



UMPQUA COMMUNITY COLLEGE

2018-2019

COURSE CATALOG



Snyder Fountain





# COURSE CATALOG

Students are to read and abide by the contents of the current UCC Catalog, which sets forth the terms and conditions of enrollment and supersedes and replaces any previous Catalog.

Circumstances will undoubtedly require that the policies, procedures, rules, and benefits described in this Catalog change from time to time as the College deems necessary or appropriate, and those changes will be valid when approved by UCC administration and/or voted by the Board of Education. Those changes will be posted on Student Self-Service Web and the UCC website and when appropriate, will be incorporated in future editions of the UCC Catalog.

A grievance procedure and binding arbitration are provided for any dispute or claim (including those based upon a statute, tort, or public policy) that a student has with the College regarding the terms and conditions of enrollment by the College.

Umpqua Community College in full accordance with the law is committed to providing a working and learning environment that is free from discrimination, harassment and retaliation. UCC does not discriminate in employment, student admissions, and student services on the basis of race, color, religion, age, political affiliation or belief, sex, national origin, ancestry, disability, place of birth, General Education Development Certification (GED), marital status, sexual orientation, gender identity or expression, Veteran status, or any other legally protected classification. UCC recognizes its responsibility to promote the principles of equal opportunity for employment, student admissions, and student services taking active steps to recruit individuals of color and women. Inquiries should be directed to Human Resources and/or the Dean of Services, 1140 Umpqua College Road, P.O. Box 967, Roseburg, OR 97470-0226 Telephone, 541.440.7773

## About this Catalog

Umpqua Community College publishes this catalog to provide you, our students and public, current information about the College.

We make every effort to provide accurate information. However, sometimes the College finds it necessary to make changes after the catalog has been printed. The changes may affect procedures, policies, calendar, curriculum, or costs. Therefore, this catalog is to be considered only as a guide in planning your course of study.

For the most up-to-date catalog information and addendum, please check online at <http://www.umpqua.edu/course-catalog>.

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# ACADEMIC CALENDAR 2018-19

	SUMMER 2018	FALL 2018	WINTER 2019	SPRING 2019
Registration Begins	May 14	May 14	November 5	February 25
Deadline to File & Pay for Graduation	End of February 2018	End of July 2018	End of October 2018	End of January 2019
Registration Payment Due **	CHECK QUARTERLY CLASS SCHEDULE FOR DETAILS			
New Student Registration	CHECK QUARTERLY CLASS SCHEDULE FOR DETAILS			
Classes Begin (via web only on weekends)	Term starts June 25	September 24	January 7	April 2
Last Day to Register/Add Classes*** (via web only on weekends)	Session dates may vary. Check Summer 2018 schedule or Registrar's Office.	October 5	January 18	April 12
Last day to drop with refund		September 30	January 13	April 7
Last Day to DROP/DELETE (classes will not appear on transcript)		September 30	January 13	April 7
Last Day to WITHDRAW (will appear on transcript as withdrawn)		November 20	March 8	May 31
Campus Closures	All Fridays from June 22 - September 7 July 4 September 3 No Friday classes	September 17 November 12 November 22-25 December 22-January 1 December 9-January 6	January 21 February 18	May 27
Student Vacations			March 24-March 31	May 27
Final Exams		December 3-8	March 18-23	June 8-14*
End of Term	August 30	December 8	March 23	June 14
GED and High School Completion Graduation			Tentative	June 13
Commencement				June 14

\*Saturday final exams will be held June 9. Saturday classes during spring term will meet longer to ensure the appropriate contact hours are met.

\*\*When registering for a class, you are agreeing to pay the tuition and fees plus any applicable late fees and interest.  
If you cannot attend you must officially drop the class or you will be charged.

\*\*\* Instructor approval required during the second week of class.



# PROGRAM CONTACTS

Agriculture Business Management . . . . .	541-440-7854	English . . . . .	541-440-4649	Music . . . . .	541-440-4693
Anthropology . . . . .	541-440-4663	Entrepreneurship . . . . .	541-440-7790	Natural Resources . . . . .	541-440-7641
Apprenticeship Training . . . . .	541-440-4675	Entry Management . . . . .	541-440-4703	Registered Nursing . . . . .	541-440-4614
Art, Art Education, Art History . . . . .	541-440-4692	Executive Business Assistant . . . . .	541-440-7790	Occupational Skills Training . . . . .	541-440-4713
Automotive Technology . . . . .	541-440-7782	Financial Services Certificate . . . . .	541-440-4703	Office Assistant . . . . .	541-440-7790
Automotive Technology–Toyota Option . .	541-440-7782	For <i>Financial Aid</i> call . . . . .	541-440-4602	Outdoor Recreation . . . . .	541-440-7729
Biology . . . . .	541-440-7683	Fire Science . . . . .	541-440-7829	Paralegal Studies . . . . .	541-440-4663
Botany . . . . .	541-440-7641	Forest Engineering, Management . . . . .	541-440-4683	Paramedicine . . . . .	541-440-7680
Business Administration . . . . .	541-440-7790	Forest Operations . . . . .	541-440-4683	Physics . . . . .	541-440-7736
Business Education . . . . .	541-440-7790	Front Office Medical Assistant . . . . .	541-440-7790	Police Reserve Academy . . . . .	541-440-7668
Chemistry . . . . .	541-440-7821	Geographic Information Systems . . . . .	541-440-4683	Political Science . . . . .	541-440-7753
Communication Specialist in Organizations . . . . .	541-440-4647	Geology . . . . .	541-440-4654	Practical Nursing . . . . .	541-440-4614
Communication Studies . . . . .	541-440-4647	Health, Health Education . . . . .	541-440-7729	Pre-Architecture . . . . .	541-440-4692
Computer Information Systems . . . . .	541-440-7686	History . . . . .	541-440-7753	Pre-Law . . . . .	541-440-7753
Computer Science . . . . .	541-440-7686	Human Services . . . . .	541-440-4679	Pre-Nursing . . . . .	541-440-4614
Criminal Justice . . . . .	541-440-7668	Hospitality and Restaurant Management	541-440-7658	Psychology . . . . .	541-440-4681
Criminal Justice – SOU . . . . .	541-440-7668	Humanities . . . . .	541-440-4649	Retail Management . . . . .	541-440-4703
Dental Assisting . . . . .	541-440-4710	Industrial Mechanics and Maintenance Apprenticeship Technologies . . . . .	541-440-4675	Scholarship Office . . . . .	541-440-7674
Drafting Technology . . . . .	541-440-4683	International Studies . . . . .	541-440-7753	Sociology/Social Work . . . . .	541-440-7826
Early Childhood Development-SOU . . . .	541-440-4650	Journalism . . . . .	541-440-4645	Supervision . . . . .	541-440-4703
Early Childhood Education . . . . .	541-440-4650	Juvenile Corrections . . . . .	541-440-7668	Surveying & Geomatics . . . . .	541-440-4683
Economics . . . . .	541-440-4663	Legal Assistant . . . . .	541-440-4663	Theatre Arts . . . . .	541-440-4694
Education: Elementary & Secondary . . .	541-784-8622	Limited Electrician Apprenticeship Technologies . . . . .	541-440-4675	Truck and Transportation Logistics (Truck Driver Training) . . . . .	541-440-7691
Education: Paraeducator . . . . .	541-784-8622	Marketing . . . . .	541-440-7790	Viticulture and Enology . . . . .	541-440-4709
Electrician Apprenticeship Technologies	541-440-4675	Mathematics . . . . .	541-440-4680	Water Quality Treatment . . . . .	541-440-4683
Emergency Medical Services-Paramedic	541-440-7680	Medical Billing and Collections . . . . .	541-440-7790	Welding . . . . .	541-440-7819
Employment Skills Training . . . . .	541-440-4609	Medical Office Administration . . . . .	541-440-7790	World Languages . . . . .	541-440-4644
Engineering Technology: Civil & Surveying . . . . .	541-440-4683	Microsoft Office Technologist . . . . .	541-440-7686		

## **President's Message —**

Welcome to Umpqua Community College (UCC). Our campus, nestled along the beautiful North Umpqua River in Southwestern Oregon, has served as a dynamic place of learning in Douglas County for over 50 years. We proudly serve our students and community.

UCC is committed to academic success. Throughout your journey here, we will provide support to help you achieve your educational goals. This catalog is designed to be a comprehensive guide for navigating the services and opportunities we offer to students, and we trust you will find the information to be valuable.

Our doors are always open to those we serve. We enjoy the opportunity to get to know you better and to hear suggestions for improving your campus experience. Please feel free to contact my office at 541-440-4622 to schedule a time to talk.

Best wishes for success.

Dr. Debra H. Thatcher  
President, UCC

# ABOUT UCC

## GENERAL INFORMATION

### **Mission Statement**

Umpqua Community College transforms lives and enriches communities.

### **College Vision**

Umpqua Community College aspires to be the center for quality teaching and learning, and a key partner in the well-being and enrichment of our communities.

### **The College will be Recognized:**

- As a supportive learning environment.
- For creative and responsive programming.
- As committed to life-long learning.
- For contributing to the Douglas County workforce and economic development.
- For technological advancement.
- For extending educational opportunity.
- As a cultural and recreational center for Douglas County.

### **College Values**

#### **Umpqua Community College Values:**

- Each person as an individual.
- Personal and professional honesty and integrity.
- The trust of the community.

- A caring, learning environment that promotes scholarship, innovation and the success of all students.
- A climate that reflects a deep appreciation and acceptance of diversity.
- Accountability on all levels that is reflected in wise stewardship of public resources.
- Collaborative and cooperative partnerships that improve the quality of life in the community.
- The history of Umpqua Community College and its continuing contributions to Douglas County.

### **College Goals**

Student Success is fundamentally important to the lives of our students, the workforce needs of our economy, our ability to meet graduation and student retention goals, and supports organizational stability.

**Goal 1.** Promote student success through a comprehensive approach to student retention and completion.

- Keep college programs relevant through current important to the economic success of our students and the communities we serve.

**Goal 2.** Provide comprehensive, relevant, innovative instruction and program.

- Our organizational ability to communicate effectively and work collaboratively as a team to achieve shared goals, is a strategically important driver of innovation, productivity, customer service, and campus culture.

**Goal 3.** Foster a positive and productive campus culture and environment based on shared values.

- Comprehensive organizational and resource



stewardship is critical to securing public trust and forms the foundation for earning support for investment in the future education and training needs of stakeholders.

**Goal 4.** Exemplify responsible and sustainable organizational stewardship.

- Informed communities insure that students, organizational partners, employees and future students understand the resources and services available to support achieving their goals.

**Goal 5.** Build stakeholder awareness through comprehensive communication, promotion, marketing, and recruitment.

- Keeping stakeholders informed is critical for organizational success.

## Accreditation Core Themes

Core Theme 1: Learning

Core Theme 2: Access

Core Theme 3: Enrichment

## Credentials

Umpqua Community College is accredited by the Northwest Commission on Colleges and Universities. Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation. Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather,

it provides reasonable assurance about the quality of opportunities available to students who attend the institution. Inquiries regarding an institution's accredited status by the Northwest Commission on Colleges and Universities should be directed to the administrative staff of the institution. Individuals may also contact:

**Northwest Commission on Colleges and Universities**  
**8060 165th Avenue N.E., Suite 100**  
**Redmond, WA 98052 (425) 558-4224**  
**[www.nwccu.org](http://www.nwccu.org)**

The College is a member of the Association of Community College Trustees and the Oregon Community College Association. The Nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN) and approved by the Oregon State Board of Nursing (OSBN). The Automotive Technology program is accredited by the National Automotive Technical Education Foundation.

## Educational Offerings

### Adult Basic Skills

Adult Basic Education, Adult High School Diploma, GED and English Language Acquisition (ELA).

### Career Pathways

Career Pathways are short term certificates designed to prepare students for employment and advancement in targeted occupations. More information and links to Career Pathways roadmaps are located at [www.umpqua.edu/career-pathways](http://www.umpqua.edu/career-pathways).

### Career-Technical Education

The Associate of Applied Science (AAS) degree and one-year certificate programs prepare students for entry into the workforce in specific areas. There are also short-term pathway certificates available in many CTE programs. See Career & Technical section for more information.

### College Transfer

The Associate of Arts Oregon Transfer (AA/OT) and Associate of Science (AS) degrees are designed to meet

the first two years of academic work at a college or university. The AA/OT degree meets all of the lower division (freshman and sophomore) general education requirements at all of the Oregon public universities and many other colleges and universities. Associate of Science (AS) degrees are specific to receiving institutions and meet the receiving institution requirements as described by articulation agreements.

The Oregon Transfer Module (OTM) is a subset of the AA/OT and is designed to partially meet the General Education assignment of the Oregon public universities, totaling a minimum of 45 credits - See Transfer Ed section for more information.

### Developmental Education

Courses in this area assist with basic reading, writing, math and study skills for success in academic programs. They are not part of a degree or certificate program.

### Online Learning

Online Learning consists of fully online courses, hybrid, interactive video conferencing, streamed and video based telecourses.

### General Studies

The Associate of General Studies (AGS) degree is intended to meet individual student need using a variety of collegiate level courses. This degree is for students not seeking a transfer or career-technical program.

### Community and Workforce Training

These offerings range from personal and professional to hobby or recreational courses, but are not part of a degree program.

## Faculty

UCC has highly qualified full-time and part-time faculty members that meet or exceed standard minimum qualifications approved at the state level. Many faculty have a broad background combining education and practical, on-the-job experience.



## CAMPUS SECURITY

Umpqua Community College conforms with the Crime Awareness and Campus Security Act of 1990, Title II of Public Law 101-542 which states all criminal actions and other emergencies occurring on campus be reported to Campus Security. All criminal actions and other emergencies which occur at off-campus college activities are also to be reported to Campus Security. Information of criminal actions will be forwarded to the Douglas County Sheriff's office or the appropriate local police agency in whose jurisdiction the incident occurred. When fully staffed, four full-time Security Officers and three part-time security guards maintain 24/7 security to the campus community and are responsible for the protection of persons and property on campus. All Security Officers are well-trained and licensed by the Oregon Department of Public Safety Standards and Training. While on campus, they are empowered to conduct investigations, contact local safety authorities, and are also responsible for the physical security of the campus buildings and facilities. They assist with providing a safe campus environment, detecting and reporting safety/fire hazards, enforcing traffic and parking regulations and promoting crime prevention. Campus Security closely coordinates its activities with the Douglas County Sheriff's Office, and excellent communication exists between enforcement agencies. The College annually collects and discloses information relating to campus security procedures and practices.

Individuals on campus, including students, employees, and visitors should take active responsibility for their personal property. The College maintains its grounds and lighting to ensure the campus is as secure as possible.

Umpqua Community College works with appropriate law enforcement agencies to reduce the opportunity for sexual assault on campus or at off-campus events sponsored by the College. Students may obtain information about registered sex offenders through the Umpqua Community College Director of Security. Umpqua Community College Security Department offers these helpful tips:

- Park in a well-lighted area.
- Be smart! Always lock your car. If you are on campus after dark, move your car to a closer parking space before your night class.
- Buddy up — have classmates walk you to your car, then drive them to theirs. Security Officers are also available to escort you to your vehicle.
- Know the location of telephones and blue-light telephones.
- Be aware of your surroundings. If you notice anything, or anyone, who appears suspicious, report it to Security by dialing 541-440-7777 (7777 on-campus phones).

### Procedures for Reporting Crimes:

#### Emergency Situations

- Dial 911
- Call Campus Security 541-440-7777.

#### Assistance Needed

Call Campus Security 541-440-7777

#### Sexual Offenses

If you believe that you have been sexually assaulted, report it to the UCC Civil Rights Coordinator, Lynn Johnson at 541-440-7690. If the crime occurs on campus, report it to Campus Security as soon as possible. Counselors are available through the Campus

Mental Health, Recovery & Wellness department. Services and staff are located in the Educational Skills Building (ESB) Room 10. The College employs four full-time Security Officers and three part-time security guards who maintain 24/7 security to the campus community and are responsible for the protection of persons and property on campus.

#### Counseling Services

Counseling services are available through the Campus Mental Health, Recovery & Wellness department. Services and staff are located in the Educational Skills Building (ESB) Room 10. Walk-ins are welcomed and scheduled appointments are available by calling 541-440-4609. If the crime occurs on campus, report it to Campus Security as soon as possible.

### UCC Campus Crime Statistics

The following statistics identify the number of persons who were arrested, referred or involved in the incident.

DESCRIPTION OF CRIME	2014-15	2015-16	2016-17
Murder/Non-negligent Manslaughter	0	9	0
Sex Offenses:			
- forcible	0	0	0
- non forcible	0	0	0
Robbery	0	0	0
Aggravated Assault	1	8	0
Burglary (in excess of \$500)	0	0	0
Motor Vehicle Theft	0	0	0
Manslaughter	0	0	0
Arson	0	0	0
PERSONS REFERRED FOR CAMPUS DISCIPLINARY ACTION FOR:			
Liquor Law Violations	0	0	0
Drug-Related Violations	0	0	0
Weapons Possession	0	0	0
Hate Crimes	0	0	0



## EMERGENCY NOTIFICATION

In addition to making public announcements of closure by radio and on its website: [www.umpqua.edu](http://www.umpqua.edu), Umpqua Community College is also able to notify students, faculty, staff and community members by phone, cell phone, email and text of issues regarding access to campus. Students, staff and faculty are automatically added to the AlertSense system. AlertSense is a streamlined, efficient data-based emergency notification system which can notify thousands of an emergency or campus closure within minutes. Secure technology and privacy controls utilize the highest security protocol possible (SSL). You can opt out, add or change your information anytime through Self-Service Banner by following the steps printed here: <http://www.umpqua.edu/emergencies>. Community members can also be added to the system by contacting the Facilities Office.

