

BAKING I, II, III 148-149
 BASEBALL 177
 BASIC DENTAL ASSISTING 157
 BASIC DESIGN: 2-D 134
 BASIC DESIGN: 3-D 134
 BASIC DESIGN: COLOR 134
 BASIC EKG 209
 BASIC ELECTRICITY FOR AUTOMOTIVE 138
 BASIC EXERCISE PHYSIOLOGY 181
 BASIC MILITARY SKILLS 205
 BASIC SANITATION 148
 BASIC WRITING I, II 224
 BASKETBALL 177
 BEGINNING EXCEL 152
 BENCH WORK 194
 BIG BAND JAZZ 207
 BIOCHEMISTRY AND GENETICS 143
 BIOLOGY OF ANIMALS III 143
 BIOLOGY OF PLANTS II 143
 BLUEPRINT READING 193
 BLUEPRINT READING SHEET METAL 193
 BOOT CAMP FOR WOMEN 177
 BRAZILIAN JUIJITSU 177
 BUILDING CONSTRUCTION FOR FIRE PERSONNEL 218
 BUSINESS COMMUNICATIONS 225
 BUSINESS ECONOMICS 144

BUSINESS ETHICS 145
 BUSINESS FINANCE 146
 BUSINESS HUMAN RELATIONS 147
 BUSINESS LAW I 146
 BUSINESS MATH 144
 BUSINESS SEMINAR 147

C

CAD/CAM LATHE 195
 CAD/CAM MILL 195
 CALCULUS FOR MANAGEMENT/SOCIAL SCIENCE 202
 CALCULUS I, II, III 203
 CAPSTONE FOR FIRE SCIENCE 219
 CARE AND PREVENTION OF ATHLETIC INJURY 180
 CAREER PLANNING 147
 CASCADE CHORALE 207
 CASCADE VOLCANOES 176
 CASE MANAGEMENT FOR THE CHEMICALLY DEPENDENT CLIENT 131
 CERAMICS I, II, III 134
 CERAMICS IV, V, VI 135
 CERTIFICATION TEST PREPARATION AWS I, II, III 198
 CERTIFICATION TEST PREPARATION NAIT 198
 CERTIFICATION TEST PREPARATION NIMS I, II, III 198
 CERTIFICATION TEST PREPARATION SME 198
 CERTIFIED FLIGHT INSTRUCTOR GROUND SCHOOL 142
 CERTIFIED FLIGHT INSTRUCTOR - HELICOPTER 142
 CHAINSAW USE AND MAINTENANCE 170
 CHALLENGE COURSE PRACTICES 184
 CHEF WORLD INTRODUCTION 148
 CHILDREN AT RISK 161
 CIRCUIT TRAINING 177
 CISCO INTERNETWORKING 154
 CISCO ROUTER CONFIGURATION 154
 CISCO VLAN AND WAN TECHNOLOGIES 154
 CLASS GUITAR I 208
 CLASSIFICATION AND REIMBURSEMENT SYSTEMS 186
 CLINIC I, II 199
 CLINICAL ASSESSMENTS 200
 CNC MILL OPERATOR 195
 CNC PRESS BRAKE AND SHEARING 197
 CNC PROGRAMMING LATHE 195
 CNC PROGRAMMING MILL 195
 CNC TURNING OPERATOR 195
 COASTAL OCEANOGRAPHY 176
 CODING CLASSIFICATIONS 186
 COLLEGE ALGEBRA 201
 COLLEGE CHOIR 207
 COLLEGE READING 215
 COLLEGE SUCCESS 219
 COLONIAL LATIN AMERICAN HISTORY 188
 COMMERCIAL HELICOPTER 141
 COMMERCIAL PILOT 141
 COMMUNICATING LOVE 217
 COMPOSITE MATERIALS/PROCESS 151
 COMPOSITES FABRICATION 151
 COMPOSITES OCCUPATIONAL TOPICS 151
 COMPOSITES PRACTICUM SEMINAR 151
 COMPUTER ACCOUNTING APPLICATIONS 146
 COMPUTER AND INFORMATION SYSTEMS PROJECTS 155
 COMPUTER CARTOGRAPHY 173
 COMPUTER CONCEPTS 152
 COMPUTER INTEGRATED MANUFACTURING I, II 196
 COMPUTER KEYBOARDING 152
 COMPUTER SCIENCE I, II 154
 COMPUTER SCIENCE ORIENTATION 154
 COMPUTERIZED ENGINE CONTROLS 139
 COMPUTERIZED MEDICAL OFFICE PROCEDURES 204
 CONCERT BAND 207
 CONFLICT MANAGEMENT 217
 CONSERVATION OF NATURAL RESOURCES 172
 CONSUMER BEHAVIOR 147
 CONTROVERSIES IN CRIMINAL JUSTICE 156
 CO-OP WORK EXPERIENCE 145
 CO-OP WORK EXPERIENCE AUTOMOTIVE 140
 CO-OP WORK EXPERIENCE BIOLOGY 143
 CO-OP WORK EXPERIENCE BUSINESS 145, 147
 CO-OP WORK EXPERIENCE CIS 156
 CO-OP WORK EXPERIENCE CRIMINAL JUSTICE 157
 CO-OP WORK EXPERIENCE CULINARY 149
 CO-OP WORK EXPERIENCE FORESTRY 170

Courses (continued)

CO-OP WORK EXPERIENCE GIS 173, 174
 CO-OP WORK EXPERIENCE - HEALTH AND HUMAN PERFORMANCE 182
 CO-OP WORK EXPERIENCE HISTORY 188
 CO-OP WORK EXPERIENCE MANUFACTURING 197
 CO-OP WORK EXPERIENCE OFFICE ADMINISTRATION 210
 CO-OP WORK EXPERIENCE POLITICAL SCIENCE 213
 CO-OP WORK EXPERIENCE PSYCHOLOGY 215
 CO-OP WORK EXPERIENCE SPEECH INTERNSHIP 217
 CO-OP WORK EXPERIENCE THEATER 220
 COORDINATE MEASUREMENT MACHINE 196
 CORRECTIONS 157
 COUNSELING THE CHEMICALLY DEPENDENT CLIENT 131
 COUNSELING THEORIES 131
 CPR - AMERICAN HEART ASSOCIATION 181
 CPR - AMERICAN HEART ASSOCIATION HEALTH CARE PROVIDERS 181
 CRIMINAL INVESTIGATION I, II 157
 CRISIS INTERVENTION 163
 CULINARY SUPERVISION 148
 CULTURAL ANTHROPOLOGY 132
 CULTURAL GEOGRAPHY 174
 CULTURE AND LITERATURE OF AFRICA 190
 CULTURE AND LITERATURE OF ASIA 190
 CULTURE AND LITERATURE OF MIDDLE EAST 190
 CULTURE AND LITERATURE OF THE AMERICAS 190
 CURRENT TOPICS 186
 CUSTOMER SERVICE 145
 CYCLING: ROAD, STUDIO, MOUNTAIN 177