## ADMISSION TO UCC

UCC has an “open door” policy and will admit students who meet any one of the following entrance requirements:

- Graduates from an accredited secondary school.
- Individuals who have earned the GED Certificate of Equivalency or an Adult High School Diploma.
- Non-high school graduates who are 18 years old or over and whose high school class has graduated.
- Individuals who are 16 or 17 years old who are not required to attend high school and who furnish a written “Release from Compulsory School Attendance” may make application as a special student (ORS 339.030).
- Students who are attending high school as juniors or

seniors who present written approval from their school officials. Course load must be approved by both schools.

- Some programs have special program requirements other than listed above.

If you are a citizen of another country, you must meet certain federal immigration and College requirements before admittance to Umpqua Community College. International students can request special application materials from the Admissions Office.

Non-credit students are not required to make formal application.

### Admission to Specialty Programs and Certificates

Acceptance to the College as a student normally implies acceptance into any of the degree programs offered. However, some programs have secondary admission requirements due to limited space, staff and equipment. The apprenticeship, automotive, dental assisting, EMS paramedic, Police Reserve Academy, and nursing programs have special admission requirements and limited enrollment. See the appropriate program listings in this catalog for more information.

### Adult Basic Education/GED/English Language Acquisition Students

Contact the appropriate office for admissions information: 541-440-4603.

### Accessibility-Related Accommodations

Accessibility-related accommodations for admission are available upon request. Ask for assistance at Enrollment Services or call Accessibility Services, 541-440-7655 or Oregon Relay at 1-800-676-3777 (TTY/Voice) or dial 7-1-1.

### International Students

International students have an opportunity to pursue a

quality education while living in a small American town. If you are a citizen of another country, you must present evidence of satisfactory English language skills through a TOEFL paper score of 500 or computer score of 173, ELPT score of 950, or IELTS 6.0. The proficiency may also be met through attending an intensive English language school, such as ESL Level 109 or equivalent.

For more information, go to: [www.umpqua.edu/international-students](http://www.umpqua.edu/international-students)  
A deposit of \$4,000 will be required to pay for the first term’s tuition, fees, books and insurance.

## REGISTERING AT UCC

### Steps for New Credit Students

#### 1. Financial Aid

Students interested in receiving financial aid assistance should contact the Financial Aid office and begin the financial aid application process immediately.

#### 2. Apply to UCC

A. Complete the Admissions Application:

**Online:** [www.umpqua.edu/getting-started](http://www.umpqua.edu/getting-started)

**In-person:** Visit Admissions in the Enrollment Services office.

B. Submit your transcripts. If you have completed coursework at another college or university, submit your official transcripts to the Admissions Office.

#### 3. Take Placement Tests

Placement tests are offered on a walk-in basis in the Testing Center (Educational Skills Building 10). Placement testing may take 2-3 hours. Placement testing is available Tuesdays from 8:15 am to 2:30 pm and Thursdays from 10:15 am to 2:30 pm in Fall, Winter and Spring terms, Tuesdays 7:15 am - 3 pm in Summer, or by appointment. UCC uses multiple measures for

## REGISTERING AT UCC, *continued*

placement which includes, ACCUPLACER, ALEKS, GED, Smarter Balanced, ACT, SAT, and/or high school transcripts. If you have submitted official transcripts to the Registrar that demonstrate a grade of C or better in a college writing or math class, you may not be required to take placement tests.

Doing well on the test may save you from having to take classes you don't need. It is a good idea to review before taking the test. Contact Testing Center at 541-440-7659.

### 4. Complete Student Orientation

Student Orientation is mandatory in order to register for credit classes. Visit online at <https://umpqua.edu/schedule-student-orientation>

### 5. Register for Classes

**Online:** [www.umpqua.edu/register-for-classes](http://www.umpqua.edu/register-for-classes)

**In-person:** Visit Registration in the Enrollment Services office to complete an Add/Drop form.

## Registration/Adding

### Prerequisites

All students are required to complete prerequisites as indicated in the course description section of the catalog. Questions concerning prerequisites for a course can be answered by the Advising and Testing Center or the instructor of the course.

### Adding and Dropping

After initial registration students may wish to add, drop and/or withdraw from classes in accordance with the dates published in the academic calendar. For assistance, contact the Information Desk at 541-440-4600.

### New Students

New students may register for classes after attending Student Orientation. Students will be directed to sign up for Student Orientation after completing the admissions process.

### Continuing Students

Umpqua Community College provides online registration for students who plan to continue their studies at UCC. Check the academic calendar for registration dates.

### Returning Students

Students who have attended UCC for credit, but have been absent for a year or more, will need to be re-admitted. There is no fee to be re-admitted but a new application for admission must be completed and placement testing may be needed. If you are seeking a degree and have attended another college since last enrolled at UCC, please have your official transcripts sent.

### Transfer Students

New transfer students taking credit classes must have their transcripts sent from the previous college(s) to: UCC Admissions, P. O. Box 967, Roseburg, OR 97470.

Transfer students may register for classes after attending Student Orientation. Students will be directed to sign up for Student Orientation after completing the admissions process.

### Veteran Priority Registration

Umpqua Community College would like to invite active or former members of the Armed Forces of the United States, or qualified dependents receiving veterans' educational benefits to participate in early registration. Eligible recipients will receive a formal e-mail regarding their priority status. Register at Enrollment Services in the LaVerne Murphy Student Center beginning the Friday before priority registration begins for each term. See the quarterly class schedule booklet for each term regarding specific dates. .

### Community and Workforce Training Students (Non-credit)

There are four ways to register for UCC Community and Workforce Training classes. Course offerings are listed in the quarterly UCC class schedule.

1. Go to [umpqua.edu/cwt](http://umpqua.edu/cwt) and select the "Register Here" button

2. Call 541-440-4668 weekdays, have payment card available
3. Mail a completed registration form from the schedule to Community & Workforce Training Center, PO Box 967, Roseburg, OR 97470
4. In person at the Community & Workforce Training Center between 8 am - 5 pm weekdays. Please note UCC is closed on Fridays from mid-June through mid-September each year.

## TUITION AND FEES

Every effort is made to insure accuracy at the time of publication, however, the college reserves the right to make changes without prior notice.

### Tuition: Resident, Non-Resident and International

All tuition rates can be found in the class schedule. International students are required to enroll as full-time students.

NOTE: Tuition and fees are subject to change without prior notice. Increases are anticipated for 2018-19.

### Fees

The fees listed below are approved for the 2018-19 academic year. Please see class schedule for the current tuition and fees.

- Legacy fee - \$8 per credit.
- Global fee - \$11.50 per credit
- Credit registration fee - \$25 per term (non-refundable)
- Student insurance fee - \$5 per term (non-refundable)
- Graduation application fee - \$30 (non-refundable)
- Graduation fee - AHSD/GED - \$15 (non-refundable)
- Course challenge fee - \$10 per course (non-refundable)
- Proctored test - \$20



## Placement Assessments:

- Retest fee - ACCUPLACER - \$6 (reading or writing)
- ALEKS \$15 (math)
- Online fee for UCC online classes - \$25 per course
- Hybrid access fee - \$25 per course
- Online fee for UCC non-credit classes - \$5 per course
- US fax for official transcript fee \$3 - (non-refundable)
- International fax for transcript fee - \$10 (non-refundable)
- Return check/stop payment charge fee - \$10
- Rush transcript fee - \$10

Other fees vary from class to class. Fee charges are listed in the “fee” column for each class requiring this additional payment.

## Non-Credit Tuition/Fees

### Non-Credit Course Cost

Class costs for Community and Workforce Training offerings are listed in the Term Class Schedule. Schedules are mailed each term to district residents, are available in the Enrollment Services office or on the web at [www.umpqua.edu](http://www.umpqua.edu)

## Residency

### Oregon Resident

An American citizen or immigrant who has maintained a residence in Oregon for at least 90 days prior to the beginning of classes.

### Out-of-State Student

An American citizen or immigrant who has not established residency in Oregon 90 days prior to the beginning of classes.

### Student

A citizen of another country here on other than an immigrant visa.

### Veterans

All Veterans and their eligible dependents pay in-state tuition rates in compliance with Section 702 of the Choice Act and its addendum.

## FINANCIAL AID

The Financial Aid Office at Umpqua Community College is committed to helping students obtain funding for their education. Although the primary responsibility for meeting college costs rests with students and their families, Umpqua Community College recognizes that many individuals cannot assume the full financial burden of the costs of a college education. For this reason, financial aid is available to help bridge the gap between the costs of education and the available student and family resources.

Students interested in financial aid are encouraged to complete the Free Application for Federal Student Aid (FAFSA) online. The official website is [www.fafsa.ed.gov](http://www.fafsa.ed.gov). UCC's federal school code is #003222. Additional financial aid information is available at: <http://www.umpqua.edu/financial-aid>.

## Eligibility Criteria

Virtually all students who meet the following eligibility criteria will be offered some type of financial aid:

- Be a U.S. citizen or eligible non-citizen
- Must have a high school diploma or a recognized equivalent such as a GED certificate or completing a high school education in a home-school setting approved under state law
- Be admitted and enrolled in an eligible degree or certificate program at UCC
- Not be enrolled simultaneously in a high school diploma completion program
- Register with the Selective Service, if required

## Notification Procedure

When a FAFSA application is received by the institution the student is notified via UCC student email, of requirements needed to process their file for an aid offer.

An award letter will be available via UCC student email to each eligible student. Financial aid awards are accepted via the Internet or by signing and returning the Award Letter to the Financial Aid office by the time frame noted.

## Disbursement Procedure

Students are allowed a 100% refund of tuition and most fees through the first week of each term. A student does not need to be full-time to receive financial aid. Many funds are pro-rated based on a student's enrollment status (full-time, three quarter-time, half-time or less than half-time). The Financial Aid Office will determine a student's enrollment status on Monday at 8:30 a.m. of the second week of the term and disburse funds for that enrollment status to the student's account.

On the second Friday of each term (with the exception of Summer term) the student's financial aid funds in excess of institutional charges will be made available through two means:

- Direct deposit (set up through UCC Finance Office)
- US Postal Service

Funds will continue to be direct deposited or mailed on Fridays, throughout the term.

Due to a rise in student loan defaults, UCC recommends that students go online and view a Financial Aid Literacy Seminar at:

<http://www.umpqua.edu/financial-aid-literacy-seminar>.

## Refunds or Repayments of Financial Aid Funds

If a student withdraws from courses while receiving financial aid, the terms of the UCC Refund Policy apply. Additionally, recipients of Title IV aid funds are affected by the federal refund and repayment regulations if they withdraw from all classes or receive all F's, or a combination of both, during a term. Students who withdraw from all classes prior to completing more than 60% of an academic term must have their eligibility recalculated based on the percentage of the term that they attended to determine unearned aid. Student aid recipients who are considering withdrawal from a class or all classes are strongly encouraged to contact the Financial Aid Office for complete information.

## **Financial Aid Satisfactory Academic Progress (SAP) Policy**

UCC is required by federal and state regulations to define and enforce standards of Financial Aid Satisfactory Academic Progress. Students must maintain SAP in order to continue to receive financial aid. Please note: Financial Aid SAP is separate from Academic SAP. Students must comply with the requirements of both policies. Satisfactory academic progress is monitored each term.

A copy of the requirements for Financial Aid SAP are available online at: [www.umpqua.edu/financial-aid](http://www.umpqua.edu/financial-aid) under the menu "Student Forms & Publications".

## **Appeals to the Standards for Satisfactory Academic Progress**

Students may appeal a Satisfactory Academic Progress suspension. An appeal requires a written statement/letter explaining why the student was not able to meet the standards along with supporting documentation and an academic plan completed by an Academic Advisor. The Financial Aid Director reviews the appeals. Appeals not accepted by the Director may be appealed in writing to the Financial Aid Advisory Committee. The committee will review the appeal and the decision is final.

## **Types of Financial Aid Available**

Often, more than one type of Financial aid funding can be offered to students. There are four basic types of financial aid: grants, scholarships, loans and work-study employment. Grants and scholarships can be thought of as gift aid because there is no requirement to repay or to work in exchange for the funds.

## **Federal Pell Grant**

The Pell Grant program was established by the federal government to provide a basic core of aid for eligible undergraduate students. Eligibility is determined by the federal government and has a lifetime limit of 18 full-time quarters.

## **Oregon Opportunity Grant (OOG)**

The State of Oregon provides funds for this program and the Office of Student Access and Completion (OSAC) determines the student's eligibility. Students must meet the requirements for state residency and demonstrate financial need. Students cannot be enrolled in a course of study leading to a degree in theology, divinity or religious education. OOG eligibility may be transferred to other eligible institutions, but eligibility is limited to 12 terms of attendance. Fall term attendance is mandatory.

## **Federal Supplemental Educational Opportunity Grant (FSEOG)**

These grants are federally funded and UCC is responsible to select eligible students and to determine the amount of the awards to students. Eligible students must not have earned a bachelor's degree. Preference for this grant is given to students who are Pell-grant eligible and have low family contributions toward their educational expenses. Funds are limited and students are encouraged to complete their FAFSA early.

## **Tuition Waivers**

Performance-based tuition waivers may be offered to students who have shown outstanding achievements in such areas as student leadership, journalism, fine and performing arts, and other areas. For more information about performance-based tuition waivers, contact the Financial Aid Office.

## **Federal Direct Student Loan Programs**

All students meeting eligibility criteria may apply for Federal Direct Student Loan funds. These loans are federally guaranteed loans. First year students (less than 45 credits completed toward their program of study) are eligible to borrow subsidized amounts up to \$3,500, and second-year students may borrow up to \$4,500. (Actual amounts are dependent upon student eligibility and budget criteria).

## **There are two types of Direct loans for student borrowers:**

- Subsidized FDSL eligibility is based on budgetary need and is awarded first, up to annual maximums based on dependency status and grade level. Interest is charged to the borrower only after no longer enrolled at least half-time. New borrowers as of 7/01/13 lose subsidy if their program is not completed within 150 percent of the published length.
- Unsubsidized FDUL eligibility is not based on financial need and may be awarded up to annual maximums, based on dependency status and grade level, or budgetary need (cost of attendance less aid and resources). Interest is charged to the borrower from the date of disbursement and may be paid quarterly to avoid capitalization. A separate loan request is required for this loan.

## **Federal Work Study (FWS)**

Work Study gives students the opportunity to earn money to help pay for educational expenses. Students must be awarded financial aid before being placed in a Work Study job. If students are interested in a work study job, contact the Financial Aid Office, located in the LaVerne Murphy Student Center. Completion of paperwork is required prior to starting work.

## **Scholarships**

Scholarships are a great way to help pay for your education. Thousands of scholarships are available each year, and every one of them has its own unique requirements. Scholarships are available through schools, employers, individuals, private companies, non-profits, communities, religious groups, and professional and social organizations. You must search for scholarships that match your own skills, interests, heritage and field of study.

Information, resources, and application forms for scholarships are available on the UCC website at <http://www.umpqua.edu/scholarships>.



## Gold Card Program

Residents of Douglas County who are 60 years of age and older, and persons who are disabled and receive Social Security Disability as a result of that disability, may become members of the Gold Card Program. Senior Gold Card members may enroll in a credit course providing space is available. Gold Card members will pay 50% of the tuition cost and 100% of the fees.

Senior and Disability Gold Card members will pay 80% of course cost on selected Community Education classes. Senior and Disability Gold Card members will be admitted to UCC fitness facilities free of charge during open hours.

## PAYMENT METHODS

Classes must be paid after registration either with cash, check, Visa, MasterCard, Discover card, gift certificate, online through your student self-service account (fees may apply) or by notifying Student Accounts Finance Office that other funding is available. You must pay the College any money you owe from previous terms before registering for the current term of classes.

It is your responsibility to notify Student Accounts that other funding is available.

## Financial Aid

Students who have applied for financial aid and have been determined eligible will have their tuition and fees taken out of their financial aid.

Students who are receiving financial assistance from sources outside of the College must work with the source to meet the deadlines required by UCC.

## Refunds

Students who withdraw from one or more Umpqua Community College courses and who have complied with regulations governing withdrawals, are entitled to certain refunds of tuition depending on the time of withdrawal. Refunds are limited to students who comply with withdrawal procedures. See Withdrawals.

Full tuition is refunded if withdrawal is made during the first week of summer, fall, winter and spring terms. During summer, full tuition is refunded if withdrawal is made during the first week of the 10-week session, and during the first two business days of each five-week session. No tuition refund will be made if withdrawal is made after these times.

Refunds in all cases are calculated from the date a refund is requested. It is not calculated from the date you ceased attending class. The only exception is in an unusual case in which delay occurred for reasons beyond your control. Students will receive full refunds for courses cancelled. Certain fees are non-refundable (i.e. credit registration fee, student insurance fee). Please review the schedule for a full list.

Community Education/SBDC - Payment is due at time of registration. Students are eligible for a refund if they drop a class two business days prior to the class start date. To officially drop, a student must contact Community and Workforce Training or SBDC office. A full refund will be granted if a workshop or class is cancelled by Umpqua Community College.

### Credit Card payments

With the exception of students paying by credit card through Higher One (see below), all refunds will be issued in the form of a check payable to the student regardless of the original form of payment or who paid for the course. If a third party sponsored agreement is set up with the Student Accounts Office, refunds will be issued in the form of a check payable to the third party.

### Nelnet payment option

Refunds for payments will be made by check to the student, regardless of who paid for the course.

### Higher One payment option:

Refunds for credit card payments (including Debit Card) will be credited back to the card used. Refunds for ACH payments (checking account) will be made by check to the student, regardless of who paid for the course.

## NON-PAYMENT ACTIONS

### Consequences for Not Paying

If you fail to pay your account, the college may take any or all of the following actions:

- Require immediate payment in full
- Block enrollment for any future terms
- Decline to provide official transcripts
- Assign accounts to a collections status for non-payment\*
- Assign your debt to the Oregon Department of Revenue (DOR) for offset of any refunds or sums due to you from DOR or any other state agency.

\*Students will receive a final notice for accounts that are overdue before the college assigns them to a collection status and reports them to a credit bureau. The collection agency will add additional collection fees, court and attorney costs to your account.

### Unpaid Account Review After Three Months

A student's account is reviewed after 90 days from payment due date (first day of the term). Accounts that remain unpaid or have not established a UCC Repayment Agreement through our mid-term and end-of-term billing cycle will be issued a Final Notice. The Final Notice may still allow students to contact Student Accounts to set up a UCC Repayment Agreement. Failure to maintain payments under the UCC Repayment Agreement will result in an account being sent to collections.

## Collection Agency Payments

Partial payment on accounts assigned to a collection agency must be paid directly to the collection agency. Student's wanting to pay their account in full can do so either at the agency or by contacting UCC Student

Accounts. Payments made in full to UCC will include collection agency charges.

Once a collection agency account is paid-in-full, students may contact Student Accounts at UCC to verify payment received at the agency. This will allow students faster access to registration and transcripts. Until payment is officially posted by UCC on the student's account; the "Overdue Payment" hold may be lifted by contacting Student Accounts. Student Accounts may not accept partial payments or set up payment agreements for the collection agencies. Students will need to contact the specific collection agency for these types of payment arrangements.

## SCHEDULE CHANGES

After registration you may make course changes such as to add or drop a course in the Enrollment Services office or via the web. Deadlines for course changes are listed on the academic calendar.

## DROPS/ WITHDRAWALS

Students registered for classes are considered to be in attendance. Students discontinuing attendance without filing the official drop/withdrawal form in the Enrollment Services office may receive a failing grade and be responsible for full cost of classes. Recipients of Title IV financial aid funds are subject to the federal regulations for withdrawals from classes for a term.

Students wishing to drop (which does not appear on the academic transcript) a course or courses must initiate the withdrawal procedure during the first week of each term, except for classes less than ten weeks in length. These dates are pro-rated and reflected in the class schedule.) Complete and file the appropriate form in the Enrollment Services office.

### Withdrawal from UCC

To withdraw from all courses, students must submit a completed withdrawal form, with appropriate signatures, to the Registration counter in the Enrollment Services office.

### Withdrawal Fall, Winter, and Spring Terms

Fall, winter, and spring term, students may withdraw from a course or courses by obtaining the signatures from advising and financial aid between the beginning of the second week and the end of the ninth week of instruction, additionally instructor signature must be obtained between weeks five and nine.

### Withdrawal Summer Term for Ten-week Classes

Students may withdraw during weeks two through eight of the term from any course or courses by completing the appropriate form in the Enrollment Services Office, signatures from advising and financial aid must be included. Beginning with the fifth week of instruction, and continuing through the eighth week of the summer term a student must obtain the signature of the instructor on the appropriate form. The student then will complete the process at the Enrollment Services office.

### Withdrawal Summer Term for Five-week Classes

Students may withdraw starting on the third day of a five-week session through the fourth week by

completing the appropriate form in the Enrollment Services office, signatures from advising and financial aid must be included. During the second week of the five-week session the student must also obtain the signature of the instructor on the appropriate form. The student then will complete the process at the Enrollment Services office.

### Instructor Withdrawal from Classes

- Instructors have the option to withdraw a student who registered for a class but does not attend the first meeting. To make sure you are not withdrawn, contact the instructor if you will miss the first meeting.
- If you want to withdraw from a class, it is your responsibility to ensure the withdrawal has occurred. If the withdrawal has not taken place, you will be assigned a grade in the class.
- You are expected to process withdrawals after the term begins in person, but under exceptional circumstances with documentation, you may initiate withdrawal by telephone or by writing a letter of explanation to the Enrollment Services office.
- Proper withdrawal is reflected on transcripts and adherence to the correct procedure protects your academic record.
- Appeals for exception to the withdrawal policy must be directed to the Academic Standards Committee. Appeal forms are available from the Enrollment Services office.

Note: Recipients of Title IV financial aid funds are subject to the federal regulations for withdrawals from all classes for a term.

## COURSE INFORMATION

**Academic Year** consists of four terms (or "quarters") of approximately 11 weeks each. You may enter at



the beginning of any term, but it is advantageous to enter fall term because most sequence courses begin in the fall.

**Credit Hour** usually represents two-three hours each week (for every hour in class, two hours of outside preparation are needed) for one term. This time may be assigned to work in classroom or laboratory or to outside preparation. The number of lectures, recitations, laboratory, studio, or other learning formats per week for any course may be found in the course descriptions in the catalog or in the regular Schedule of Classes.

**Subject** is a designated field of knowledge such as math, history, science or English.

**Sequence** consists of three successive terms of a course such as Biology 101-102-103 or History of the US 201-202-203.

**Curriculum** is an organized set of courses and study designed to prepare students for advanced study, professional work or general education experience.

**Period** is a class meeting of discussion, lecture, laboratory work, etc., which may last for 50 minutes or more.

**Full-Time Student** is one who is registered for 12 or more credit hours per term.

**Part-Time Student** is one who is registered for fewer than 12 credit hours per term.

## Credit Hour Load

- Typically you should enroll for an average of 16 approved credits within your program per term to earn an associate degree in two years. Completion time frames may vary between students.
- Sixteen credit hours involves about 48 clock hours of scholastic productivity each week during the term (16 classroom + 32 study preparation).  
An accumulative GPA minimum of 2.75, and written approval from your academic advisor is required to enroll in more than 19 credits per term.

- **Summer Term:** By taking advantage of summer term classes you can either reduce the number of credits needed per term or the length of time required for attaining your degree.

## CREDIT OPTIONS

### Advanced Placement

Umpqua Community College recognizes Advanced Placement (AP) and International Baccalaureate (IB) Programs, offered in some high schools, by awarding credit for some courses. To receive credit, scores of 3 or above must be obtained on the AP exam(s) and 5 or above on the IB exam(s). Official scores must be sent to UCC for evaluation before credit will be awarded. Contact the Registrar's Office if you have questions.

### Challenging Courses

Umpqua Community College maintains a course challenge procedure, recognizing that alternative avenues exist other than the classroom for acquiring knowledge. If adequate justification exists, you may challenge courses using the following guidelines and procedures:

1. Consult the appropriate instructor.
2. If justification exists to challenge the course, obtain the challenge form at the Enrollment Services office.
3. Obtain signatures of appropriate instructor and department chair.
4. Present the completed challenge form to the Enrollment Services office and pay the \$10 per course nonrefundable challenge fee.
5. Complete the challenge examination during the term initiated and at a time mutually agreed with the instructor.
6. If challenge is successfully completed, register and pay appropriate tuition and fees for the class with the Enrollment Services office.

7. MTH 060 competency challenge: Umpqua Community College allows students to pass a MTH 060 challenge exam to meet the math requirements for programs such as the AAS degree and one-year certificates. The MTH 060 challenge exam may be taken by making arrangements with the math department chair.

Challenges are not considered part of the residency requirements for degrees, diplomas, or certificates nor are they considered in determining full-time status or eligibility for athletics or student benefits.

If you successfully pass the challenge exam, you must pay the appropriate tuition and register for the class. The instructor will record the grade (A, B, C or P) on the regular end-of-term grade sheet. If the student fails to pass the exam, no grade will be recorded. The student may not challenge a course a second time. Students may not challenge a course in which they have already received a grade, nor may they challenge a course at a lower level than a course previously completed (Example: WR 115 may not be challenged if WR 121 has been completed).

### Cooperative Work Experience

Cooperative Work Experience is a structured work and learning opportunity. Students are concurrently enrolled in a related academic program. The work experience is directly related to the goals and objectives of the individual student's education program, coupling classroom learning with workplace training. The college and participating firms and organizations cooperatively develop training and evaluation plans to guide and measure the success of each student. Each course is offered summer, fall, winter, and spring terms.

- Up to thirteen CWE credits may count toward the AAS and AGS Degrees.
- Up to twelve CWE credits may count toward the AA/OT elective requirements.
- Up to twelve CWE credits may count toward the one-year certificate.
- Requires instructor consent. Some programs may limit the number of credits allowed per term.

## CREDIT OPTIONS, *continued*

- See a faculty or academic advisor for requirements specific to your program.
- Some programs require students to complete a CWE seminar. CWE Seminar I is one credit.
- Credits earned for CWE Seminar I are part of the annual total credits allowed. For more information on how to begin CWE, check with your faculty or academic advisor.

### **Credit for Prior Learning**

Students have options to seek credit for prior learning, which is a means for earning credit for learning associated with life-experience. Up to 25% total credits for a degree or certificate may be earned. Options for credit for prior learning include:

- The CLEP program, a set of nationally-normed examinations which provide credits in individual subjects
- International Baccalaureate
- Advanced Placement tests (score of 3, 4 or 5 required)
- Military schooling (ACE Guide approved)
- Institutional challenge exams
- Professional Certifications (see details below)

Students can contact the Registrar at 541-440-4617 for additional information about the process for credit for prior learning.

### **Credit for Professional Certification (CPC)**

- The UCC Criminal Justice and Emergency Medical Service programs award CPC credits. CPC awards college credits from Umpqua Community College to professionals in areas such as law enforcement, corrections, parole and probation, and 9-1-1 telecommunications. The CPC program awards college credits in specific criminal justice courses by directly correlating the applicant's DPSST (Dept. of Public Safety Standards and Training) training, years of experience, special unit assignments, specialized

departmental/facility training, and conferences attended. The applicant's training record is then aligned to specific content of criminal justice credit courses offered at Umpqua Community College. For information contact the Criminal Justice Program Coordinator at 541-440-7668.

- The EMS (Emergency Medical Services) program awards credit for prior certification to students who possess respective certifications or licenses for EMT or Driver. Please contact the EMS department chair at 541-440-7680 for more information.

### **High School Connections: College Credit for High School Students**

#### **Dual Credit**

- High school students can earn college credits while in high school. The Dual Credit Program offers opportunities through a partnership with Douglas County schools by providing lower division academic and entry level professional technical course credits that are transcribed through Umpqua Community College. The Program supports the concept of assisting high school students as they begin planning and carrying out a learning continuum that begins in high school and extends through the college experience to a degree or a professional certificate.

For more information about the Dual Credit program, visit the website at: [www.umpqua.edu/high-school-connections-students/dual-credit](http://www.umpqua.edu/high-school-connections-students/dual-credit) or contact [academicpartnerships@umpqua.edu](mailto:academicpartnerships@umpqua.edu) or 541-440-7709.

#### **Expanded Options Program**

The Expanded Options Program (EOP) was created in 2005 through Senate Bill 300 (SB 300) to provide students with additional options to continue or complete their education and to allow them to earn concurrent high school and college credits through Oregon's community colleges and universities. If accepted into the program, students take classes on



the UCC campus or online, and the students' sponsoring high school covers the cost of tuition and fees. To be eligible to apply, the student must be:

- 16 years of age or older at the time of enrollment and in grade 11 or 12
- Currently enrolled in high school, and
- On track to complete course requirements for graduation

Students should contact their high school counselor to determine if they are eligible. Some high schools in the area have a waiver and do not participate in the program. For more information, visit [umpqua.edu/high-school-connections-students/expanded-options-program](http://umpqua.edu/high-school-connections-students/expanded-options-program) or call 541-440-7709.

### **Independent Study**

Independent study focuses on subjects beyond the course curriculum, or in-depth study of a particular aspect of course content. Independent study affords an opportunity for instructors to challenge advanced



students who are interested in more in-depth pursuit of subject matter. Provides an avenue for students who have previous study in a subject area to complete further work for credit.

- Course arrangements must be made in advance. Credit will not be granted retroactively.
- Approval for student registration must be granted by the department responsible based upon student/instructor's written request, and by the Division Dean.
- Credit to be granted will be decided by the department responsible, with each credit equivalent to 20 clock hours minimum.
- Objectives are to be specified in writing, including dates for completion of particular activities or assignments and approved by the Instructor, Department Chair and Dean.

To qualify, students must have approved previous background in the appropriate content area, or be performing at a high quality level in current course work and willing to take on the additional work.

## Transcripting and Transferring Credits

If you are transferring from another college:

1. If pursuing transfer credit: An official copy of the transcript listing the credits should be received by the Enrollment Services office at UCC before enrolling at UCC.
2. Credits are accepted only from regionally accredited colleges and universities, become part of the permanent academic record, and/or as listed below:
  - A. A grade of D is acceptable in transfer work unless the specific program or degree requires a grade of C or higher.
  - B. Career-Technical (vocational) credits will be accepted toward the AAS degree; and 12 such credits may count toward the AS and AA degrees.
  - C. Credit for military training is granted on the basis of recommendations by the American Council on

Education (ACE) as contained in the "Guide to the Evaluation of Educational Experiences in the Armed Services." UCC accepts credits from the military DANTES and USAFI programs, as recommended by the ACE. All military credits are to be listed on a military transcript:

- Army — Army/ACE Registry System (AARTS)
- Air Force — Community College of the Air Force
- JST - Joint Services Transcript
- Marines — Individual Training Standards System, Maintenance Training Management and Evaluation Program (ITTS MATMEP)
- Navy — Navy Occupation/Training and Awards History

D. Credit for College Level Examination Program (CLEP) and the Advanced Placement (AP) Tests are granted based on acceptable scores.

E. For information on a Credit for Prior Learning (CPL) program, contact the Registrar at 541-440-4617.

## ACADEMIC TRANSCRIPTS

An official transcript may be requested from the Enrollment Services office. Transcripts must be requested in person, by fax, by mail, or through Student Self-Service Web (UCC's secure website), and may not be requested by parents, spouse, children, or any other individual without written consent from the student.

Official transcripts are stamped with the college seal and mailed to recipients designated by the student; unofficial transcripts are labeled "Unofficial." There is no charge for academic transcripts. There is a charge for special handling, and no more than twenty may be requested during a month's time. Transcript requests will not be processed until all debts are cleared with the

Finance Office.

Requests must include the student's name, any previous names, student ID number (or Social Security Number), date of birth, current mailing address, current phone number, address(es) to send transcript, signature, and approximate dates of attendance.

Umpqua Community College does not release copies of any transcripts originating from another college or university from which the student may have transferred.

## Holding of Transcripts

Transcripts will be held for outstanding debts owed the College or any other lending institution that provided financial aid, after the acceptance of the account by a collector, including the U.S. Department of Education.

## Transferring UCC Credits

Institutions of the Oregon public universities will accept 124 transfer credits from Oregon community colleges. Any transferable credit earned after completing 124 quarter hours must be earned at a four-year school. Permission is required from the department and the Registrar's Office at the four-year school for exceptions to this rule. Umpqua Community College does not assume responsibility for acceptance of additional credit by another school.

Career-technical credits may be transferred in certain programs to Oregon public universities on a transfer articulation agreement. You should plan in advance with proper college officials at both Umpqua Community College and the college or university involved to make all of the necessary arrangements.

## CEU and Non-Credit Transcripts

Continuing Education Units are awarded at the discretion of the college. An official transcript of CEU and non-credit courses may be requested from the Enrollment Services office following regular UCC transcript guidelines.

# GRADING SYSTEM

Grades are issued at the end of each term.

GRADE	DESCRIPTION	GRADE POINTS
A	Exceptional Work	4
B	Superior Work	3
C	Average Work	2
D	Inferior Work	1
F	Unsatisfactory Work	0
I	Incomplete	0
IP	In Progress	0
E	Extended Course	0
P	Pass (Equivalent to C or better)	0
W	Withdrawal	0
AU	Audit	0
NG	Non-graded course	0
AU	signifies the student audited the course. No credit awarded.	
I	signifies that the instructor has granted an "incomplete" mark with arrangements made for completing the requirements.	
IP	signifies that the course completion is in progress and that the instructor has not submitted the grade by the deadline.	
E	signifies the course was scheduled to extend into the next term and thus a grade cannot be submitted. The issuance of this grade is based upon satisfactory progress by the student. The E grade must be completed within two terms after the E grade was assigned, or the E grade becomes permanent and the course must be repeated.	
NG	signifies the course or section is not graded.	
P	signifies a passing grade of C or better was earned. Qualifying credits count toward degrees and certificates but are not computed in the GPA.	
W	signifies withdrawal from a course.	

GPA is computed by: 1) multiplying the number of credit hours attempted in a course by the number of points allowed for the grade received; 2) adding the total points for all courses; 3) dividing this total by the number of credit hours attempted for the term. A GPA is usually computed to two decimal places.

Transfer GPA's are not listed on the UCC transcript, nor are they used in determining the UCC GPA.

## Auditing

Students who want to participate in a course, but do not want to receive credit and a grade may register for a course under an audit option beginning the first day of class. Charges for auditing a class are 50% of tuition and 100% of fees for the first time a specific course is audited at UCC, and no tuition and 100% of fees for subsequent audits of the same course or for courses previously completed with a passing grade at UCC. These charges are not eligible for financial aid assistance. Students may register as auditors beginning the first day of class on a space-available basis with credit students receiving priority. A student wishing to change from credit to audit, or vice versa, must do so by the tenth instructional day of the term.

## Grade Discrepancies

You must bring any grade discrepancy to the attention of the Director of Enrollment Services/Registrar within 90 days.

## Incomplete

When a student has satisfactorily completed a substantial portion of the assigned coursework but some essential course requirement has not been completed for reasons acceptable to the instructor, a grade of Incomplete (I) may be given and additional time granted for completion.