D

DANCERISE 178
 DATABASE THEORY/SQL 153
 DATA CONVERSION AND DOCUMENTATION 174
 DENDROLOGY 172
 DENTAL ASSISTING PRACTICUM I, II 159
 DENTAL COMPUTING 159
 DENTAL INFECTION CONTROL 158
 DENTAL MATERIALS I, II 158
 DENTAL OFFICE MANAGEMENT 158
 DENTAL RADIOLOGY I, II 158
 DENTAL SCIENCE 157
 DENTAL SEMINAR I, II 159
 DESIGN PROCESSES I, II 194
 DEVELOPMENTAL MATHEMATICS 200
 DEVELOPMENTAL PSYCHOLOGY 214
 DIESEL PERFORMANCE I 138
 DIGITAL METROLOGY 195
 DIGITAL PHOTOGRAPHY 138
 DINING ROOM I, II 149
 DINING ROOM III: MANAGEMENT 149
 DIRECTED PRACTICE I, II 185-186
 DOCUMENT MANAGEMENT AND TECHNOLOGY 184
 DOCUMENTATION 225
 DRAWING I, II, III 135
 DRILL PRESS 194
 DRUG CLASSIFICATION AND THERAPEUTICS I, II 211
 DRUGS AND ADDICTION 130
 DRUGS AND CRIME IN SOCIETY 157
 DUAL DIAGNOSIS 130
 DYNAMICS 165

E

EARLY CHILDHOOD EDUCATION PRACTICUM I, II 161
 EAST ASIAN HISTORY 188
 EASTERN THEORY & PRACTICE 199
 ECONOMIC GEOGRAPHY 174
 EFFECTIVE HELPING SKILLS I, II 130-131
 EFFECTIVE THINKING IN OFFICE DECISIONS 200
 ELECTRICAL CONTROL/FLUID POWER 196
 ELECTRICAL FUNDAMENTALS 165
 ELECTRIC MOTOR CONTROL 196
 EMERGENCY MEDICAL TECHNICIAN BASIC PART A, B 162
 EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE PART A, B 162-163
 EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 1, 2 163-164
 EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 1, 2 CLINICAL 164
 EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 3 164
 EMERGENCY MEDICAL TECHNICIAN PARAMEDIC PART 3 CLINICAL 165
 EMERGENCY RESPONSE COMMUNICATION/DOCUMENTATION 163
 EMERGENCY RESPONSE PATIENT TRANSPORT 163
 EMT-PARAMEDIC CO-OP WORK EXPERIENCE 163
 ENGINEERING ORIENTATION 165
 ENGINEERING PROBLEM SOLVING AND TECHNOLOGY 165

Courses (continued)

ENGINE PERFORMANCE I, II 139-140
 ENGLISH COMPOSITION 224-225
 ENTREPRENEURSHIP 147
 ENVIRONMENTAL GEOGRAPHY 174
 ENVIRONMENTAL PROBLEMS 176
 ENVIRONMENTS & CURRICULUM IN EARLY CHILDHOOD EDUCATION 160
 ETHICS FOR HUMAN SERVICES 130
 EVENT PLANNING 189
 EXCEL 153
 EXCEPTIONAL CHILDREN IN EARLY CHILDHOOD EDUCATION 161
 EXPLORING ONLINE LEARNING 219

F

FACILITATING GROUP EXPERIENCES 183
 FAMILIES AND ADDICTIONS 130
 FCAW I, II, III 197
 FI-210 WILDFIRE ORIGIN/CAUSE 222
 FIELD DENDROLOGY 172
 FIELD GEOGRAPHY OF CENTRAL OREGON 175
 FIELD STUDIES PACIFIC NW FORESTS 170
 FIGURATIVE CLAY SCULPTURE 135
 FIGURE DRAWING I, II, III 135
 FILM & SOCIETY: CONTEMPORARY ISSUES 132, 215
 FILM & SOCIETY: GLOBAL CULTURES 132, 215
 FILM & SOCIETY: RACE, GENDER, AND CLASS 132, 215
 FINANCIAL ACCOUNTING I, II 145
 FIRE BEHAVIOR AND COMBUSTION 218
 FIRE CODES AND ORDINANCES 218
 FIRE ECOLOGY AND EFFECTS 171
 FIRE INVESTIGATION 218
 FIRE LAW 218
 FIRE PROTECTION HYDRAULICS AND WATER SUPPLY 219
 FIRE SERVICE ENTRANCE EXAMS 219
 FIRE SERVICE SAFETY AND SURVIVAL 217
 FIRE TACTICS AND STRATEGIES 218
 FIRST AID AND CPR 182
 FIRST YEAR FRENCH I, II, III 165-166
 FIRST YEAR GERMAN I, II, III 166-167
 FIRST YEAR ITALIAN I, II, III 167-168
 FIRST YEAR SPANISH I, II, III 168
 FIT/FIRST AID 182
 FIXED SYSTEMS AND EXTINGUISHERS 218
 FLIGHT MANEUVERS 141
 FLUID POWER SYSTEMS I, II 194
 FOOD SERVICE MANAGEMENT 189
 FOOD SERVICE NUTRITION 148
 FOREST ECOLOGY 171
 FOREST ENTOMOLOGY/PATHOLOGY 170
 FOREST RESOURCE CAPSTONE 171
 FOREST SPORTS 169
 FOREST SURVEYING 171
 FORESTRY PERSPECTIVES 170
 FORESTRY PROGRAM ORIENTATION 169
 FRACTION REVIEW WORKSHOP 200
 FRENCH CONVERSATION AND CULTURE I, II, III 166
 FUNDAMENTALS OF ELEMENTARY MATHEMATICS - WIC I, II, III 202
 FUNDAMENTALS OF PUBLIC SPEAKING 216

G

GARDEMANGER I, II, III 149
 GENDER AND SEXUALITY IN AN ANTHROPOLOGICAL PERSPECTIVE 133
 GENDER COMMUNICATION 217
 GENERAL BIOLOGY I, II, III 142
 GENERAL BOTANY 144
 GENERAL CHEMISTRY I, II, III 150
 GENERAL PHYSICS I, II, III 212
 GEODATABASE DESIGN 173
 GEOGRAPHIC INFORMATION SYSTEMS 173
 GEOGRAPHY FOR TEACHERS 176
 GEOGRAPHY OF CENTRAL OREGON 175
 GEOGRAPHY OF OREGON 175
 GEOGRAPHY OF PACIFIC NORTHWEST 175
 GEOLOGY I, II, III 176
 GEOLOGY OF OREGON 176
 GEOLOGY OF THE PACIFIC NORTHWEST 176
 GERMAN CONVERSATION AND CULTURE I, II, III 167
 GETTING HIRED 189
 GIS CAPSTONE 174
 GLOBAL BUSINESS 145
 GMAW I, II, III 197
 GOLF 178

Courses (continued)

GOLF ADVANCED 178
 GROUPS AND ADDICTIONS TREATMENT 130
 GREAT AMERICAN THOUGHT AND ACTION 188
 GTAW I, II, III 197

H

HEALTH AND FITNESS 182
 HEALTH CARE DELIVERY AND TECHNOLOGY 185
 HEALTH DATA COLLECTION 185
 HEALTH DATA CONTENT/STRUCTURE 184
 HEALTH INFORMATION MANAGEMENT 185
 HEALTH INFORMATION SEMINAR 185
 HEALTH INFORMATION SYSTEMS AND PROCEDURES 184
 HEALTH PSYCHOLOGY 182
 HIPAA MANAGEMENT 185
 HISTORY OF THE AMERICAN WEST 187
 HISTORY OF THE CIVIL WAR 187
 HISTORY OF THE MIDDLE EAST 188
 HISTORY OF THE PACIFIC NW 188
 HISTORY OF THE UNITED STATES 187
 HISTORY OF WESTERN CIVILIZATION 186-187
 HIV, AID AND ADDICTIONS 130
 HOLISTIC WELLNESS 182
 HORIZONTAL MILLING 195
 HOT FOOD PRODUCTION I, II, III 148
 HUMAN ANATOMY AND PHYSIOLOGY I, II, III 143
 HUMAN DEVELOPMENT: ADULT 215
 HUMAN DEVELOPMENT: CHILD 214
 HUMAN FACTORS 142
 HUMAN NUTRITION 210
 HUMAN RESOURCES MANAGEMENT 146
 HUMAN SEXUALITY 181
 HYDROTHERAPY 199

I

I-300 INTERMEDIATE INCIDENT COMMAND SYSTEMS 223
 I-400 ADVANCED INCIDENT COMMAND SYSTEMS 223
 IMMIGRANT EXPERIENCE AMERICAN LITERATURE 190
 INCIDENT COMMAND SYSTEMS 221
 INDUSTRIAL FABRICATION 197
 INDUSTRIAL SENSORS 196
 INFORMATION RESEARCH SKILLS 191
 INFORMATION SYSTEMS ANALYSIS 155
 INSTRUMENT-AIRPLANE 141
 INSTRUMENT-HELICOPTER 141
 INTEGRATED THERAPIES 200
 INTERMEDIATE ALGEBRA 201
 INTERNET IN DEPTH 155
 INTERPERSONAL COMMUNICATION 217
 INTRODUCTION TO A MASSAGE CAREER 198
 INTRODUCTION TO AFRICAN-AMERICAN LITERATURE 190
 INTRODUCTION TO AIRCRAFT SYSTEMS 140
 INTRODUCTION TO ALTERNATIVE MEDICINE 132
 INTRODUCTION TO ART HISTORY 133-134
 INTRODUCTION TO AUTOCAD 152
 INTRODUCTION TO AVIATION 140
 INTRODUCTION TO BUSINESS 144
 INTRODUCTION TO CHEMISTRY I, II, III 150
 INTRODUCTION TO CHILDREN'S LITERATURE 192
 INTRODUCTION TO COLLEGE LIFE 219
 INTRODUCTION TO COMPARATIVE POLITICS 213
 INTRODUCTION TO COMPOSITES 150
 INTRODUCTION TO COMPUTERS: WINDOWS 152
 INTRODUCTION TO CONTEMPORARY MATHEMATICS 201
 INTRODUCTION TO CREATIVE WRITING: FICTION 225
 INTRODUCTION TO CREATIVE WRITING: NONFICTION 225
 INTRODUCTION TO CREATIVE WRITING: POETRY 225
 INTRODUCTION TO CREATIVE WRITING: SCRIPTWRITING 225
 INTRODUCTION TO CRIMINOLOGY 156
 INTRODUCTION TO DREAMWEAVER 153
 INTRODUCTION TO EARLY CHILDHOOD EDUCATION 160
 INTRODUCTION TO EDUCATION 162
 INTRODUCTION TO EMERGENCY SERVICES 163, 217
 INTRODUCTION TO EPIDEMIOLOGY 181
 INTRODUCTION TO EXERCISE/SPORT SCIENCE 180
 INTRODUCTION TO FILM 190
 INTRODUCTION TO FIRE BEHAVIOR AND FIREFIGHTER TRAINING 221
 INTRODUCTION TO FLASH 153
 INTRODUCTION TO GEOGRAPHY 174
 INTRODUCTION TO HEALTH OCCUPATIONS 131
 INTRODUCTION TO HUMAN MOVEMENT 181

Courses (continued)

INTRODUCTION TO INTERCULTURAL COMMUNICATION 216
 INTRODUCTION TO INTERNATIONAL RELATIONS 213
 INTRODUCTION TO JAZZ HISTORY 206
 INTRODUCTION TO JUVENILE JUSTICE 156
 INTRODUCTION TO LITERATURE: DRAMA 192
 INTRODUCTION TO LITERATURE: FICTION 191
 INTRODUCTION TO LITERATURE: POETRY 192
 INTRODUCTION TO MEDICAL ANTHROPOLOGY 133
 INTRODUCTION TO MEDICAL ASSISTING 203
 INTRODUCTION TO MEDICAL CODING 185
 INTRODUCTION TO MEDICAL RECORD ANALYSIS 185
 INTRODUCTION TO METHODS OF PROBABILITY AND STATISTICS 202
 INTRODUCTION TO OUTDOOR LEADERSHIP 183
 INTRODUCTION TO PHARMACY TECHNICIAN 210
 INTRODUCTION TO POLITICAL THOUGHT 213
 INTRODUCTION TO PROGRAMMING 152
 INTRODUCTION TO SOCIOLOGY 215
 INTRODUCTION TO SUBSTANTIVE LAW 157
 INTRODUCTION TO THEATER 220
 INTRODUCTION TO THE SOCIOLOGY OF WOMEN 216
 INTRODUCTION TO THE STUDY OF DISEASE 132
 INTRODUCTION TO THE VISUAL ARTS 134
 INTRODUCTION TO US GOVERNMENT AND POLITICS 213
 INTRODUCTION TO WOMEN WRITERS 193
 INTRODUCTION TO WOMEN'S AND GENDER STUDIES 191
 IT IN BUSINESS 155

J

JAZZ COMBO 207
 JAZZ IMPROVISATION 207
 JEWELRY - CASTING & CHAIN MAKING I, II 136
 JEWELRY - ENAMELING I, II 136
 JEWELRY - PRECIOUS METAL CLAY & ENAMELING I, II 137
 JEWELRY - PRECIOUS METAL CLAY I, II 136
 JOGGING 178
 JOURNALISM PRACTICUM 191
 JUDICIAL PROCESS 156
 JUVENILE CORRECTIONS 157