The Incomplete Grade Contract Form process must be initiated by the student, except in emergency cases. The form is to be filled out and signed by both the student and the instructor. However, only the instructor may submit the form to the Director of

Enrollment Services/Registrar.

Because a substantial amount of completed coursework is required for incomplete eligibility for the student, a course repeat is not a legitimate make-up assignment and such agreement will not be accepted by the Registrar's office.

An I grade must be removed by the end of the next regular term, regardless of whether or not the student is enrolled or the course is offered. An I grade may be extended only under the most extenuating circumstances and then only for one additional term. An extension must be filed with the Director of Enrollment Services/Registrar on a new or revised contract form prior to the original expiration date. If an I is not removed by the agreed-upon date, the I then becomes the letter grade designated on the contract.

## Mid-Term Status

If you are failing or are in danger of failing you may be notified by the Advising and Testing Center sometime during weeks two through seven of each term. However, failure to receive this notification does not constitute assurance that you will not fail based on performance following the seventh week.

## Pass/Fail Option

Grading options for each course are listed in the course syllabus. Some courses are graded A-F only, some are graded Pass/Fail only, and some allow students to choose either of those two grading options. To choose a grading option, students must inform the instructor during the first two weeks of class. Courses in the student's major should not be taken with the Pass/Fail option.

## Repeating a Course

Umpqua Community College policy allows students to repeat a course to improve the grade earned.

We will update student academic records when courses are repeated, in most cases, so that credit is awarded only once. The lower grade will be notated with an "E" (excluded) on the transcript and is not

computed in the GPA. The GPA is recalculated using the higher grade.

Course work taken at another school will not be considered as a repeat for the same course taken at UCC.

## DEGREE COMPLETION AND CATALOG TIME LIMITS

### Catalog Time Limit for Program Completion

Students must complete the program and degree requirements listed in the catalog under which they began their program within a five-year time span. After five years, students must either complete current program requirements in effect, or petition the Department Chair (for career-technical programs) or the Director of Enrollment Services/Registrar (for transfer programs) for an extension of time or an approved adjusted program.

### Graduation Requirements

Degrees and certificates are awarded at the conclusion of each term. The commencement ceremony to honor degrees and one or more year certificates is held in June. It is your responsibility to request a graduation evaluation to ensure that all requirements are completed. For June graduates, the evaluation should be requested by March 1, of the year in which the certificate or degree is to be awarded.

To receive any degree from UCC, a student must maintain a 2.00 cumulative grade point average, attend UCC for two terms including the last, and complete at least 25%

of the program requirements at UCC.

Students must complete a minimum of 90 term credits of lower division collegiate courses with a minimum accumulated grade of C or better.

Students who graduate from high school or completed a high school equivalency program in 1997 or later must meet the second language requirement for admission to a four-year Oregon State college or university: 1) Two years of the same high school-level second language, or 2) two terms of a college-level second language with a grade of C or better.

### Limitations

1. Physical Education Activity Courses – 12 hours maximum.
2. Students may not receive credit toward a degree or certificate for courses in which they have previously completed advanced work (e.g., BA 151 after completing BA 211).

### Second Degree or Certificate

- To earn a second Associate Degree, students must satisfactorily complete a minimum of 24 credit hours in addition to those completed for the first degree.
- To earn a second program Certificate, students must complete a minimum of 12 credit hours in addition to those completed for the first certificate.

### Pathway Certificate

UCC automatically awards Pathway Certificates upon completion of requirements at the conclusion of each term. To opt out of an automatic award of a Pathway Certificate, submit a completed Change in Graduation form (with the OPT OUT box checked) to the Registrar's Office in the Enrollment Services office.

### Degree Completion at Another Institution

Under extraordinary circumstances a student may

petition the Enrollment Services office for permission to complete a maximum of 15 credit hours of degree requirements at another institution. In order to qualify, the student must have met the UCC residency requirements. Completion time is limited to one calendar year following the last term of attendance at UCC.

## ACADEMIC STATUS

### Honor Roll

For full-time students, UCC maintains two levels of Honor Roll. The President's Honor Roll, 3.75 - 4.00 GPA for the term, and the Dean's Honor Roll, 3.50 - 3.74 GPA.

### Graduation with Honors

UCC recognizes Honor graduates as follows:

4.00 GPA — Highest Honors

3.75 - 3.99 — Honors

For the commencement program the cumulative GPA through winter term is used.

### Phi Theta Kappa

Phi Theta Kappa is an international honor society for community colleges. It was founded in 1918 at Stephens College in Columbia, Missouri by two-year college presidents to give prestigious recognition to community college students with excellent scholarship and character. Made up of over 1.2 million members, Phi Theta Kappa touches 1,200 campuses around the world. The benefits of membership are numerous, including a notation on the UCC transcript, the privilege of wearing the Phi Theta Kappa academic regalia at graduation, and a myriad of scholarship opportunities. The purpose of Phi Theta Kappa is to recognize and encourage scholarship among two-year



college students. Phi Theta Kappa chapters provide opportunities for:

- the development of leadership & service
- the exchange of ideas and ideals
- fellowship and
- stimulation of interest in continuing academic excellence.

Membership is based on completion of 12 credit hours or more and a cumulative GPA of 3.50 or higher. There is a one-time fee for membership into the campus chapter, the region and the International Society.

For more information about Phi Theta Kappa, please contact Marjan Coester at 541-440-7749 or visit the Student Life Office located in the LaVerne Murphy Student Center.

### **Academic Probation**

Academic Probation is a warning status that students are not making satisfactory academic progress. Full- and part-time students whose cumulative Grade Point Average (GPA) falls below a 2.00 for any given term will be placed on academic probation.

### **Academic Suspension**

Academic Suspension is a status that limits students' enrollment options. Academic Suspension will be applied in the following two (2) situations:

1. Full- and part-time students maintaining less than a 2.00 cumulative Grade Point Average (GPA) for two (2) consecutive terms will be placed on academic suspension.
2. Full- and part-time students who have attempted 36 credits and have a 1.75 cumulative GPA or lower will be placed on academic suspension.

The Registrar is responsible for reviewing and updating this policy. Specific guidance for policy implementation may be found in the associated Administrative Procedure(s).

### **Forgiveness of Past Academic Performance**

Academic Forgiveness is a one-time process by which credits and grades from forgiven terms will not be used in determining GPA or academic standing. Students whose past academic records at Umpqua Community College are detrimental to future academic or occupational pursuits may pursue one of three options to be eligible to petition the Academic Standards Committee for Academic Forgiveness of past performance:

- 1) After a leave period of at least two (2) years and upon return, the successful completion ("C" or better) of 12 credits for an Associates or 25% of the required coursework for a Certificate.
- 2) A change of major and the successful completion ("C" or better) of 12 credits for an Associates or 25% of the required Certificate course work in the new program.
- 3) After a period of at least five (5) years between the quarter for which the petition is sought and the date of the appeal.

Once students graduate from Umpqua Community College they may no longer be granted Academic Forgiveness for terms prior to their most recent graduation date.

The Registrar is responsible for reviewing and updating this policy. Specific guidance for policy implementation may be found in the associated Administrative Procedure(s).

### **Attendance**

You are accountable for attending class(es) in which you are officially enrolled. If you do not attend during the first day of class or contact the instructor, the instructor may withdraw you from the class. To ensure you have been withdrawn you must contact the Enrollment Services office. Classes that meet less than the regular length of the term have different deadlines (see Schedule of Classes for dates). A grade will be assigned in credit classes unless an official drop or withdrawal has been processed by the published deadlines (see Schedule of Classes for dates).

Instructors may announce an attendance policy for your classes. It is your responsibility to obtain attendance rules from each instructor in cases of late enrollment.

Only students who have officially registered may attend classes. Starting the first week of the term the student's name must appear on the Class Roster, or the student must have a class schedule which shows they are registered for the class.

## STUDENT EDUCATIONAL RECORDS

The Family Educational Rights and Privacy Act (FERPA), also known as the Buckley Amendment, covers the release and inspection of each student's educational records. In compliance with FERPA, Umpqua Community College has formulated the Student Records Policy to outline the proper handling and release of student educational records.

### **Your Rights Under FERPA**

The Family Educational Rights and Privacy Act (FERPA) gives all matriculated students certain rights regarding their education records. As a student at Umpqua Community College you have the right:

- To inspect and review your education records. You may request to review your education records by submitting a written request to the Registrar or other school official having custody of such records. The College will normally comply with your request to inspect your education records within ten days, but in no case more than 45 days from the request;
- To seek amendment of your education records that you believe are inaccurate, misleading, or otherwise in violation of your privacy rights. Requests for amendment of education records must be in

writing and must describe the specific portions of specific records you wish to have amended, text or instructions as to the change desired, and the reasons why the change is justified;

- To consent to disclosure of personally identifiable information contained in your education records, except for when consent is not required by FERPA. FERPA does not require your consent when disclosure is to other school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position; a person or company with whom the college has contracted or appointed as its agent; or a student serving on an official committee or assisting another school official in performing the official's tasks. A school official has a legitimate educational interest if the official needs to review an education record to fulfill their professional responsibilities. Other exceptions include: to schools in which a student seeks or intends to enroll, to Federal, State, and local authorities involving an audit or evaluation of compliance with education programs, in connection with financial aid (such as the administration or continuation of aid), to individuals or organizations conducting studies for or on behalf of an educational institution, to regional or professional accreditation organizations, to comply with a judicial order or subpoena, in the event of a health or safety emergency where the information is required to resolve the emergency. FERPA also allows the disclosure of your directory information without consent, but you may request that your directory information not be released. If you wish to make such a request, you must do so according to the procedures outlined in the following section under the heading "Directory Information";
- As of January 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which your education records and personally identifiable information

(PII) contained in such records - including your Social Security Number, grades, or other private information - may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities:") may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program and job training, as well as any program that is "principally engaged in the provision of education," such as early childhood and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent, PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

- To file a complaint with the Department of Education, Family Compliance Office, concerning alleged failures by the college to comply with the requirements of FERPA.

## Use of SSN (Social Security Number)

OAR 589-004-0400 authorizes Umpqua Community College to ask you to provide your Social Security Number. The number will be used by the college for reporting, research, and record keeping. Your number will also be provided by the college to the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon, 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 your social security number to the following agencies or match it with records from the following systems:

- State and private colleges, 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 you by the college.

State and federal laws protect the privacy of your records. Your number will be used only for the purposes listed above.



## Directory Information

Umpqua Community College defines certain information as Directory Information, and this information may be released to a third party. Students may sign a Directory Information Hold Form which will prevent the release of this information. Students who sign the request will not be listed in news releases concerning honor rolls, or in commencement related publications. UCC defines Directory Information as:

1. Student name
2. Student email address
3. Student phone number
4. Student address
5. Terms of enrollment
6. Degree and awards received
7. Dean's list, President's list, honors list.
8. Participation in officially recognized activities and sports
9. Weight and height of members of athletic teams

## STUDENT EDUCATIONAL RECORDS, *continued*

10. Most recent previous educational agency or institution attended
11. Under the Solomon Amendment, names and addresses will be released to the branches of the US Armed Forces upon request
12. In compliance with the Hope Scholarship and Lifetime Learning Tax reform, information will be released to the IRS.

If a student has not filed a hold, UCC will assume the student approves disclosure. If a third party requests information other than that listed above, a copy of your signed authorization will be required.

## STUDENT DEVELOPMENT AND SERVICES

Umpqua Community College offers a wide range of student services to meet a variety of needs. Academic, financial, social, and personal services are available at little or no cost. We hope you will take advantage of the services available and the opportunities they present.

### Academic Advising

Academic advising is available in the LaVerne Murphy Student Center. A variety of student services are provided to meet a student's individual needs while attending UCC. Services provided by an academic advising specialist may include:

- One-to-one academic advising sessions
- Interpret academic requirements and select appropriate courses
- Creating first term schedules
- Development of a Term-by-Term Planner
- Understanding of academic policies and procedures
- Degree requirements and transfer options

### Bookstore

The UCC Bookstore is located in the LaVerne Murphy Student Center Building, on the main campus. The bookstore offers course textbooks and materials, general books, computer software and hardware, clothing, gifts, cards, snacks, espresso, and a wide variety of school supplies.

Bookstore hours are 7:30 a.m. to 4 p.m. Monday through Friday, for the fall, winter and spring terms. Summer hours are 7:30 a.m. to 4 p.m. Monday through Thursday.

During the fall, winter, and spring terms the bookstore will be open until 5:30p.m. the first two days of classes. Your student ID and class schedule are required to assure that you will receive the correct textbooks for your classes.

The UCC Bookstore is a certified SNAP retailer and is able to accept EBT cards for associated food purchases under Federal SNAP guidelines. schedule to assure the purchase of the correct textbooks for your classes.

You can now compare pricing and purchase textbooks online through the UCC Bookstore website with financial aid or Visa or Mastercard. Allow a 24 hour ship time and only street addresses will be accepted. In-store pickup is also available. NO PO BOXES.

Textbooks purchased during the term may be returned until the end of the first week of school, providing the textbook is in the same condition as purchased, and proof you dropped the class and a receipt for the item are provided. Textbooks or software in shrink-wrap, labeled no-return if opened, may be returned for a refund during this time if unopened.

The UCC bookstore will have a textbook buy-back Wednesday through Friday of finals week during the fall, winter and spring terms. Buy-back will be held during August for the summer term.

We encourage students to bring any and all textbooks to buy-back as we buy for the store, based on need, as well as for other schools. Textbooks eligible for book buy-back usually include texts that will be used the



next term on our campus. Price paid at buy-back varies with each book, but can be as much as one half the amount paid.

The UCC Bookstore is a non-profit self-sustaining operation owned by Umpqua Community College.

## Bus Service

Regularly scheduled transit service, provided by Umpqua Public Transit, is available to UCC students each term. Bus passes are available each term at a discounted rate to currently enrolled students from the Student Accounts, located in LaVerne Murphy Student Center. Students must show a UCC Student ID card and current class schedule. Financial assistance may be available through ASUCC Leadership for students with limited income; visit the LaVerne Murphy Student Center. The service picks up and delivers students daily to the UCC campus. The bus stop is located between Jacoby Auditorium and the Administration building. Bus schedules are available outside the ASUCC Leadership offices in the LaVerne Murphy Student Center. For more information call Umpqua Transit at 541-440-6500, or online at [www.umpquatransit.com](http://www.umpquatransit.com).

## Child Care

Umpqua Community College offers a limited number of spaces for child care on campus. The Ford Childhood Enrichment Center also functions as a training laboratory for students in Early Childhood Education. Children ages 6 weeks to 5 years of age may attend part or full time, depending on the parents' schedules. Cost depends on the number of hours the child attends. Financial assistance may be available to eligible students. Applications are accepted throughout the year. For more information, visit the child care office in the Ford Childhood Enrichment Center, or phone 541-440-4650 or 541-440-7741.

## Accessibility Services

Students who experience barriers to access will find UCC's campus to be accessible and accommodating.

Support services are available to students with many types of disabilities including mobility, auditory, visual, learning, chronic illness, and psychological. Services include, but are not limited to, alternate testing, note takers, readers, interpreters, mobility assistance, assistive technology, and consultation/collaboration with faculty and Accessibility Services.

Students will receive accommodations and other accessibility support services only when they submit appropriate documentation and register with the Accessibility Services office. New students are encouraged to make an appointment with the coordinator prior to taking the placement test, and as soon as possible each term for ongoing services. Please visit Accessibility Services on the UCC web page for additional information ([www.umpqua.edu/accessibility-services](http://www.umpqua.edu/accessibility-services)).

When requesting accommodations for performances and other public events, please contact Special Events at 541-440-4704. Accessibility Services can be reached at 541-440-7655 or 541-440-7900 or Oregon Relay at 1-800-735-2900. The Accessibility Services office is located in the Educational Skills Building (ESB).

## Food Service

**River Rush Café**, operated by UCC, provides complete meals, salads, deli sandwiches, a la carte selections, pizza, snacks and beverages for students/guests in the cafeteria, located in the LaVerne Murphy Student Center. Menus feature local, regional and international cuisines. The Café will be closed during our Summer term with added food service/selection from our UCC Bookstore. We strive to provide reasonably-priced quality food to our guests in a comfortable atmosphere.

**River Rush Catering** is operated by UCC and provides both a la carte and buffet menus. River Rush Catering serves food for all kinds of campus-related events, including fund-raisers, conferences, weddings, luncheons, workshops and more. Whether a business meeting for your UCC department, student events, or local business, River Rush Catering can provide the food.

River Rush Catering is a self-sustaining operation owned by the college.

Vending machines, located between the main dining room and the student lounge areas, provide beverages and snacks throughout these times and in the evenings. The Campus bookstore also offers a selection of food and beverages.

## Student Insurance Fee — Mandatory Participation by Students

Students pay \$5 per term of enrollment for insurance which provides coverage during supervised college activities (e.g. classes and field trips) and travel to and from such activities. The insurance covers injury caused solely by an accident which happens while the student is taking part in a college supervised activity. For more information, contact the Budget Assistant, located in Lockwood Hall: phone 541-440-7861.

## Information Technology

UCC offers excellent computer facilities to students, faculty, and staff. Over 400 computers are available for use in computer laboratories located in the various buildings on the main campus as well as the various outlying centers. The computer lab hours vary during the term, and some open lab times are also offered. Lab assistants are generally available for assistance. UCC also provides extensive wireless accommodation for use with laptops, PDAs, and other wireless devices. All use of college-owned computer equipment and network services must be in compliance with applicable UCC policies, procedures and guidelines as well as federal and Oregon state law. Please refer to materials posted in labs or the college web page for details (<http://www.umpqua.edu>).