K

KEYBOARDING 210
 KI AIKIDO 178
 KINESIOLOGY I, II, III, IV 198

L

L-180 HUMAN FACTORS-FIRELINE 221
 L-280 FOLLOWERSHIP/LEADERSHIP 223
 LAND NAVIGATION 205
 LAND USE RESEARCH 175
 LANGUAGE AND CULTURE 133
 LANGUAGE AND LITERACY IN EARLY CHILDHOOD EDUCATION 160
 LATHE OPERATOR I, II 195
 LATINO LEADERSHIP 147, 189
 LAW ENFORCEMENT 156
 LAYOUT 194
 LEADERSHIP AND MANAGEMENT 205
 LEARNING ACROSS THE LIFESPAN 162
 LEGAL ASPECTS MEDICAL RECORDS 185
 LEVEL 2 NURSING ASSISTANT - ACUTE CARE 208
 LIFE PLAN FOR WOMEN 147
 LIFEGUARD TRAINING 182
 LIMNOLOGY 176
 LISTENING 217
 LITERATURE INTO FILM 190
 LODGING MANAGEMENT 189
 LPN RE-ENTRY PRACTICUM 209

M

MACROECONOMICS 161
 MAGIC, WITCHCRAFT, RELIGION 133
 MANAGEMENT FUNDAMENTALS I, II 145
 MANAGERIAL ACCOUNTING 145
 MANAGING A WINDOWS 2003 NETWORK ENVIRONMENT 155
 MANAGING BUSINESS PROCESSES 147
 MANUAL DRIVE TRAINS I, II 139
 MANUFACTURING COST ESTIMATION 196
 MANUFACTURING ELECTRICAL SYSTEMS 194
 MANUFACTURING JIGS AND FIXTURES 196
 MANUFACTURING PROCESSES I, II 193
 MANUFACTURING PROCESSES III 194
 MAP, COMPASS, GPS 171

Courses (continued)

MAP INTERPRETATION AND DESIGN 175
 MARKETING PRINCIPLES I, II 146-147
 MASSAGE I, II 199
 MATERIAL HANDLING-FORK LIFT SAFETY 197
 MATERIALS ENGINEERING 193
 MATH FITNESS FOR COLLEGE ALGEBRA 201
 MATH FOR BUSINESS DECISIONS 146
 MATH, SCIENCE AND TECHNOLOGY IN EARLY CHILDHOOD EDUCATION 160
 MATHEMATICS FOR MANAGEMENT/LIFE/SOCIAL SCIENCE 202
 MECHANICAL SYSTEMS I 139
 MEDIA, COMMUNICATION, SOCIETY 217
 MEDICAL ASSISTANT PRACTICUM I 204
 MEDICAL ASSISTING ADVANCED PROCEDURES 204
 MEDICAL ASSISTING BASIC PROCEDURES 203
 MEDICAL ETHICS 132
 MEDICAL OFFICE PROCEDURES I, II 204
 MEDICAL TERMINOLOGY I, II 131
 MEDICAL TRANSCRIPTION APPLICATIONS 184
 MENTORING FOR OREGON LEADERSHIP INSTITUTE I, II, III 189
 MENTORSHIP 199
 METALS PREPARATION 194
 METALWORK & JEWELRY - COLD FABRICATION I, II 136
 METALWORK & JEWELRY - ETCHING & HYDRAULIC PRESS I, II 137
 METALWORK & JEWELRY - FORMING I, II 136
 METALWORK & JEWELRY - HOT FABRICATION I, II 135
 METALWORK & JEWELRY - SURFACES I, II 136
 METEOROLOGY I, II 140-141
 MICROBIOLOGY 143
 MICROECONOMICS 161
 MILITARY SCIENCE I, II, III 204-205
 MIND AND BRAIN 214
 MIND AND SOCIETY 214
 MODERN ART HISTORY 134
 MODERN LATIN AMERICAN HISTORY 188
 MOUNTAINEERING I, II 183
 MOVEMENT, MUSIC AND THE ARTS IN EARLY CHILDHOOD EDUCATION 160
 MULTICULTURAL ISSUES IN EDUCATION SETTINGS 162
 MULTICULTURAL ISSUES IN HUMAN SERVICES 130
 MULTI-ENGINE PILOT 142
 MUSIC FUNDAMENTALS 205
 MUSIC THEORY IA, IB, IC 205
 MUSIC THEORY IIA, IIB, IIC 206
 MUSICIANSHIP IA, IB, IC 206
 MUSICIANSHIP IIA, IIB, IIC 206-207

N

NATIVE AMERICAN ART HISTORY 134
 NATIVE AMERICAN HISTORY 187
 NATIVE AMERICAN LITERATURE AND CULTURE 190
 NETWORKING ESSENTIALS 155
 NFPA INSTRUCTOR I 221
 NOTE TAKING 219
 NURSING ASSISTANT 208
 NURSING CRITICAL CARE 209
 NURSING I, II, III, IV, V, VI 208-209
 NUTRITION FOR HEALTH 182
 NUTRITION THERAPY 160

O

OBSERVATION & GUIDANCE IN EARLY CHILDHOOD EDUCATION LEARNING 160
 OCS PHASE I 205
 OFFICE PROCEDURES PRACTICUM 210
 OPTICAL COMPARATOR 195
 ORAL MEDICINE 159
 ORGANIC CHEMISTRY I, II, III 150
 OUTDOOR LIVING SKILLS 183
 OUTDOOR PHOTOGRAPHY 178
 OUTDOOR RECREATION LEADERSHIP 183
 OXYGEN-FUEL AND PLASMA CUTTING 196

P

PAINTING I, II, III, IV, V, VI 137
 PATHOLOGY 198
 PAYROLL ACCOUNTING 144
 PC TECHNICIAN 154
 PERSONAL FINANCE 146
 PERSONALITY PSYCHOLOGY 214
 PHARMACOLOGY I, II 209-210

Courses (continued)