## Library

The library provides services for all UCC students, faculty, staff, and Douglas County residents at no cost. The library staff is friendly, focused on customer service,

## STUDENT DEVELOPMENT AND SERVICES, *continued*

and ready to help you. Take advantage of our group study space, open seating, and carrels for individuals. Our open computer lab is available to all students across the curriculum with lab aides to answer your computer-related questions. We offer laptops for student checkout, wireless access, printers, mobile charging stations, mobile device printing, scanners and copy machines, both color and black and white. Lockers, restrooms, ATM, and vending machines are available in the library lobby.

The library houses print books, DVDs, CDs, a reference collection, and a textbook reserve collection for current students. Access online articles, ebooks, and reference sources through the digital library collection. Our online research guides point to resources, research tips, and online tools for your classes. Interlibrary loan is also available for students, faculty, and staff.

The Reference Librarian teaches research skills to classes across campus and offers LIB 127 Library and Internet Research, a 3-credit online class each term. Learn how to use the library, research your favorite subjects, improve your performance on class projects, and move between online and print information sources with ease. The library staff is available to answer questions, show you how to use the library's services and collections, and help you find the information you need. Stop by the library, e-mail, call or make an appointment for research help for your assignments and information needs. Visit us at [www.umpqua.edu/library](http://www.umpqua.edu/library) or call 541-440-4640.

### **Success Center**

The Success Center supports classroom instruction by providing assistance to students with a variety of services aimed at promoting their success in college. Services are designed to reinforce course content and to emphasize good study habits. Student tutors can help with a variety of subject areas, technology skills and placement testing review. Success Center tutors and staff are committed to a welcoming, safe and stimulating environment that encourages all of our students to become independent, life-long learners and to achieve success within their

careers. The Success Center is located in the Sue Shaffer Learning Commons and Library (541-440-7831). For more information and access to resources provided through the Success Center, please visit our website at [www.umpqua.edu/success-center](http://www.umpqua.edu/success-center).

### **Parking**

Umpqua Community College provides more than 1,450 parking spaces located near all campus buildings. One-hour Visitor Parking space is designated in white directly in front of the Del Blanchard Administration building. Our one-hour parking is for non-student activities and is strictly enforced. Staff parking is designated in green while all other parking on campus is in yellow. One-day permits can be obtained for visitor parking through UCC Security and Facilities at 541-440-4671.

Traffic citations will be issued for improperly parked vehicles. Any vehicle left unattended on UCC property for more than 72 consecutive hours will be deemed abandoned and towed at owner's expense. Penalties/ fines may be paid through the cashier in the Finance Office, located in Laverne Murphy Student Center. All traffic and parking issues should be addressed through UCC Security and Facilities at 541-440-4671.

More information on parking, traffic citations, and the citation grievance process can be found at <http://www.umpqua.edu/parking>.

Umpqua Community College reserves the right to change any of these regulations without prior notice as needed for the safety and security of the campus. Such changes will be posted prominently throughout the campus community and through UCC Security and Facilities at 541-440-4671.

### **Authorized Testing Center**

Testing Services provides proctored testing with: Accuplacer and ALEKS testing, online courses and industry based tests. UCC is the official GED test center for Douglas County.

We offer testing for CLEP, LSAC, ACT and DSST and are a certified test center for Prometric, Metro Institute, Pearson Vue, Castle Worldwide and NHA, offering Information Technology, Pesticide, ASE and GED testing. The Testing Center is located in the Educational Skills Building (ESB). For information call the Testing Coordinator, at 541-440-7659.

### **Student ID Cards**

All registered students are entitled to an ID card. The ID card serves as your official UCC photo identification and can be utilized as a UCC Library Card. An ID card is needed for the bus pass. ID cards are available through the Information Desk in the LaVerne Murphy Student Center during regular business hours. ID cards must be validated each quarter of enrollment; validation stickers are available from the Information Desk, from the Finance Cashier located in Laverne Murphy Student Center and from the Library reference desk.

### **Student Veteran Center**

The Student Veteran Center, located in the Educational Skills Building (ESB), provides dedicated space for to our student veterans, where they can go for resources, quiet study, and relaxation. It features a small kitchenette, a computer lab with scanning, and a TV lounge. An access code is required; see Diana Kelly at the LaVerne Murphy Student Life office.

### **Veterans**

The Veterans Education Benefits Office was established to provide service to veterans and their eligible dependents in applying for and receiving Veterans Educational Benefits, VA work study, and other supportive services. You are encouraged to contact the Veterans Coordinator in the LaVerne Murphy Student Center, or call 541-440-4621 for assistance or more information.

Students may generally establish eligibility with the VA for full-time benefits by taking 12 or more eligible credits, three-quarter time benefits with 9 to 11 eligible credits and half-time benefits with 6 to 8 eligible credits.

Only tuition and fee benefits are available to students taking less than half-time. If you are taking GED courses you must attend class 18 hours or more per week to be considered full-time. Veterans and other military personnel need to check with the Enrollment Services office regarding procedures for acceptance of military credits.

The Veterans Office will assist you in filling out the necessary paperwork to establish eligibility for educational benefits. All students receiving Veterans Education Benefits while attending UCC are required to submit transcripts for all previous education, including all military service.

After certification by the college and the VA you must:

1. Maintain satisfactory progress (described below).
2. Enroll only in courses that are part of the certified program. By taking classes outside of the certified program, you will be liable for overpayments from the VA.
3. Complete at least the minimum hours for which you were certified. Overpayments will occur if you enroll in but do not complete your credits for which you were certified.
4. Inform the VA Office immediately of schedule or address changes, as it takes up to six weeks to process the changes.
5. Chapters 30 and 1606 must certify enrollment status with the Veteran's Administration monthly, by logging on to <https://www.gibill.va.gov/wave/index.do> or by calling 1-877-823-2378.

Application can be made for advance pay if there is more than a 30-day break between terms. Advance pay requests must be received by the UCC Veterans Education Services Office at least 30 days prior to the beginning of the term for which advance pay is requested.

### **Veterans Satisfactory Progress**

Students receiving veterans educational benefits must comply with the following:

- A student is considered in good standing when he/she maintains a 2.0 GPA on both term and accumulative grade records.
- Any reduction of class load which will affect the student's status will be reported to the VA and could result in an over payment.
- A maximum of 45 hours of deficiency courses will be allowed for any veteran student.
- Veterans whose GPA falls below 2.0 will be advised that they are on probation.
- Students who do not maintain a 2.0 GPA for two consecutive terms will receive a notice of suspension. The appropriate VA Regional Office will also be informed. Once students are placed on Unsatisfactory Progress they must enroll for, and complete, one term on their own before the veterans office will submit their records to the VA for recertification. During the term, students must maintain the same credit-hour level as they did when they were certified and must also earn a minimum 2.0 GPA for the term.

## TRiO

### **What is TRiO?**

Our nation has asserted a commitment to providing educational opportunity for all Americans regardless of race, ethnic background or economic circumstance. In support of this commitment, Congress established a series of programs to help low-income Americans enter college, graduate and move on to participate more fully in America's economic and social life. These Programs are funded under Title IV of the Higher Education Act of 1965 and are referred to as the TRiO Programs. While student financial aid programs help students overcome financial barriers to higher education, TRiO programs help students overcome class, social and cultural barriers to higher education. UCC is home to three TRiO Programs: Student Support Services-Transfer Opportunity Program, Educational Talent Search, and Upward Bound.

### **Student Support Services – Transfer Opportunity Program**

The Transfer Opportunity Program is a Student Support Services-TRiO project funded by the U.S. Department of Education on a \$269,486 per year grant to serve 165 students. The program is designed to assist eligible students to complete requirements at UCC for transfer to a four-year college or university. The Program offers a variety of free resources and support that students need to develop an educational plan, make informed career decisions, and gain the tools and skills necessary to successfully complete their educational goal of earning a bachelor's degree.

### **What does the Program offer?**

Academic Advising, Career Advising, Tutoring, College/Campus Visits, Cultural Enrichment, Book Resources, Transfer Assistance, Financial Aid/Scholarship Assistance, and Educational Seminars on a variety of topics.

### **Eligibility**

Students qualify based on federally-defined criteria as follows: meet the federal low-income guidelines and/or be a first-generation to attend college and/or have a documented physical/learning disability.

### **Application**

Pick up an application in the Transfer Opportunity Program Center located in the LaVerne Murphy Student Center next to the cafeteria's main entrance or visit the website at: [www.umpqua.edu/student-support-services](http://www.umpqua.edu/student-support-services). For further information, call the Transfer Opportunity Program office at 541-440-4712.

### **Educational Talent Search (ETS)**

Talent Search programs serve young people in grades six through twelve. In addition to academic advising, participants receive information about college admissions requirements, scholarships and various student financial aid programs, financial literacy and career exploration. This early intervention program helps students from families with lower incomes or where neither parent has a bachelor's degree to better



understand their educational opportunities and options. Over 310,000 students are enrolled in 449 Talent Search TRiO programs. UCC's Educational Talent Search program was originally funded in 2002 and re-funded in 2016 on a five-year grant to serve 600 students per year. ETS has on-site advisors at South Umpqua, Riddle, Glide, Douglas, Roseburg and Sutherlin High Schools, as well as in middle schools. Along with academic and career advice, students are also exposed to numerous cultural and educational field trips during the school year. ETS is funded on a \$284,160 a year grant. For more information on ETS, please call 541-440-4606.

### Upward Bound

Upward Bound helps young students prepare for higher education. Participants receive instruction in literature, composition, mathematics, world languages, and science after school, on Saturdays, and during the summer. Currently, 813 programs are in operation throughout the United States. UCC's UB Program was funded in 2007 on a four-year grant, and has been refunded for another five years as of the 2017-2018 school year.

UCC's UB serves 65 students from Douglas, Roseburg and South Umpqua High Schools. There are on-site coordinators who assist students with their academic, college and career exploration needs. Students also participate in a 6-week summer academy where they take classes at UCC to prepare them for the upcoming academic year. Students are invited to attend cultural and educational experiences throughout the year to help them realize their college and career dreams. Upward Bound is funded on a \$270,375 a year grant. For more information on Upward Bound, please call 541-440-4606.

### Student Job Placement

Student Job placement services are available through the Financial Aid Office under the federal Job Location and Development Program (JLD). Student Job placement identifies employment opportunities within our community for students who want to work regardless if they are eligible for federal student aid. Part-time and full-

time vacancies are posted online at <http://www.umpqua.edu/student-job-placement>. Program registration is required.

Services provided may include:

- Resume Assistance
- Job Search Correspondence
- Interviewing Resources
- Job and Career Fair

Visit the Student Job Placement Office in the LaVerne Murphy Student Center (CC)/Financial Aid Office or call 541-440-7797, afternoon hours.

## STUDENT LIFE

### Associated Students of UCC

The Associated Students of Umpqua Community College (ASUCC) Leadership Team provides representation for all students to the college administration by participating as voting members on all major college committees.

ASUCC supports the formation of clubs, organizes activities for students, and helps students learn leadership skills that will serve as a foundation for their future career success. They also involve themselves in community service activities.

Participants can learn valuable leadership skills in student government, develop friendships and establish contacts with the college staff. ASUCC Officers and Senate positions are eligible for compensation.

Executive officer positions — filled by election — include the President, Vice President, Activities Officer, Public Relations Officer, and Business Manager/Secretary. Senator positions are filled through a petition and appointment process.

Executive officers' positions are filled during the spring term. Senator positions are considered on a regular basis and are open to all full- and part-time students. The Leadership Team holds weekly meetings. All are invited to attend.

For more information contact ASUCC Leadership at 541-440-7849 or the Director for Student Life at 541-440-7749.

### Clubs

Student clubs and organizations provide students with an opportunity to combine various aspects of academic and/or vocational learning into personal action. Through participation in a student club or organization, students learn to apply the skills and responsibilities of leadership (communication, team building, problem solving, meeting management, decision making and conflict management) and become involved in the community.

Clubs are a great way to meet other students with similar interests and have fun while developing lifelong skills.

Student clubs must be open and available to any Umpqua Community College student regardless of race, color, religion, national origin, sex, gender identity, marital status, disability, veterans status, political affiliation, age, sexual orientation or any other status protected by federal, state or local law in any area, activity or operation of the College.

A chartered (certified) student club is any student club which has been officially recognized by the ASUCC Leadership Board. Student clubs may exist on campus without official recognition but will not be eligible for subsidy by the ASUCC or be granted the benefits given to a chartered student club.

If you are interested in chartering a club, stop by the ASUCC Leadership Office, located in the LaVerne Murphy Student Center, and pick up a club charter (certification) form. If you have any questions, please phone 541-440-7849 or contact the Director of Student Life at 541-440-7749.

### Athletics

UCC is a member of the Northwest Athletic Conference (NWAC) and the National Junior College Athletic Association (NJCAA) and actively participates in men's and women's basketball, wrestling, cross country, obstacle course racing and women's volleyball. Competition comes from across the country.

Team membership is based on skill and ability to compete at the intercollegiate level. Any qualified student is welcome to try out. Besides the benefits of physical development, participants learn teamwork, self discipline, and leadership skills. Some members of each team receive merit awards, based on NWAC and NJCAA rules, to help pay for tuition.

UCC is known for building champions in the classroom, champions in the community and champions in competition. All students are encouraged to attend and support UCC athletic events. Attendance is free for all current students. Team colors are green, black, and white, and the college mascot is the Riverhawk. Those interested in becoming a member of a team, contact the Athletic Director, 541-440-7729.

## Music and Theatre Arts

The UCC Music program sponsors a number of performing groups, including Symphonic Choir, Band, Orchestra, Chamber Choir, and Concert Choir. All students are welcomed, and college credit can be earned. In addition, numerous music classes are offered, including individual lessons.

The UCC Theatre program produces three or more plays during the year, including summer musicals. Casting auditions are open to all students and college credit may be earned for participation. In addition, classes in theatre arts are offered throughout the year.

Performance-based tuition waivers are awarded to outstanding music and theatre students each term. Call the music faculty at 541-440-4693 or theatre faculty at 541-440-4694 for more information.

## Student Newspaper

UCC's student newspaper, The Mainstream, provides both print and online editions. It is primarily staffed by students enrolled in Journalism Production (J 215) which is a variable credit course (students may enroll for 1, 2, or 3 credits per term). A scheduled class time for J 215 is listed in the UCC catalog, but students who are unable to meet at that time due to schedule

conflicts should contact the advisor for a possible schedule override.

J 215 students explore media writing, graphic design or both in a hands-on training environment under the leadership of an advisor and student editor. Students can gain experience in Associated Press style, media writing formats, interviewing, copy editing, journalism ethics, media graphic design, advertising, and working as a creative team.

No prerequisites are required for J 215, but students interested in media writing for The Mainstream should consider taking J 251 Writing for the Media either concurrently or before J 215. Students enrolling in J 215 must be able to meet deadlines and interact positively on a work team.

For information about The Mainstream, contact the advisor, Melinda Benton, at [melinda.benton@umpqua.edu](mailto:melinda.benton@umpqua.edu) or the staff at [uccmainstream@yahoo.com](mailto:uccmainstream@yahoo.com).

## COMMUNITY AND WORKFORCE TRAINING

The UCC Community and Workforce Training Department enriches lives and supports employers with high-quality education and training in Douglas County. We strive to respond to the ever-changing needs of residents and businesses quickly and with care. The Department coordinates non-credit classes, workshops and trainings in several subject areas:

- Fun, hobby, and personal enrichment
- Professional development & continuing education
- Safety and health certifications
- Employer training & consulting

Community and Workforce Training includes Adult and High School Driver Education courses, American Heart Association CPR/First Aid courses, coordination of Gold Cards, Continuing Education Units (CEUs), Summer Enrichment Camps for children and teens and much more.

Course offerings are updated each term and can be found in the printed UCC Class Schedule distributed to your home mailbox or online at: <http://www.umpqua.edu/community-workforce-training>.

For more information on Community and Workforce Training activities, please call 541-440-4668, visit our website or visit our office in the old Science building on the Umpqua Community College Campus.

## Off-Campus Classes

UCC Community and Workforce Training offers courses located off-campus throughout the college district. These include non-credit self-improvement, technology, and cultural and personal growth activities. Consult the UCC Community and Workforce Training sections for listings of courses in your area. Department coordinators serve all areas of the college district. Their names and contact numbers are listed in the quarterly schedule. If you have an interest in a particular class, contact 541-440-4668.

## COMMUNITY SERVICES

### The Art Gallery at UCC

The UCC Art Gallery is located in the Whipple Fine Arts Building. There are six exhibits during the academic year. Above the main floor is a mezzanine gallery that features student art work on a continuous basis. Both galleries feature exhibits in a variety of media, including ceramics, drawing, painting, photography, printmaking and sculpture.

## COMMUNITY SERVICES, *continued*

Gallery hours are 9 am - 4 pm, Monday through Friday. There is no admission charge. To receive information about the Art Gallery and its programs, please call 541-440-4692 or 541-440-4691.

### **Continuing Education Unit**

The Continuing Education Unit (CEU) is used by some professional and occupational groups as a means of measuring time spent in upgrading activities and in-service. CEUs are given for non-credit and non-graded activities. They are awarded at the discretion of the college. For more information, contact Community and Workforce Training, 541-440-4668.

### **Customized Training & Workforce Development Classes**

Increase your employees' productivity and your organization's bottom-line utilizing UCC's customized training and workforce development services. Computer applications, manufacturing process skills, management training, leadership and team development, safety training and lean implementation are just a few of the many topic areas available. From entry-level to senior executive management team members, UCC can customize training to fit your needs. From individualized coaching and consulting to customized employee seminars, training is available when and where you need it twenty-four hours a day, seven days a week! For more information contact the Community and Workforce Training Department at 541-440-7650.