PHARMACY CALCULATIONS 211
 PHARMACY TECHNICIAN PROCEDURES 211
 PHARMACY TECHNICIAN SEMINAR 211
 PHILOSOPHY OF LOVE AND SEX 211
 PHOTOGRAPHY I, II, III 137-138
 PHOTOSHOP 153
 PHYSICAL ANTHROPOLOGY 133
 PHYSICAL GEOGRAPHY: LANDFORMS AND WATER 175
 PHYSICAL GEOGRAPHY: WEATHER AND CLIMATE 175
 PHYSICAL SCIENCE: ASTRONOMY 173
 PHYSICAL SCIENCE: CHEMISTRY 173
 PHYSICAL SCIENCE: GEOLOGY 173
 PHYSICAL SCIENCE: OCEANOGRAPHY 173
 PHYSICAL SCIENCE: PHYSICS 173
 PIANO CLASS I 207
 PILATES 179
 PILATES-ALL LEVELS 179
 PLANTS OF THE PACIFIC NORTHWEST 170
 PNW ENGINE ACADEMY 223
 POLITICS OF THE MIDDLE EAST 213
 POPULAR CULTURE: DETECTIVE STORIES 190
 POPULAR CULTURE: NOIR FILM AND FICTION 191
 POPULAR CULTURE: SCIENCE FICTION 190
 POPULAR CULTURE: SPY THRILLER 191
 POPULAR CULTURE: THE AMERICAN WESTERN 190
 POPULAR CULTURE: TRAVEL LITERATURE 191
 PRACTICUM ADDICTIONS TREATMENT 131
 PRACTICUM: CULINARY SUPERVISION 159
 PRACTICUM: FOOD SERVICE CONTROLS 159
 PRACTICUM: FOOD SERVICE NUTRITION 160
 PRACTICUM I: HOSPITAL/INSTITUTIONAL 211
 PRACTICUM II: RETAIL/COMMUNITY 211
 PRACTICUM IN MATHEMATICS 202
 PRACTICUM IN TEACHING 162
 PRACTICUM: NUTRITION THERAPY 160
 PRACTICUM: SANITATION 159
 PRE-ALGEBRA 200
 PREVENTIVE DENTISTRY 158
 PRINCIPLES OF BIOLOGY I 143
 PRIVATE PILOT 140
 PRIVATE PILOT-HELICOPTER 141
 PROBLEMS OF PHILOSOPHY - EPISTEMOLOGY 212
 PROBLEMS OF PHILOSOPHY - ETHICS 212
 PROBLEMS OF PHILOSOPHY - LOGIC 212
 PROCRASTINATION & MOTIVATION 220
 PROFESSIONAL ETHICS AND RULES 199
 PROGRAMMABLE LOGIC CONTROLLERS I, II 196
 PROGRESSIVE WALKING 180
 PSYCH OF VIOLENCE & AGGRESSION 214
 PSYCHOLOGY OF RISK AND ADVENTURE 183
 PUBLIC EDUCATION AND FIRE PREVENTION 218
 PUBLIC RELATIONS 144
 PUBLICATIONS LAB 191
 PURPOSE, STRUCTURE AND FUNCTION OF EDUCATION IN A DEMOCRACY 162

Q

QUALITY ASSURANCE 194
 QUALITY IMPROVEMENT IN HEALTH CARE 186
 QUICKBOOKS 146

R

RACE, CLASS ETHNICITY 216
 RAKU-SPECIAL TOPICS 135
 READINGS IN THEATER 220
 RECREATIONAL RESOURCE MANAGEMENT 172
 REGIONAL GEOLOGY 176
 REMOTE SENSING 174
 REPORTING 1, 2 191
 RESCUE PRACTICES 219
 RESOURCE INTERPRETATION 172
 RESOURCE MEASUREMENT 171
 RESOURCE SAMPLING 171
 RETAILING 147
 RHETORIC AND CRITICAL THINKING I, II 224
 RHIT EXAM PREPARATION 186
 RN RE-ENTRY PRACTICUM 209
 ROBOTIC PROGRAMMING I, II 194, 196
 ROCKS AND MINERALS 177
 RX-300 PRESCRIBE BURN BOSS 223
 RX-340 (RX-310) FIRE EFFECTS 223

Courses (continued)

S

S-131 ADVANCED FIREFIGHTER 221
 S-131 AND S-134 221
 S-134 LOOKOUTS, COMMUNICATION, ESCAPE ROUTES, SAFETY ZONES 221
 S-200 INITIAL ATTACK INCIDENT COMMAND 221
 S-203 INTRODUCTION TO INCIDENT INFORMATION 221
 S-211 PORTABLE PUMPS 222
 S-212 WILDFIRE POWER SAWS 222
 S-215 FIRE OPERATIONS IN THE URBAN INTERFACE 222
 S-230 CREW BOSS 222
 S-231 ENGINE BOSS 222
 S-232 DOZER BOSS 222
 S-234 IGNITION OPERATIONS 222
 S-244 FIELD OBSERVER 222
 S-260 INTERAGENCY INCIDENT BUSINESS MANAGEMENT 222
 S-261 APPLIED INTERAGENCY INCIDENT BUSINESS MANAGEMENT 222
 S-270 BASIC AIR OPERATIONS 223
 S-290 INTERMEDIATE WILDFIRE BEHAVIOR 223
 S-300 IC EXTENDED ATTACK 223
 S-330 TASK FORCE/STRIKE TEAM LEADER 224
 S-336 SUPPRESSION TACTICS 224
 S-339 DIVISION GROUP SUPERVISOR 224
 S-390 FIRE BEHAVIOR CALCULATION 224
 SCIENTIFIC TERMINOLOGY: LATIN AND GREEK ROOTS 143
 SCULPTURE 138
 SEARCH AND SEIZURE 157
 SECOND YEAR FRENCH I, II, III 166
 SECOND YEAR GERMAN I, II, III 167
 SECOND YEAR ITALIAN I, II, III 168
 SECOND YEAR SPANISH I, II, III 169
 SELECTED TOPICS:
See individual subject area in course descriptions which begin on page 129.
 SELLING AND NEGOTIATION 146
 SEMINAR IN CRIMINAL JUSTICE 156
 SEMINAR IN OUTDOOR LEADERSHIP 183
 SHAKESPEARE 192
 SHAKESPEARE REVIEW IN ASHLAND 192
 SILVICULTURE AND HARVESTING PROCESSES 170
 SKI ALPINE I, II 178
 SKI CONDITIONING (NORDIC) 178
 SKI X-COUNTRY I, II 179
 SMALL GAS ENGINES 139
 SMALL GROUP COMMUNICATION 217
 SMAW I, II, III 197
 SNOWBOARDING I, II 177
 SNOWBOARDING III COMPETITIVE FREESTYLE RIDING 177
 SOCCER 178
 SOCCER ADVANCED 179
 SOCIAL DEVIANCE 216
 SOCIAL ISSUES AND SOCIAL MOVEMENTS 216
 SOCIAL PSYCHOLOGY 214-215
 SOCIALIZATION 216
 SOCIOLOGY OF POPULAR CULTURE 216
 SOC OF RELIGION 216
 SOFTBALL 178
 SOFTWARE APPLICATIONS 153
 SOILS: SUSTAINABLE ECOSYSTEMS 171
 SPANISH CONVERSATION AND CULTURE I, II, III 169
 SPANISH FOR LAW ENFORCEMENT PERSONNEL 156
 SPATIAL DATA COLLECTION 173
 SPECIAL STUDIES:
See individual subject area in course descriptions which begin on page 129.
 SPORT AND EXERCISE PSYCHOLOGY 181
 SS: BIOLOGY 143
 SS: SPECIAL STUDIES 151
 SS: SPECIAL STUDIES CMT 151
 STATE/LOCAL GOVERNMENT 213
 STATICS 165
 STEERING AND SUSPENSION 139
 STRENGTH OF MATERIAL 165
 STRESS MANAGEMENT 181
 STRETCH AND RELAXATION 178
 STRING ENSEMBLE 207
 ST: SELECTED TOPICS CMT 151
 ST: SPECIAL TOPICS CMT 150
 STUDY STRATEGIES 220
 SUCCESS IN THE CLASSROOM 220
 SUPERVISION AND LEADERSHIP 171