### **Summer Recreation**

During the summer months a number of athletic activities are offered for members of the community. The swimming pool is open for recreation/lap swim and also for swimming classes. In addition, there are Boys and Girls Basketball, and Volleyball youth camps.

For information consult the Summer Schedule of Classes or call Summer Recreation & Sports Information at 541-440-7845 or visit [www.umpqua.edu](http://www.umpqua.edu).

## ONLINE LEARNING

### **Classes Online**

Many UCC courses are offered online. These courses generally appeal to students who need a more flexible schedule and are motivated, self-starting students who are able to accomplish much of the required coursework independently.

For information, please visit our website: [www.umpqua.edu/ucconline](http://www.umpqua.edu/ucconline), e-mail us at [ucconline@umpqua.edu](mailto:ucconline@umpqua.edu), call 541-440-7685 or visit us in the Educational Skills Building, (ESB) room 34.

### **Academic Advising**

Academic Advising for online learning options and course information is available in the Advising and Testing Center. For more information, call 541-440-4600.

## SMALL BUSINESS DEVELOPMENT CENTER

The Small Business Development Center is one of 20 SBDCs in Oregon established by the Oregon State Legislature in 1983. SBDCs were given the directive to assist and educate business owners. The UCC SBDC provides almost 1000 hours of business advising each year working for businesses up to 500 employees. In addition to providing advising at no cost the SBDC also provides low or no-cost workshops, seminars, and technology assistance. The Center is located at 522 SE Washington in Roseburg but services are available anywhere in Douglas County. Don't hesitate to call for an appointment at your place of business. For

information or an appointment, call 541-440-7824 or visit our local website at [www.umpqua.edu/sbdc](http://www.umpqua.edu/sbdc)

### **Training**

SBDC offers an array of free or low-cost trainings to meet the needs of small businesses. Topics include starting a business, computer training, supervision and management, marketing, accounting, human resource issues, food production, government contracting, and real estate broker's license pre-test and property management training. Call 541-440-7824 or 541-440-7662 for more information on current and future workshops.

### **Advising**

SBDC offers free business advising to people considering starting a business, as well as to business owners at all stages of business life. Advising is personalized to meet the business owner's needs and might include: getting started, financing, business plan creation, marketing, human resource issues, government contracting, QuickBooks assistance, changes in business structure, or just guidance on taking your business to the next level. There is no limit to the amount of hours or sessions.

## ACADEMIC SUPPORT

### **The Woolley Center**

The Harold Woolley Adult Basic Education Center is the hub of activity for a variety of adult basic skills development programs throughout the county. The center serves learners reviewing basic subjects such as reading, math or writing skills, and students who are working toward their General Educational Development (GED) tests. Students receive help with the transition to college and the workplace.

The Woolley Center provides an orientation for new students, which includes goal setting and study skill



components. Our skilled instructors utilize a wide range of instructional materials. For more information about attending the Woolley Center or other sites in Douglas County and to sign up for orientation, call 541-440-4603.

## Adult Basic Education

For adults who would like to develop basic reading, writing or math skills, UCC offers Adult Basic Education classes at several locations in Roseburg and throughout Douglas County. Students receive individual attention and instruction. When the student completes the ABE course of study, he or she is ready for GED and transition assistance. For more information, or to sign up for orientation, please call 541-440-4603.

## General Educational Development (GED)

The GED is a certificate of high school equivalency awarded by the Oregon Department of Education. To obtain it, one must pass a series of four tests, and maintain a minimum average score on all tests. The tests cover mathematical reasoning, science, social studies, and reasoning through Language Arts.

UCC offers day, evening, and Saturday classes to help students prepare for the tests. Classes are held at UCC's main campus, Roseburg's Woolley Center, Glide High School, South Umpqua School District office, and other locations around the county.

Completion of the GED Certificate and 60 hours of instruction in a UCC class entitle the graduating student to free tuition for one college term at UCC. This tuition waiver must be used the year following completion of the final GED test, excluding Summer term.

For information on the schedule and fees, or to schedule an orientation, call 541-440-4603.

## GED Testing

UCC is the official GED Test Center for Douglas County. Tests are given each week in the Educational Skills building. Appointments and payment for GED tests are made at [www.ged.com](http://www.ged.com).

## Adult High School Diploma

For students interested in earning a high school diploma, UCC offers the Oregon Adult High School Diploma (AHSD) on a limited basis. For students requiring less than 3 credits to complete their diploma/graduation requirements. The UCC diploma program has been approved by the Oregon Department of Education and the Oregon Department of Community Colleges and Workforce Development. The AHSD mirrors current state high school graduation requirements.

For students graduating between July 1, 2018 to June 30, 2019, the credit requirements are as follows:

Language Arts.....	4
Mathematics (Algebra I and above).....	3
Science (2 credits lab based).....	3
Social Sciences.....	3
Second Languages, The Arts, Career and Technical Education.....	3
Electives.....	6
Total credits:.....	24

### Students must also complete:

- a Career Related Learning portfolio, which consists of an Education Plan & Profile and documentation of career-related learning experiences and extended application of skills
- reading, writing, and math proficiency test
- all credits earned in the program with a minimum of a 2.0 GPA

AHSD candidates must complete a minimum of two UCC high school credits or six UCC college credits (or an equivalent combination of the two) to be awarded a diploma from UCC.

### There are two ways of earning credit towards the Adult High School Diploma:

#### *Through the day program at the Woolley Center*

The classes at the Woolley Center feature independent hybrid classes with online and face-to-face instruction. Emphasis is placed on successfully transitioning into

college and the workforce. Candidates must be at least 16 years of age and have a minimum of ninth grade reading level to be admitted to this program. Students 16 and 17 years of age must have a referral from their school district or release from compulsory attendance. For more information, please call 541-440-4603.

#### *By enrolling in the AHSD program on campus*

Candidates in this program enroll in college classes, and earn high school diploma credit and college credit simultaneously. Students are expected to demonstrate the ability and maturity to succeed in college coursework as well as in the community college environment. Students must place into college level coursework on the ALEKS Placement Test for Math and the ACCUPLACER Placement Test for Reading and Writing. For more information, please call 541-440-7785.

## Skill Building Through ABS Classes

For students interested in taking college courses, but who need to refresh or upgrade skills in math, reading or writing, there is another option. Students can attend Skills Review classes in a number of locations. Please call 541-440-4603 for more information.

## English Language Acquisition (ELA)

Several levels of classes are offered for adults whose native language is not English. There are day and night classes available. Classes stress conversation and pronunciation, with particular emphasis on work and life skills. For more information, please call 541-440-4603.

Clases de Inglés Como Segundo Idioma (ESL) English as a Second Language (ESL) Clases Para obtener más información sobre cómo tomar clases de Inglés como Segundo Idioma (ESL) y clases de Desarrollo de Educación General (GED) por favor de llamar al Centro de Woolley, 541-440-4603.

For more information on taking English as a Second Language (ESL) classes and General Education Development (GED) classes call the Woolley Center at 541-440-4603.

## Learning Skills (Developmental Education)

What if I don't place into college-level coursework? Don't be discouraged! Many new students need to upgrade their skills. The Learning Skills Center helps students achieve proficiency in the basic academic skills necessary to succeed in college. By taking reading, writing, and skill-building classes, students learn to apply strategies and access resources to advance in current and future coursework.

## Bridge to Success Program

Many community colleges operate learning communities to improve low rates of student success. At UCC, our learning communities co-enroll a cohort of students into several classes together and include integrated curricula, collaboration among instructors, as well as enhanced mentoring and tutoring which are embedded into the Dedicated Learning Communities. Skills development includes reading, writing, and basic computer literacy. Students are recommended to the program based on their placement test scores.

### Objectives of the DLCs:

Learning communities provide academically low-performing/under-prepared students with the opportunity to enroll and complete courses together at the developmental level. Students are grouped in small cohorts and enroll in two developmental courses (Reading and Writing), a College Success course, and a Critical Thinking course. Students also have the option to enroll in one college-level course in their major or Math. This is designed to:

- help students advance through developmental education and into college-level courses within a structure of cohort accountability
- academically and socially integrate students with the formal and informal academic and social systems of UCC.

### Benefits of the Learning Communities to Students:

- Raises levels of academic and social achievement
- Decreases student marginality and increases mattering
- Provides opportunities for deeper, more meaningful, and connected learning
- Creates a practice ground for skill development within a meaningful context
- Improves critical thinking, functioning in a group, negotiation, and communication skills
- Prepares students for work environments during college and after graduation

## POLICIES

(see disclaimers on page 3)

### Enrollment Limitations

UCC may restrict enrollment in a class or program because we have limited staff, space or equipment. Enrollment is also limited for some programs because of additional admission requirements.

We encourage you to apply early to the nursing program which has additional admission requirements.

### Cancellation of Classes

The college reserves the right to cancel any class due to extenuating circumstances, such as low enrollment.

### Closure Due to Weather or Emergency

School closure shall be determined by the Provost, in consultation with the college President and Director of Facilities. When the college is closed, it is totally closed and no one is required to report for classes or work, excepting security personnel and others specifically requested or approved by the Provost and President. All closures will be publicized as soon as possible through all news media. Closures due to adverse weather conditions will be announced by 6:30 a.m. the day of the closure.

## Equal Employment/Educational Opportunity/Affirmative Action

UCC promotes inclusion and equal opportunity in employment and education. In full accordance with the law, UCC prohibits unlawful discrimination based on race, color, religion, national origin, gender, marital status, disability, veteran status, age, sexual orientation, or any other status protected by federal, state, or local law in any area, activity or operation of the College. The College also prohibits retaliation against an individual for engaging in activity protected under this policy, and interfering with rights or privileges granted under anti-discrimination laws. In addition, the College complies with applicable provisions of the Civil Rights Act of 1964 (as amended), related Executive Orders 11246 and 11375, Title IX of the Education Amendments Act of 1972, Section 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act of 1990 (as amended), Uniformed Services Employment and Reemployment Rights Act ("USERRA"), Title II of the Americans with Disabilities Act, and all local and state civil rights laws. Under this policy, equal opportunity for employment, admission, and participation in the College's programs, services, and activities will be extended to all persons, and the College will promote equal opportunity and treatment through application of this policy and other College efforts designed for that purpose.

### • Title IX Coordinator:

Lynn Johnson (staff), Human Resources Director  
Title IX Coordinator - 541.440.7690, 1-800-949-4232  
TTY 7-1-1, lynn.johnson@umpqua.edu, located in the Sue Shaffer Learning Commons and Library

### • Title IX Deputy Coordinator:

April Hamlin (Students), Dean of Student Services - 541-440-7860, april.hamlin@umpqua.edu, Located in the LaVerne Murphy Student Center

### • College ADA Coordinator:

Lynn Johnson (staff), Human Resources Director/  
Title IX Coordinator - 541.440.7690, TTD 541.440.4612,  
lynn.johnson@umpqua.edu, located in the Sue Shaffer Learning Commons and Library

- **Coordinator, Accessibility Services:**  
Danielle Haskett (students), Coordinator, Accessibility Services - 541.440.7655, 1-800-676-3777 (TTY/Voice) or dial 7-1-1, Danielle.Haskett@umpqua.edu located in the Educational Skills Building (ESB)

## **Title IX – Prohibits Sexual Harassment and Discrimination on Basis of Gender**

UCC is committed to diversity and equal employment/education opportunity. We comply with Title IX. This is a federal civil rights law. It prohibits discrimination on the basis of sex in federally-financed education programs.

UCC protects and supports the 1972 Educational Amendments of Title IX. We work to:

- Promote equity in academic and athletic programs.
- Prevent hostile environments on the basis of sex.
- Prohibit sexual harassment and sexual violence.
- Protect from retaliation and remedy the effects of other gender-based forms of discrimination.
- Investigate and notify the college community of serious or ongoing threats. We work to prevent a recurrence.

### **How do I file a harassment or discrimination complaint? Who can I contact for more information on Title IX issues? When should I file a complaint of discrimination/harassment?**

You should file a complaint of discrimination if you are a UCC student, staff, or faculty member and believe:

- You are being subjected to harassment/discrimination
- You have witnessed harassment/discrimination
- You have knowledge of harassment/discrimination

### **How do I file a complaint of discrimination/harassment?**

Report the situation to an Responsible Employee. A Responsible Employee is either:

- The administrative-level supervisor
- The administrator to whom the alleged harasser reports

- Lynn Johnson, Human Resources Director, Title IX Coordinator – 541.440.7690, lynn.johnson@umpqua.edu, Sue Shaffer Learning Commons and Library
- The grievance procedures can be found online at <http://www.umpqua.edu/conduct-grievance/>
- Title IX Deputy Coordinator  
April Hamlin (Students), Dean of Student Services - 541-440-7860, april.hamlin@umpqua.edu, located in the LaVerne Murphy Student Center

## **Section 504 - Accessibility Services**

The Accessibility Services office coordinates accommodations for students with disabilities.

### **What is the purpose of Accessibility Services?**

Accessibility Services has multiple purposes.

The office:

- Provides academic accommodations
- Offers support services
- Promotes a supportive learning environment
- Promotes student independence, program accessibility and a psychologically-supportive environment
- Helps students achieve educational objectives

### **Who can I contact for more information and accommodations?**

#### **Resolving Discrimination/Harassment Concerns Internally**

- Danielle Haskett (students/visitors), Coordinator, Accessibility Services - 541.440.7655, Danielle.Haskett@umpqua.edu located in the Educational Skills Building (ESB)
- Lynn Johnson, (staff) Human Resources Director, Title IX Coordinator - 541.440.7690, lynn.johnson@umpqua.edu, located in the Sue Shaffer Learning Commons and Library

## **Resolving Discrimination/Harassment Concerns Outside of the College**

Individuals are encouraged to utilize an internal complaint process, but do have a right to file an external complaint of discrimination and/or harassment with:

- **U.S. Department of Education's Office for Civil Rights**  
915 Second Avenue, Room 3310, Seattle, WA 98174-1099  
(206) 220-7900 (v), (206) 222-7887 (fax)  
<http://www.ed.gov/ocr/complaintprocess.html>
- **Equal Employment Opportunity, Seattle Field Office**  
909 First Avenue, Suite 400, Seattle, WA 98104-1061, 1-800-669-4000 (v), 1-800-669-6820 (TTY) 206-220-6911 (fax)
- **Bureau of Labor and Industries**  
3865 Wolverine Ave NE, Building E, Suite 1 Salem, OR 97305-1268, Phone: 503-378-3292, Ore. Relay TTY: 711
- **The Federal Equal Employment Opportunity Commission**

## **Alcohol/Drug Free Environment**

UCC is committed to maintaining an effective learning environment free from the devitalizing influences of alcohol and drug abuse. The unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees on college property or as a part of any of its activities is strictly prohibited. UCC will impose disciplinary sanctions on students and employees (consistent with local, State and Federal law), up to and including expulsion or termination of employment and referral for prosecution for violations of college policies. Information about applicable legal sanctions, description of health risks, and resources for treatment is made available for all employees through the Human Resources department 541-440-4626 and for all students through the Campus Mental Health, Recovery & Wellness department at 541-440-4609, or the UCC website under <https://umpqua.edu/daapp>



## Drug & Alcohol Policy

Umpqua Community College is dedicated to providing a learning environment for students that is safe and free of the detrimental influences of drug and alcohol abuse.

The abuse of drugs and alcohol by individuals constitutes a serious threat to their physical and mental well-being and may significantly impair performance. Although the college recognizes drug and alcohol dependencies as illnesses and major health problems, drug and/or alcohol abuse at UCC is considered unacceptable behavior because it negatively affects the productivity, safety and security of the college.

Therefore, in order to foster a safe, healthful, and secure campus environment, it is UCC's intent and obligation to provide appropriate drug and alcohol related procedures, educational resources, prevention-focused activities and referral services. In addition, when necessary, the college will impose sanctions.

Actions taken with respect to students shall be consistent with rights afforded individuals under college policy, state and federal statutory, regulatory and constitutional provisions.

The college's premises are defined as any building, room, outdoor space, or vehicle that is owned, rented, leased or used by the college.

In keeping with this commitment, students are expected to comply with the following procedures:

- A. Students are expected to report to class in a condition that is conducive to learning. Any student under the influence of alcohol or controlled substances (as defined by federal and state statutes) while on the college's premises or on college-sponsored activities will be subject to sanctions which may include suspension or expulsion from the college.
- B. The unlawful manufacture, distribution, or possession of a controlled substance (other than a drug prescribed by a physician) by any student while on college business or while on the college's premises is prohibited and may constitute grounds for suspension, expulsion from the college, and

referral to appropriate law enforcement agencies for prosecution.

- C. Students experiencing problems resulting from drug, narcotic, alcohol abuse, or dependency should make use of appropriate community resources for dealing with their specific situation.

Although the college recognizes that alcohol and drug abuse can be treated and is willing to work with students who may suffer from such problems, it is the student's responsibility to seek assistance before drug or alcohol problems lead to academic problems.

## Tobacco Free Campus Policy

Umpqua Community College acknowledges and supports the findings of the Surgeon General that tobacco use in any form, active and passive, is a significant health hazard. The College further recognizes that environmental tobacco smoke has been classified as a Class-A carcinogen. In light of these health risks, and in support of a safe and healthy learning/working environment, the following restrictions shall be placed:

1. Smoking or other tobacco usage is not permitted inside the perimeter of any Umpqua Community College (UCC) property. This includes all College sidewalks, landscaped areas, recreational areas, buildings on UCC property, and any leased or rented facilities. Designated smoking areas will be provided near parking lots on the outside perimeter of campus.
2. Improper disposal is prohibited and includes but is not limited to:
  - Spitting smokeless tobacco product
  - Littering (i.e. discarded cigarette butts, throwing cigarette butts out of windows, leaving spit container)
  - Anything that creates fire hazards
3. The inhaling, exhaling, burning, or carrying of any lighted smoking material, including cigarettes, cigars, or pipes, is prohibited in all areas not designated for smoking, and in vehicles owned

or operated by UCC. The use of other tobacco products, such as smokeless or chewing tobacco is also prohibited.