Courses (continued)

SURFACE GRINDING I, II 194, 195
 SURVEY AMERICAN LITERATURE I, II 193
 SURVEY BRITISH LITERATURE I, II 192
 SURVEY OF NORTHWEST WILDLIFE 172
 SURVEY OF THE CRIMINAL JUSTICE SYSTEM 156
 SWIMMING I: SWIM FIT & TECH 177
 SYMPHONY 207

T

20TH CENTURY EUROPEAN HISTORY 188
 TAE KWON DO 179
 TAI CHI/QIGONG 179
 TAI CHI/QIGONG-INTERMEDIATE 179
 TEACHING ROCK CLIMBING 184
 TEAM SKILLS 217
 TECHNICAL MATHEMATICS I, II 201
 TECHNICAL WRITING 225
 TENNIS I, II 179
 TEST TAKING 220
 THE BUSINESS OF MASSAGE 144
 THE WILDERNESS CONCEPT 174
 TIME MANAGEMENT 220
 TOPICS IN PRECALCULUS 202
 TOTAL FITNESS 179
 TRAINING THEORY AND APPLICATIONS 181
 TRIGONOMETRY 201

U

UNDERSTANDING MUSIC 206
 URBAN FORESTRY 172
 URBAN INTERFACE 218
 US WOMEN'S HISTORY 188

V

VECTOR CALCULUS I, II 203
 VERTICAL MILLING 195
 VOCAL ENSEMBLE 207
 VOICE CLASS I 208
 VOLLEYBALL (ADV) 179
 VOLLEYBALL ALL LEVELS 179
 VOLLEYBALL (BEG) 179
 VOLLEYBALL (DOUBLES) 180

W

WATER AEROBICS 180
 WATER SAFETY INSTRUCTOR 182
 WATERCOLOR I, II, III 138
 WEB DEVELOPMENT I, II 155, 156
 WEIGHT TRAINING 180
 WELDING INSPECTION/QUALITY CONTROL 196
 WELDING TECHNOLOGY I, II, III 193
 WESTERN WORLD LITERATURE: ANCIENT 192
 WESTERN WORLD LITERATURE: MIDDLE AGES 192
 WESTERN WORLD LITERATURE: MODERN 192
 WHITEWATER RAFT GUIDING 184
 WILDERNESS ADVANCED FIRST AID 183
 WILDERNESS AND SOCIETY 176
 WILDERNESS CONCEPTS 170
 WILDERNESS TRAINING 180
 WILDERNESS TRAINING: WATER 180
 WILDLAND FIRE SCIENCE I, II 170, 171
 WILDLIFE CONSERVATION 172
 WILDLIFE ECOLOGY 172
 WINDOWS 2003 NETWORK INFRASTRUCTURE ADMINISTRATION 155
 WINDOWS VISTA 155
 WINDOWS XP PROFESSIONAL 156
 WINE AND BEVERAGES 148
 WOMEN IN 20TH CENTURY EUROPEAN HISTORY 188
 WOOD TECHNOLOGY & UTILIZATION 172
 WOODWIND ENSEMBLE 207
 WORKING INTERNSHIP 144
 WORLD HISTORY 187
 WORLD REGIONAL GEOGRAPHY I, II 175

Y

YOGA 180
 YOGA-ALL LEVELS 180
 YOGA/PILATES BLEND 180
 YOUTH AND ADDICTIONS 130

GENERAL INDEX

A

AAOT 33
 AAS 35
 ABE 32. *See also* Adult Basic Education
 Ability-to-benefit 11
 academic advising 17
 Academic Eligibility Standard 12
 academic information 24
 academic support services 17
 Academic Warning Policy 26
 academic year 23
 Accounting 61
 Accounting Clerk Certificate 60
 accreditation 3
 Addictions Studies 48-50, 130
 adding classes 9
 Adjunct Faculty 231
 Administration 236
 Administrative Withdrawal 8
 Administrators Emeriti 239
 admission criteria 6
 Adult Basic Education/College Preparation 4, 8, 32
 Adult Basic Education Instructors 233
 adult community education 23
 Adult high school diploma 32
 Advanced Placement (AP) 28
 advanced standing 27
 Advising 6
 AGS 35
 alcohol policy 31
 Allied Health 131
 Anthropology 51, 132
 application dates 6
 Application Procedure, Financial Aid 14
 Apprenticeship 52
 Art 53, 133
 Articulated high school programs 7
 Articulation agreements 34
 AS 34
 AS-DT 34
 Associate of Applied Science (AAS) 42
 Associate of Applied Science degrees (AAS) 35
 Associate of Arts-Oregon Transfer 38
 Associate of Arts - Oregon Transfer (AAOT) 33
 Associate of General Studies 35, 43
 Associate of Science (AS) 34, 40
 Associate of Science - Direct Transfer 34
 Associated Students of COCC (ASCOCC) 21
 attendance 8
 Audit (X) 25
 auditing classes 9
 Automotive Drive-Train Technician 55

Automotive Electrical Technician (Advanced) 56
 Automotive Electrical Technician (Basic) 55
 Automotive Engine Performance Technician 56
 Automotive Engines Technician 55
 Automotive Heating and Air Conditioning Technician 56
 Automotive Management 54
 Automotive Technology 55-56, 138
 Aviation 58
 Aviation-Airplane 57
 Aviation-Helicopter 58
 Aviation-Prof. Pilot Airplane 140

B

Barber Library 3, 18
 Basic skills classes 32
 Biology 59, 142
 Board of Directors 226
 Board Vision and Goals 2
 Bookstore 17
 Broadside, Student Newspaper 21
 Business AAS specializations 60
 Business Administration 60-62, 144
 Business Development Center 4