4. The sale of tobacco products or tobacco-related merchandise is prohibited on College property.
5. The free distribution (sampling) of tobacco products and associated products is prohibited at College facilities or events.
6. Sponsorship of campus events by organizations that promote tobacco use is prohibited.
7. Advertisement of tobacco products and printed materials on campus is prohibited regardless of sponsorship.
8. Tobacco use on college property or improper disposal of smoking materials may result in disciplinary action or a \$25 fine.

More information on UCC's tobacco policy, related fines, and the appeal process is available at <http://www.umpqua.edu/tobacco-use-policy>, or in the Tobacco-Free Campus brochure, available at the Enrollment Services office.

## Sexual Harassment Policy

Umpqua Community College is committed to providing all employees and students with the opportunity to work and learn in an environment free from discrimination, including harassment. It is a violation of college policy for any employee or student to engage in harassment of any other college employee or student.

Sexual harassment includes any sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when, either explicitly or implicitly:

- A. It is made a condition of employment or a basis for employment decisions regarding students or staff or
- B. It is made a condition for a student's enrollment, evaluation, or satisfactory progress in a class or program; or
- C. Such behavior unreasonably interferes with a student or staff member's academic or work

performance by creating an intimidating, hostile, or offensive learning or work environment.

UCC employees and students who feel they have been subjected to sexual harassment are encouraged to first pursue an informal resolution to their complaint. Employees should bring their concerns to the attention of their supervisors, Human Resources, Dean of Student Services, or the college Affirmative Action Officer.

Students are encouraged to discuss their concerns with a college counselor or the Dean of Student Services. Every effort will be made to maintain confidentiality for both the complainant and the accused at the informal level.

If the situation is unresolvable by informal means, employees and students should promptly seek assistance from the college Affirmative Action Officer and follow the formal discrimination grievance procedures. Impartial replacements will be selected by the President in the event that a member of the Personnel/Affirmative Action Committee is the alleged harasser.

UCC supervisors are responsible for promoting an environment that is free from sexual harassment. UCC will thoroughly investigate all reported incidents of sexual harassment. Employees or students found to be in violation of this policy will be subject to immediate discipline, including possible termination or suspension from the college.

UCC will not tolerate retaliation of any kind against employees or students based upon their allegations regarding sexual harassment. Retaliatory behavior will be considered a breach of this policy and will be dealt with accordingly.

Employees and students should be aware that formal allegations of sexual harassment carry potentially serious consequences to the person charged. Such allegations should be made if warranted, but should be made with accuracy and truthfulness.

## Student Right to Know Act Statement & Statistics

The reporting of graduation and transfer rates are calculated based on the federal IPEDS definitions. College-based graduation and transfer rates are based on known transfers as confirmed by the National Student Clearinghouse match process.

For more information about the UCC student population contact the Institutional Researcher at 541-440-4625. For more information about the athletic programs and athletic participation contact the Athletic Department at 541-440-4686.

IPEDS Cohort Graduation Rate	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016
Total Cohort	318	306	165	205	120
Total Graduates	32	47	27	47	24
Graduation Rate	10%	15%	16%	23%	20%

## 721.0 Student Code of Conduct

Students at Umpqua Community College are expected to conduct themselves in a manner compatible with an educational environment and in accordance with standards of the college that are designed to perpetuate its educational purposes.

The college, because of its responsibility to provide a safe and supportive learning environment, has certain obligations that need to be reflected as rules in the governance of student conduct and discipline.

Through this Student Code, Umpqua Community College describes

- 1) the responsibilities, rights and freedoms afforded to students and
- 2) conduct that would interfere with the educational mission of the institution.

The provisions of the Student Code of Conduct are not to be regarded as a contract between the students and the College. The College reserves the right to amend

any provision herein at any time in accordance with established College policies. Communication of any changes will be made to the College community in an appropriate and timely fashion.

This Student Code of Conduct will apply to conduct which occurs on College premises and to conduct which occurs elsewhere during the course of a College-sponsored activity. Off-campus behavior that adversely affects the College and/or the pursuit of its objectives may also be subject to the Umpqua Community College Student Code of Conduct.

The Dean of Student Services is responsible for the administration of the Student Code of Conduct. In the absence of the Dean of Student Services, the President may appoint a designee to administer the Student Code of Conduct.

The full UCC Code of Conduct is available online at <http://www.umpqua.edu/conduct-grievance/>

### Academic Integrity

Umpqua Community College is committed to providing students with a quality education that upholds high academic standards; the academic integrity of each student is valued. Academic integrity means academic honesty or the ethical adherence to guidelines set by individual faculty members and UCC. The academic integrity of each student is crucial not only to that individual student's quality of education but to the academic reputation of UCC as a whole. Academic dishonesty jeopardizes individual students and the educational mission of UCC. Therefore, UCC has a zero tolerance policy regarding all forms of academic dishonesty.

#### A. ACADEMIC DISHONESTY

The following actions and/or behaviors are types of academic dishonesty for which students will be subject to sanction. These actions/behaviors are not designed to define academic dishonesty in all-inclusive terms and in no way should this be considered an exhaustive list:

1. Deliberate cheating on any graded assignment; cheating is defined as any of the following:

- a. use of any unauthorized assistance in taking quizzes, tests or exams;
  - b. dependence upon the aid of services beyond those authorized by the faculty member in writing papers, preparing reports, solving problems or carrying out other assignments;
  - c. the acquisition without permission of the faculty member, of a test or other academic material.
2. Consultation of any notes, crib sheets, or other materials in examinations where such consultation is prohibited.
  3. Copying another student's answers or strategies on a test, quiz, professional or practical assignment or allowing another to do so.
  4. Obtaining a faculty member's examination questions or answers without the faculty member's permission.
  5. Collaborating with others on assignments or assessments when expressly prohibited by the faculty member.
  6. Submitting one's own previously graded work as a new assignment without the faculty member's permission.
  7. Plagiarism or the presenting as one's own work the work of another writer without acknowledgment of the source. Plagiarism includes failure to acknowledge the source of words, phrases, ideas, information, data, evidence, or organizing principals; failure to acknowledge the source of a quotation or paraphrase; submitting as one's own work that which was borrowed, stolen, purchased, or otherwise obtained from someone else or the Internet.
  8. Fabrication or falsification of any information, research, data, references or clinical records.
  9. Assisting another student to engage in any form of academic dishonesty.
  10. Tampering with evaluation devices or documents;
  11. Impersonating another student during a quiz, test, cooperative work experience placement, or

clinical placement or other student assessment/ assignment or participating in being impersonated by another student;

12. Use of electronic devices including cell phones or other similar wireless devices to convey information relevant to the test, quiz or other student assessment, during any test, quiz, or other student assessment.

#### B. SANCTIONS FOR ACADEMIC DISHONESTY

1. Zero or F grade for assignment. A faculty member may immediately issue a zero or F grade for a paper, assignment, quiz, or other student assessment as a sanction for academic dishonesty, with or without the possibility of makeup.
2. Zero or F grade in course. A faculty member has the right to immediately suspend a student from the course (with no possibility of refund) and issue a grade of F for a course if the faculty member has documented that the student has engaged in egregious acts of academic dishonesty.
3. Recommendations for administrative sanctions. In addition to the above sanctions, a faculty member or department chair may petition the Dean of Student Services to apply administrative sanctions. Administrative sanctions include:
  - complete withdrawal from all courses (with no possibility of refund);
  - disciplinary suspension from the student's academic program (if applicable); and/or
  - disciplinary suspension from the college.

#### C. PROCESS

A student who violates the academic integrity policy will initially be dealt with by the faculty member in whose class the violation occurred.

**Step One:** Notice. The faculty member will inform the student of the misconduct and apply the appropriate immediate sanction.

**Step Two:** Filing of report. The faculty member will file a written report of the act of academic dishonesty

with the Dean of Student Services within five (5) college business days of when the faculty member discovered the act of dishonesty. A copy of the report will be provided to the Registrar.

**Step Three:** Filing of Student Code of Conduct violation. Pursuant to Policy 721.5, the faculty member or department chair may initiate disciplinary proceedings by filing a Student Code of Conduct violation with the Dean of Student Services.

Independent of the faculty member or department chair, the Dean of Student Services may choose to initiate disciplinary proceedings based on the written report of the act submitted by the faculty member.

**Step Four:** Disciplinary Proceedings. Disciplinary proceedings for acts of academic dishonesty will be conducted in accordance with the Student Discipline procedure outlined in the Student Code of Conduct, policy 721.4.

**Step Five:** Grievance/Appeals. Pursuant to the Student Code of Conduct, policy 721.7 the student may grieve the faculty member's decision and/or appeal any decision rendered through the Student Discipline process.

#### Student Discipline

The student discipline process is outlined in the Student Code of Conduct at <http://www.umpqua.edu/conduct-grievance>.

#### Student Grievance Procedure

Students have recourse through the Student Grievance Procedure, which provides both informal and formal processes, to investigate concerns or complaints arising from conditions, policy, procedures, practices, working relationships, decisions, actions or inactions of Umpqua Community College and/or its students and employees. The informal procedure attempts to resolve the grievance through cooperative meetings with the parties involved. The formal procedure resolves issues through written grievances, investigations and hearings. Students are strongly encouraged to resolve any concern informally. It is not necessary to follow the



informal procedure prior to filing a formal grievance.

If the informal procedure fails to resolve the issue, the student has the option of filing a formal complaint and/or pursuing outside legal advice. However, the student may not be represented by an attorney during the formal complaint process.

Students with complaints of possible unlawful harassment or unlawful discrimination may seek immediate assistance through the Office of the Dean of Student Services or the Office of Human Resources.

Processes are student initiated and designed to facilitate the student's grievance being heard and to outline steps to resolve the complaint. It is important that the student be an active and informed participant in the process.

Any timeline set forth in the procedures may be extended by the Dean of Student Services upon written application to do so.

No student shall be expelled, suspended, disciplined or in any other way retaliated against for having pursued a grievance in good faith whether or not the charges were substantiated. However, anyone willfully filing a false grievance is subject to discipline.

A more detailed outline of the Student Grievance Procedure is available at:

<http://www.umpqua.edu/conduct-grievance/>



# TRANSFER EDUCATION

## **WANT TO START AT UMPQUA AND TRANSFER?**

Good choice! It's the personal attention you get at Umpqua that gives you a great start. Our graduates go on to successful academic and professional careers in all fields. One key to that success is advising — every transfer student should work closely with both a UCC academic advisor and a representative from the institution(s) they plan to attend. Umpqua is a great springboard for transfer success!

**GET STARTED NOW!**



# TRANSFER DEGREES & OPTIONS – OVERVIEW

## **AA/OT OR OTM**

Work closely with a UCC academic advisor to follow the Associate of Arts Oregon Transfer (AA/OT) degree program and complete your general education requirements, explore majors, and enter an Oregon public university campus or nearly any other college or university as a junior. Or follow the Oregon Transfer Module (OTM) to transfer as a sophomore. These are generally the best choices for students who are exploring different majors and/or different colleges and universities.

## **ASSOCIATE OF ARTS – OREGON TRANSFER (AA/OT)**

The AA/OT degree is designed for students planning to transfer into a baccalaureate degree program in one of Oregon's public universities (University of Oregon, Oregon State University, Eastern Oregon University, Western Oregon University, Southern Oregon University, Portland State University, Oregon Tech) or the AA/OT as a “block transfer,” enabling a student to enter as a junior with all of the transfer school's lower division general education requirements met. The AA/OT offers students the flexibility to choose courses that interest them while fulfilling requirements at their transfer schools.

Several Oregon private institutions and a limited number of out-of-state institutions also accept the AA/OT. These include Concordia University, Pacific University, Warner Pacific College, George Fox University and Marylhurst University in the Portland area, as well as Western Baptist College, BYU - Hawaii, Hawaii Pacific University, Boise State University, Seattle Pacific University, and Washington State University. It is important to note that the AA/OT may not be the best degree option for all majors. Students should consult advisors in their major areas for educational planning related to required courses in their majors.

## **OREGON TRANSFER MODULE (OTM)**

The Oregon Transfer Module (OTM) is an approved 45 credits of general education courses (foundational skills and introduction to discipline courses) that are common among Oregon's colleges and universities. Courses are selected from an approved list of general education requirements, determined by each Oregon community college, public university, or participating Oregon independent college or university. It is designed to improve student access to a college degree by enhancing opportunities for the transfer of credits earned at one community college or public university to another public college or university.

Any student completing an OTM who conforms to the guidelines below will have met the requirements for the OTM at any Oregon community college or public university.

- Upon transfer, the receiving institution may specify additional course work that is required for a major, for degree requirements, or to make up the difference between the OTM and the institution's total General Education requirements.
- The OTM includes coursework chosen from the courses approved for the categories below by the institution issuing the credit. In the case of community colleges, these are courses approved for the AA/OT degree; in the case of universities and four-year colleges, they are courses approved for the General Education portion of a baccalaureate degree.

## **AS OR TARGETED TRANSFER**

Work closely with a UCC academic advisor to accumulate the maximum number of credits possible before transferring to your chosen college or university in your chosen major. These are generally the best choices for students who have selected a major or a college or university. Turn to page 48 for an alphabetical listing of transfer programs.

## **ASSOCIATE OF SCIENCE (AS)**

The AS degree is designed for students who plan to transfer and complete a Bachelor of Science degree at a four-year institution. The degree requirements allow students more flexibility in course selection, allowing them to focus on their major requirements. NOTE : Completion of this degree does not guarantee that all lower-division General Education requirements have been met for a baccalaureate degree (i.e., this is not a block transfer degree as is the AA/OT). In selecting courses for this degree, students are strongly encouraged to consult the specific transfer curriculum pages in this catalog, the faculty advisor, and the institution to which they intend to transfer to determine if it is an appropriate choice.

## **ASSOCIATE OF GENERAL STUDIES (AGS)**

This flexible degree option enables a student to complete an Associate degree that is tailored to the general education requirements of the transfer school. Students must exercise caution in using the AGS option, as the degree does not guarantee transferability of courses completed. Educational planning for the AGS should be done with the help of an advisor.

## **SECOND LANGUAGE ADMISSION REQUIREMENT FOR OREGON PUBLIC UNIVERSITIES**

The admission requirements for the Oregon universities include the completion of an acceptable second language, including American Sign Language (ASL), coursework, or demonstration of knowledge of and/or proficiency in a second language. New undergraduate students are required to meet an assessed proficiency-based standard in a second language.

Contact the university of your choice for more details. All students graduating from high school in 1997 and thereafter must meet the requirement.

# STUDENT LEARNING OUTCOMES FOR AA/OT DEGREES

The AA/OT/ASOT transfer degrees are designed to prepare students to succeed after transferring to public universities and to attain GPAs comparable to students who begin their education at those institutions. Students who attain these degrees will possess a wide range of knowledge and skills, as described in the categories below.

**As a result of completing the AA/OT/ASOT, students should be able to:**

## **ARTS AND LETTERS**

ARTS AND LETTERS refers to works of art, whether written, crafted, designed or performed, and documents of particular poignancy and significance in statement or design.

- Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life; and
- Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

## **MATHEMATICS**

- Use appropriate mathematics to solve problems; and
- Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

## **SCIENCE OR COMPUTER SCIENCES**

- Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions;
- Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner; and
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society.

## **SOCIAL SCIENCES**

- Apply analytical skills to social phenomena in order to understand human behavior; and
- Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

## **SPEECH/ORAL COMMUNICATION**

- Engage in ethical communication processes that accomplish goals; and
- Respond to the needs of diverse audiences and contexts; and
- Build and manage relationships.

## **WRITING**

- Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences;
- Locate, evaluate, and ethically utilize information to communicate effectively; and
- Demonstrate appropriate reasoning in response to complex issues.

## **CULTURAL LITERACY**

- Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

# ASSOCIATE OF ARTS / OREGON TRANSFER DEGREE (AA/OT)

The Associate of Arts Degree is conferred on students who complete a full lower division college transfer program meeting requirements set jointly by Oregon's community colleges and public universities. A minimum 90 credits with a grade of C or higher and a cumulative GPA of 2.0 or higher are needed to satisfy AA/OT requirements. All Foundational Requirements and Discipline Studies Requirements courses must be at least three credits each.

This degree provides for "block transfer" to Oregon's four-year colleges and universities. All lower division general education requirements of the receiving institution are met. ***Students should work closely with UCC advisors and faculty, and with representatives of the institution(s) to which they may transfer for specific details. There may be special requirements for specific programs or schools.***

To complete an AA/OT at Umpqua Community College, a minimum of 24 credits must be earned through UCC and two terms of attendance must have occurred at UCC.

Transfer note: Check transfer school for admissions, foreign language and cultural literacy, and transfer program requirements.

## FOUNDATION REQUIREMENTS

<b>Writing</b>		<b>8</b>
WR 121	Academic Composition	4
WR 122	Argument, Research, and Multimodal Composition	4
WR 227	Technical Report Writing	4

## Oral Communications **3**

Must take one of the following classes:

SP 105	Listening	3
SP 111	Fundamentals of Public Speaking	4
SP 112	Persuasive Speech	3
SP 218	Interpersonal Communication	3
SP 219	Small Group Discussion	3

## Mathematics **4-5**

One course of college level mathematics from the approved MTH courses listed on pages 46-47.