C

CAD 65
 Campus description 3
 Campus Services 22
 CAP Center 17
 Career and Technical courses 46
 Career and Technical Education 35
 Career/Life Planning 147
 Career Services 18
 Cascade Culinary Institute 69, 148
 Certificates at a Glance 47
 Certificates of completion 35
 certificate completion 35
 challenge courses 24, 27
 checklists, associate degrees 38-43
 Chemistry 63, 150
 Classified Staff 239
 Clubs, student 22
 Club Sports 21
 CNC Machining 98
 COCC Foundation 4
 COCC Foundation Scholarships 14
 Collections Policy 8
 College Level Examination Program (CLEP) 28
 College Now/Tech Prep 7
 College Now/Transfer 7

college preparation 32
 Commencement Ceremony 36
 Community Learning 4, 8
 Composites Manufacturing Technology (CMT) 64, 150
 Computer Aided Drafting 65
 Computer and Information Systems 65-66, 152
 computer competency requirement 36
 computer labs 18
 concerns procedure 31
 concurrent enrollment 7
 Confidential/Supervisory Staff 240
 Continuing Education 8
 Copy Center 18
 corequisite 129
 Corrections 67
 Counseling (CAP Center) 18
 course 23
 descriptions 129
 listing
 how to read 129
 numbering 23
 credit 23
 credit class schedule 23
 Credit for Prior Certification (CPC) 27
 credit load 23
 credit recovery 32
 Criminal Investigations 67
 Criminal Justice 67-68, 156
 Culinary 69-70
 curriculum 23

D

Dean's list 25
 Dean Emeritus 226
 Deans 226
 degree completion 35
 degree general requirements 35
 degree options 33
 degree preparation 33
 degrees
 at a glance 47
 Dental Assisting 71, 157
 Developmental Studies 18. *See also* Mathematics, Reading or Writing
 Dietary Management 159
 Dietary Manager 72
 Digital Production Services 18
 Directory Information 29
 Directory/release of information 29
 Disabilities 19
 Distribution courses 45
 District, College 2

dropping classes 9
drug policy 31

E

e-mail 20
Early Childhood Education 73-74, 160
Eastern Oregon University 34
Economics 75, 161
Education 76, 162
Electronic Medical Billing 93
Emergency Medical Services 76-77, 162
ends statements/goals 2
Engineering 114, 165. See
 also Manufacturing, CAD or Forest
 Resources Technology
Engineering Tech 114
English. See Literature or Writing
English Language Learning (ELL) 8, 32
English/Literature 78-79
enrolled student 23
Enrollment Services – Admissions 6
Enrollment Services – Financial Aid 12
escort service 22
Exercise Science 80-81. See *also* Health
 and Human Performance
Expanded Options 7

F

Fabrication Sheet Metal 98
Faculty 3, 227
Faculty Achievement Award Recipients
 235
Faculty Emeriti 233
Family Education Rights and Privacy Act
 of 1974 Pell-Buckley Amendment
 (FERPA) 29
Federal Family Education Loan Programs
 (FFELP) 15
Federal Pell Grant 14
Federal PLUS (Parent Loan to
 Undergraduate Students) program
 15
Federal Supplemental Education
 Opportunity Grant (FSEOG) 14
fees 8
FERPA 29
Film 190
Film Arts. See Humanities
Financial Aid 12
financial aid, types of 14
financial aid appeal procedures 13
financial aid distribution 12
financial aid withdrawal penalty/
 repayment requirements 13
Firefighter Type II 127
Fire Science. See Structural Fire Science
 or Wildland Fire Management
Fisheries and Wildlife. See Forest
 Technology or Forestry

food service 22
Foreign Languages 82-83, 165
Forest Resources Technology 84-86
Forest Resource Tech 169
Forestry 169
full-time student 23

G

GED College Preparation 32
GED prep 8
General Business 61
General Education outcomes 33
General Science 87, 173. See Physical
 Science
General Studies degree 35
Geographic Information Systems (GIS)
 88-89, 173
Geography 90, 174
Geology 91, 176
glossary of academic terms 23
grade changes 25
grading policy 24
graduation 36
graduation honor roll 25
grants 14

H

Health Information Technology 92-93,
 184
health insurance 22
Health Promotion 94
Health Records. See Health Information
 Technology
HHP: Activity Classes 177
HHP: Exercise Science 180
HHP: Health Classes 181
HHP: Outdoor Leadership 183
high school completion 8
high school options 2
high school students 7
History 95, 186
 of COCC 2
Honor scholarships 14
Hospitality, Tourism & Recr 189
Hotel, Tourism and Recreation
 Management 61
Human Development 189
Humanities 96-97, 190
Humanities Distribution Course options
 45
Humboldt State University 34

I
IC3 Exams 36
Incomplete 24
information consent 30
Information Systems Management 61
Insurance 92
International Baccalaureate 28
international credentials 29
In progress (IP) 24

J

Journalism 191
Juniper Hall residence housing 22
Juvenile Corrections 67
Juvenile Justice 67

K

Kitchen Prep certificate 69

L

Law Enforcement 67
Library 3, 18, 191
Linn Benton Community College 34
Literature 78-79, 191. See
 also Humanities
loans 15
lower-division courses 23

M

Mail Services 18
Management and Marketing 61
Manual Machining 99
Manufacturing Technology 98-101, 193
Mapping Cartography 85
Massage Therapy 102-103, 198
Master Automotive Technician 56
Mathematics 104, 200
matriculation 11
Medical Assistant 105, 203
Medical Coding 93
Medical Secretary 92
Medical Transcription 93
MIC, "M" courses 129
midterm grade reports 25
military credit 28
military recruiting 30
Military Science 106, 204
mission statement 2
Multicultural Center 19
Multicultural Infusion Component 129
multiple/concurrent degrees 36
Music 107, 205

N

Native American Program 19
Native American students 11
Natural Resources 84
new students 6
noncollegiate and nonaccredited
 institutions 28
nondegree-seeking students 6
nondiscrimination policy 31
NSF Checks 8
Nursing 108-109, 208
Nutrition 210

O

OCCURS 30
 Office Administration 210
 Office Assistant 110
 Oregon Community College Unified Reporting System (OCCURS) 30
 Oregon Institute of Technology 35
 Oregon Opportunity Grant (OOG) 15
 Oregon State University-Cascades Campus 5, 35
 Oregon Transfer Module 37
 Outdoor Leadership 111-112

P

parking 22
 Parole and Probation 67
 Pass (P)/no pass (NP) 24
 Pathways to success 33
 Pharmacy Technician 113, 210
 Philosophy 211
 Physical Education. See Health and Human Performance
 Physical Science. See General Science
 Physics 114, 212. See also General Science
 placement testing 6
 policies 24
 Political Science 115, 213
 Portland Community College 35
 Practical Nursing 108
 pre-college coursework 32
 Pre-Dental Hygiene 116
 Pre-Dentistry 119
 Pre-Law 117
 Pre-Medical Imaging Technology 120
 Pre-Medical Lab Technology 118
 Pre-Medicine 119
 Pre-Radiology Technologist 120
 Pre-Veterinary 119
 prerequisite 129
 President 226
 Presidents Emeriti 226
 Private scholarships 14
 Processing fees 10
 programs at a glance 47
 Psychology 121-122, 214

Q

Quality Assurance 99

R

Reading 215
 Recreation Leadership. See Health and Human Performance
 Redmond Campus 4, 240
 refunds 10
 Registered Nursing 109
 registration 7

repayment requirements 13
 repeat grade policy 25
 residency 10-11
 residency appeals 11
 residency policy 10
 Retail Management Certificate 60
 Retail Operations Management 61
 rights and responsibilities, student 31

S

Satisfactory Academic Progress 12
 scholarships 14
 Science 87
 Science/Math/Computer Science Distribution Course options 45
 Services for Students with Disabilities 19
 shuttle bus 22
 Smoking policy 31
 Social Sciences Distribution Course options 46
 Social Security number 30
 Sociology 123, 215
 special admission 7
 Speech 216
 Speech Communication 124-125
 Stafford Loan program 15
 Structural Fire Science 125-126, 217
 student
 e-mail account 20
 educational records 29
 housing 22
 network account 20
 support services 21
 Student Life 21
 Student Right to Know Act 11
 Student Services 17
 students 3
 Students not seeking a certificate or degree 6
 Students returning after an absence 6
 students under age 15 7
 Study Abroad 20
 Study Skills 219
 subject 23

T

Testing 21
 Testing Center 20
 Theater Arts 220
 The Oregon Transfer Module (OTM) 33
 transcripts 10
 transfer/bachelor degree preparation 33
 transfer credit 27
 transfer students 6
 transferring credits 29
 Transitional Studies 18, 32

transportation 22
 tuition 8
 tuition payment plan 8
 tuition refund 10
 Tutoring 21
 Tutoring Center 20

U

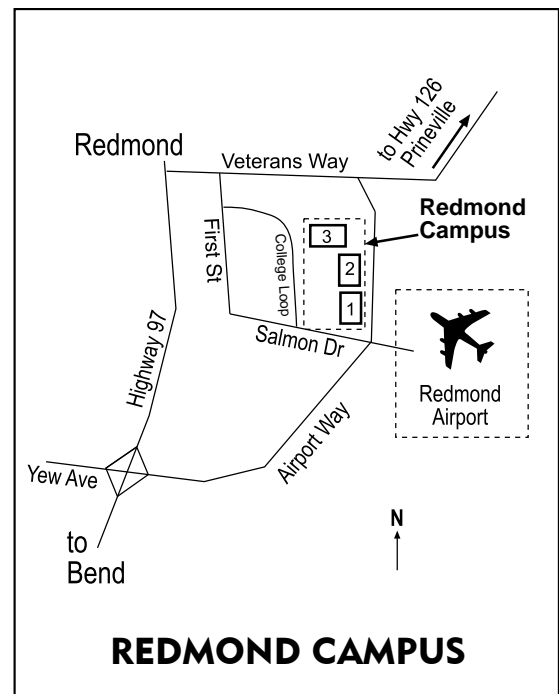
Under-Car Technician 55
 upper-division courses 23

V

veterans education benefits 16
 Vice President Emeritus 226
 Vice Presidents 226
 vision statement 2

W

wait lists 9
 Welding 100
 WIC, "W" courses 129
 Wildland Fire Fuels Management 127-128, 221
 Wildland Fire Suppression 127
 Withdrawal (W) 24
 withdrawal from classes 9
 Women's Studies. See Humanities
 work-study employment 15
 Writing 224
 Writing in Context 129



Medical Imaging/Radiology Technologist Associate of Science

Students interested in ultimately practicing in the field of medical imaging can use the following degree guidelines to prepare for transfer and meet program admission requirements for OIT's Bachelor of Science in medical imaging and LBCC's Associate of Applied Science in Radiology Technology. This is not a complete list of application prerequisites. Requirements are subject to change; refer to the catalogs of the transfer institutions for detailed information.

Associate of Science (medical imaging/radiology technologist)			
General Education: Basic Skills		Notes for OIT preparation	Notes for LBCC preparation
English Composition			
	WR 121 (3cr)	1	5
	WR 122 (3 cr)	1	
	Third approved WR course(3 cr)	WR 227 recommended	
Speech			
	SP 111 (3 cr)	1	5 (or SP 218)
Math			
	MTH 111 (4 cr)	1	5
Health			
	HHP 231, 242, 258, 266, 295 or 252A (3cr)		5
	HHP 185xx (1 cr)		
Computer Skills			
	Pass CIS 120 (4 cr) or computer comp. test		5 CIS 120 or computer competency test
General Education: Distribution Requirements			
Area 1 (Choose three courses from the Sciences/Math/Computer Science category on the Distribution List with at least two different prefixes, at least two courses with the same prefix)			
	BI 231 (4 cr)	2	5
	BI 232 (4 cr)	2	Not required/highly recommended
	CHEM 104 or 221 (4 cr)	2	6 (or GS 105) (4 cr)
Area 2 (Choose three courses from the Social Science category on the Distribution List with at least two different prefixes, at least two courses with the same prefix)			
	PSY 201 or 202 (4 cr)	1,	Not required
	Second course from list (3-4 cr)	1, 3,	
	Third course from list (not PSY prefix, 3-4cr)	3	
Area 3 (Choose two courses from the Humanities category on the Distribution List)			
	First course from list(3-4 cr)	1, 4	
	Second course from list (3-4 cr)		6
Program Requirements (24 credits minimum) Must be 100 level and above, and should be chosen with advisor)			
	BI 233 (4 cr)	2	Not required/highly recommended
	MTH 112 (4 cr)	2	Not required
	MIT 103 (from OIT, 3 cr)	2	Not required
	AH 111 (3 cr)	2	5
	AH 112 (3 cr)		6
	BI 101 or 211 (4 cr)		6
	PH 201 or 211 or GS 104 (4 cr)		6
Elective Requirements (Choose enough elective credits to reach a minimum of 93 overall degree credits. Elective classes must be numbered 100 or above, with no more than 12 career technical education credits (see COCC catalog for an up-to-date list of career education courses), and a maximum of 15 credits of HHP activity, music performance and CWE courses. Electives can also be used to meet lower-division major requirements if not met in other sections.			
			Cultural Diversity requirement (see Selection Process Handbook) contributes to points
Other Degree Requirements			
	Minimum of 93 total <i>degree applicable</i> credits		
	Minimum of 24 COCC <i>degree applicable</i> credits		
	Minimum of a 2.0 cumulative COCC GPA		
	Submit official transcripts for all transfer courses		
	Apply for graduation two terms prior to graduation.		

Notes

- OIT MIT application prerequisite (NOT used for GPA calculation)
- OIT MIT application prerequisite (USED for GPA calculation)
- OIT general education requirement in Social Science: select from the following prefixes on COCC's Distribution List: ANTH, EC, GEOG (some), HST, PS, PSY, SOC
- OIT general education requirement in Humanities: select from the following prefixes on COCC's Distribution List: ART, ENG, MUS, PHL, 2nd year foreign language
- LBCC/RT application prerequisite (C or better)
- LBCC/RT graduation requirement, not required for admission but contributes to points (C or better)