## Health/Wellness/Fitness **3**

HPE 295	Wellness & Health Assessment	
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## DISCIPLINE STUDIES REQUIREMENTS

### Arts and Letters

Must take at least three courses, chosen from at least two disciplines from the approved list on pages 46-47.

Note: Second year world languages, are included in this category. First year world languages are counted as electives.

### Science / Math / Computer Science

Must take at least four courses from at least two disciplines — including at least three biological or physical science courses with labs, from the approved list on pages 46-47.

Note: Math credits used to meet this requirement are in addition to any used to meet the Foundational Requirement above.

### Social Science

Must take at least four courses chosen from at least two disciplines from the approved list on pages 46-47.

### Electives

Any courses numbered 100 or above that would bring total credits up to 90.

Note: Electives may include up to 12 credits from the approved Career and Technical Education (CTE) list on pages 46-47, and a maximum of 12 credits of PE activity courses.

### Cultural Literacy

At least one of the Discipline Studies courses above must be designated as meeting the criteria for Cultural Literacy.

This course is not an additional course — it would also meet Foundational, Discipline or Elective requirements.

***No course substitutions are allowed for the AA/OT.***

***Courses used in these areas must be at least 3 credits. See pages 46-47 for approved courses.***

***No course may be used to satisfy more than one requirement or distribution area.***



# OREGON TRANSFER MODULE (OTM)

45 CREDITS

The Oregon Transfer Module is conferred upon students who complete a lower division college transfer program meeting requirements set jointly by Oregon's community colleges and public universities. This module provides "block transfer" to Oregon's four-year colleges and universities. A minimum 45 credits with a grade of C or higher and a cumulative GPA of 2.0 or higher are needed to satisfy OTM requirements. All Foundational Requirements and Discipline Studies Requirements courses must be at least three credits each.

***Students planning to transfer should work closely with UCC advisors and faculty, and with representatives of the institution(s) to which they may transfer for specific details. There may be special requirements for specific programs or schools.***

Transfer note: Check transfer school for admissions, foreign language and cultural literacy, and transfer program requirements.

## FOUNDATIONAL REQUIREMENTS

<b>Writing</b>		<b>8</b>
WR 121	Academic Composition	4
WR 122	Argument, Research, and Multimodal Composition	4
WR 227	Technical Report Writing	4

## Oral Communications **3**

Must take one of the following classes:

SP 105	Listening	3
SP 111	Fundamentals of Public Speaking	4
SP 112	Persuasive Speech	3
SP 218	Interpersonal Communication	3
SP 219	Small Group Discussion	3

## Mathematics **4-5**

One course of college level mathematics from the approved MTH courses listed on pgs. 46-47.

## DISCIPLINE STUDIES REQUIREMENTS

### Arts and Letters

Must take at least three courses from the approved list on pages 46-47.

Note: Second year world languages are included in this category.

### Science / Math / Computer Science

Must take at least three courses, including at least 1 biological or physical science course with lab, from the approved list on pages 46-47.

### Social Science

Must take at least three courses from the approved list on pages 46-47.

***No course substitutions are allowed for the OTM.***

***No course may be used to satisfy more than one requirement or distribution area.***

***\*Courses used in these areas must be at least three credits. See pages 46-47 for approved courses.***

***Students are encouraged to complete at least one course with the Cultural Literacy component in order to complete AA/OT requirements.***

# ASSOCIATE OF SCIENCE DEGREE (AS)

90 CREDITS (minimum)

The Associate of Science degree is designed for students planning to transfer credits to a baccalaureate degree program. Unless directly articulated with another college/university the degree does not guarantee that students will be accepted as having completed all lower division comprehensive and General Education requirements for a baccalaureate degree. There are no majors within this degree.

In selecting courses for this degree, students should consult advisors at UCC and the institution to which they will transfer about the requirement of their baccalaureate major. All elective courses must be lower division collegiate courses (numbered 100 and above). Career and technical course credits are limited to 12 credits unless part of an articulated program.

To complete the degree at Umpqua Community College a minimum of 25% of the program credits required must be earned through UCC and two terms of attendance must have occurred at UCC.

Listed next are the General Education requirements included in Associate of Science programs; additional courses are listed starting on p.50 under the specific degree program.

## GENERAL EDUCATION REQUIREMENTS (23 - 26 CREDITS)

<b>Writing</b>		<b>8</b>
WR 121	Academic Composition:	4
WR 122	Argument, Research, and Multimodal Composition	4
WR 227	Technical Report Writing	4

## Oral Communications 3

Must take one of the following classes:

SP 105	Listening	3
SP 111	Fundamentals of Public Speaking	4
SP 112	Persuasive Speech	3
SP 218	Interpersonal Communication	3
SP 219	Small Group Discussion	3

## Mathematics

MTH 105	Math in Society (or higher)	4
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## Social Sciences 3

3 credits from the Social Sciences discipline listing.

## Arts & Letters 3

3 credits from the Arts and Letters discipline listing.

## Science 4

4 credits of a science course with lab from the Science discipline listing.

## Cultural Literacy 3

3 credits from a course that is defined as meeting Cultural Literacy from the discipline listings.

This course may also be used to satisfy one of the requirements listed above.

*No course substitutions are allowed for the AS*

# ASSOCIATE OF GENERAL STUDIES DEGREE (AGS)

90 CREDITS

The Associate of General Studies (AGS) degree is intended to meet individual student needs using a variety of lower division college level courses to meet degree requirements. "Associate of General Studies" appears on the student's transcript. Specific program designation or focus does not appear on the student's transcript or degree. Academic or Career and Technical Education (CTE) courses used to satisfy AGS degree requirements must be on the approved list on pages 46-47.

The AGS degree must include 90 quarter credits or equivalent proficiency, a recognizable core of general education courses, and an established standard of academic achievement. Electives may include any combination of lower division collegiate transfer and/or collegiate level career and technical education courses.

To complete an AGS at Umpqua Community College, a minimum of 25% of the program credits required must be earned through UCC, two terms of attendance must have occurred at UCC, and a student must have a cumulative GPA of 2.0 or higher.

## GENERAL REQUIREMENTS

MTH 105 or above 4-5  
(from the approved MTH courses listed on pages 46-47 OR BA 180 Business Mathematics I)

### Writing

WR 121 Academic Composition 4

### Human Relations

PSY 101 Psychology of Human Relations 3

## DISCIPLINE STUDIES REQUIREMENTS

### Arts and Letters

Must take at least one course from the approved list on pages 46-47.

### Science / Math / Computer Science

Must take at least one course from the approved list on pages 46-47.

### Social Science

Must take at least one course from the approved list on pages 46-47.

*No course substitutions are allowed for the AGS*

*No course may be used to satisfy more than one requirement or distribution area.*

*\*Courses used in these areas must be at least 3 credits each. See pages 46-47 for approved courses.*

# ASSOCIATE OF ARTS / OREGON TRANSFER DEGREE (AA/OT)

## 2018 - 2019 UCC PROGRAM ADVISING SHEET

Minimum 90 credits with a grade of "C" or higher needed to satisfy AAOT requirement - unless noted, courses offered at three credit hours each; a minimum of 25% of the program credits required must be earned through UCC and two terms of attendance must have occurred at UCC. ++ Courses identified that meet the REQUIRED three credits for UCC AAOT Cultural Literacy; \* Courses with required pre-/co-requisites (check catalogue course description – many may be Banner enforced)

Transfer Note: Check transfer school for admissions, foreign language & cultural literacy, and transfer program requirements.

### AREA 1: FOUNDATIONAL REQUIREMENTS – Required to complete AAOT – writing, speech, health & physical education and math:

- |   |   |
|---|---|
| ___ WR 121 Academic Composition (4)*  | ___ SP 105, 111 (4), 112, 218++, or 219: Speech |
| ___ WR 122 Argument, Research, and Multimodal Composition (4)* <i>OR</i> ___ WR 227 Technical Report Writing (4)* | ___ HPE 295: Wellness & Health                  |
| (Note: WR115 may count toward elective credits but does not meet the foundational requirements)                   | ___ MTH (105 level or above): Math (4)          |

### AREA 2: ARTS & LETTERS – Complete three courses from two different disciplines from the following:

- |   |  |   |
|---|--|---|
| ___ ART 101: Introduction to Visual Arts++ (4)                  | ___ ENG 260: Introduction to Women's Literature (4)      | ___ SP 111: Fundamentals of Public Speaking (4)     |
| ___ ART 120: Artists' Books++                                   | ___ ENG 288: Cultural Diversity – American Lit++ (4)     | ___ SP 112: Persuasive Speech                       |
| ___ ART 134: Illustrating Nature                                | ___ FA 256: American Film History (4)                    | ___ SP 218: Interpersonal Communication++           |
| ___ ART 204, 205, 206: History of Western Art I, II, III++ (4)  | ___ Language 201, 202, 203: GER, SPAN++, FR++ (4)        | ___ SP 219: Small Group Discussion                  |
| ___ ART 210: Women in Art++                                     | ___ J 205: Intro to Public Relations                     | ___ SP 237: Gender Communication++                  |
| ___ ART 216: Photography: History, Technology, Culture, and Art | ___ J 215: Journalism Production                         | ___ Theater: One 3-credit theatre art #100 & above  |
| ___ ART 217: Comics and American Culture++                      | ___ J 251: Writing for the Media                         | ___ TA 256: Musical Theatre Workshop                |
| ___ ART: One 3-credit studio art # 100 & above                  | ___ MUS 105: History of Rock Music                       | ___ TA 257: Musical Theatre Dance                   |
| ___ ENG 104, 105, 106: Introduction to Literature++ (4)         | ___ MUS 161: Jazz Improvisation                          | ___ TA 261: Intro to Costume Design                 |
| ___ ENG 107, 108, 109: World Literature (4)                     | ___ MUS 201, 202, 203: Intro to Music and Its Literature | ___ TA 271: Introduction to Theatre (4)             |
| ___ ENG 201, 202: Shakespeare (4)                               | ___ MUS 204: Music of the World                          | ___ WR 241: Creative Writing – Short Fiction (4)*   |
| ___ ENG 204, 205, 206: Survey of English Literature (4)         | ___ MUS 205: Introduction to Jazz History                | ___ WR 241: Creative Writing – Poetry (4)*          |
| ___ ENG 230: Environmental Literature ++ (4)                    | ___ PHL 201, 202, 203: Introduction to Philosophy        | ___ WR 243: Creative Writing – Mixed Genre (4)*     |
| ___ ENG 250: Intro to Mythology (4)                             | ___ R 201, 202, 203: World Religion                      | ___ WS 101: Intro to Gender & Women's Studies++ (4) |
| ___ ENG 253, 254, 255: Survey of American Literature++ (4)      | ___ SP 105: Listening                                    |   |

### AREA 3: SCIENCE/MATH/COMPUTER SCIENCE – Complete four courses from two disciplines, three must include a lab. From the following:

#### Area 3 Courses WITH Labs:

- |   |   |  |
|---|---|--|
| ___ ATS 201: Climate Science (4)*                                     | ___ FOR 241: Dendrology (4)   | ___ PH 201, 202, 203: General Physics (5)*   |
| ___ BI 101, 102, 103: General Biology (4)                             | ___ G 146: Rocks & Minerals (4)                                       | ___ PH 211, 212, 213: General Physics with Calculus (5)*                                     |
| ___ BI 101A: Ecology of Baja Peninsula (4)                            | ___ G 180: Regional Field Geology (4)                                 | ___ SOIL 205, 206: Soil Science (4) – must be taken together to meet Science Lab requirement |
| ___ BI 110: Wildlife Biology on Safari (4)                            | ___ G 201, 202, 203: General Geology (4)                              | ___ SUR 209: Photogrammetry and Intro to Remote Sensing (4)*                                 |
| ___ BI 211, 212, 213: Principles of Biology (5)*                      | ___ G 221: Environmental Geology (4)                                  |  |
| ___ BI 231, 232, 233: Human Anatomy & Physiology (4)*                 | ___ GIS 203: Digital Earth and Geospatial Concepts (4)                | <b>*Area 3 Courses WITHOUT Labs:</b>   |
| ___ BI 234: Introduction to Microbiology (4)*                         | ___ GIS 234: GIS 1 Introduction to Geographic Information Systems (4) | ___ BI 222: Intro to Genetics*   |
| ___ BOT 203: General Field Botany (4)                                 | ___ GIS 235: GIS II Data Analysis and Applications (4)                | ___ CS 160: Intro to Computer Science (4)*   |
| ___ BOT 204: Flowering Plants of SW OR/NO. CA (4)                     | ___ GS 104, 105, 106: Physical Science (4)*                           | ___ CS 161: Computer Science I (4)*  |
| ___ CH 104, 105, 106: Introduction to Chemistry (4)*                  | ___ GS 107: Beginning Astronomy (4)                                   | ___ CS 162: Computer Science II (4)*   |
| ___ CH 112: Fundamentals of Chemistry (5)*                            | ___ GS 112: Making Sense of Science (4)                               | ___ CS 260: Data Structures (4)*   |
| ___ CH 221, 222, 223: General Chemistry (5)*                          | ___ NR 221: Water Resource Science (4)                                | ___ CS 271: Computer Architecture (4)*   |
| ___ CH 241, 242, 243: Organic Chemistry (4)*                          | ___ NR 240: Forest Biology (4)*                                       | ___ ENGR 111: Engineering Orientation*   |
| ___ FOR 234: GIS 1 Introduction to Geographic Information Systems (4) | ___ NR 241: Dendrology (4)*   | ___ ENGR 112: Problem Solving and Technology*  |
| ___ FOR 235: GIS II Data Analysis and Applications (4)                | ___ NR 242: Ecosystems of SW OR/NO. CA (4)*                           | ___ ENGR 201, 202: Electrical Fundamentals (4)   |
| ___ FOR 240: Forest Biology (4)                                       | ___ NR 255: Field Sampling of Fish and Wildlife (3)                   | ___ ENGR 203: Electrical Fundamentals – Signals and Controls (4)*                            |
|   | ___ PE 135: Anatomy & Physiology for Fitness (4)                      | ___ ENGR 211: Statics (4)*   |





# APPROVED DISCIPLINE STUDIES LISTINGS

## Arts and Letters

ART 101*	Introduction to Visual Arts 4
ART 120*	Artists' Books 3
ART 134	Illustrating Nature (3)
ART 204*, 205, 206	History of Western Art I, II, III (4,4,4)
ART 210*	Women in Art (3)
ART 216*	Photography: History, Technology, Culture, and Art (3)
ART 217*	Comics in American Culture (4)
ENG 104*,105*,106*	Intro to Literature (4, 4, 4)
ENG 107, 108	World Literature (4, 4)
ENG 109*	World Literature (4)
ENG 201, 202	Shakespeare (4,4)
ENG 204, 205, 206	Survey of English Literature (4, 4, 4)
ENG 230*	Environmental Literature (4)
ENG 250	Intro to Mythology (4)
ENG 253*, 254*, 255*	Survey of American Lit. (4, 4, 4)
ENG 260	Intro to Women's Literature (4)
ENG 288*	Cultural Diversity in Contemporary American Literature (4)
FA 256	American Film History (4)
FR 201*, 202*, 203*	Second-Year French (4, 4, 4)
GER 201, 202, 203	Second-Year German (4, 4, 4)
J 205	Introduction to Public Relations (3)
J 215	Journalism Production (3)
J 251	Writing for the Media (3)
MUS 105	History of Rock (3)
MUS 161	Jazz Improvisation (3)
MUS 201, 202, 203	Intro to Music & Its Literature (3, 3, 3)
MUS 204	Music of the World (3)
MUS 205	Intro to Jazz History (3)
PHL 201, 202, 203	Intro to Philosophy (3, 3, 3)
R 201, 202, 203	World Religions (3, 3, 3)
SPAN 201*, 202*, 203*	Second-Year Spanish (4, 4, 4)
SP 105	Listening (3)
SP 111	Fundamentals-Public Speaking (4)
SP 112	Persuasive Speech (3)
SP 218*	Interpersonal Communication (3)
SP 219	Small Group Discussion (3)
SP 237*	Gender Communication (3)
TA 256	Musical Theatre Workshop (3)
TA 257	Musical Theatre Dance (3)
TA 261	Intro to Costume Design (3)
TA 271	Introduction to Theatre (4)
WR 241, 242, 243	Creative Writing (4, 4, 4)
WS 101*	Introduction to Women's Studies (4)

ART: One 3-credit course in studio arts numbered 100 or above. (ART 221\*)

THEATRE: One 3-credit course in theatre arts numbered 100 or above.

\* meets AA/OT Cultural Literacy Requirement

## Science / Math / Computer Science

ATS 201	Climate Science (4)
BI 101,102,103	General Biology (4, 4, 4)
BI 101A	Ecology of Baja Peninsula (4)
BI 110	Wildlife Biology on Safari (4)
BI 211, 212, 213	Principles of Biology (5, 5, 5)
BI 222	Genetics (3)
BI 231, 232, 233	Anatomy & Physiology (4, 4, 4)
BI 234	Introductory Microbiology (4)
BOT 203	General (Field) Botany (4)
BOT 204	Flowering Plants of Southern Oregon-Northern California
CH 104,105,106	Introduction to Chemistry (4, 4, 4)
CH 112	Fundamentals of Chemistry (5)
CH 221, 222, 223	General Chemistry (5, 5, 5)
CH 241, 242, 243	Organic Chemistry (4, 4, 4)
CS XXX	Computer Science
ENGR 111	Engineering Orientation (3)
ENGR 112	Problem Solving and Technology (3)
ENGR 201	Electrical Fundamentals (4)
ENGR 202	Electrical Fundamentals II (4)
ENGR 203	Electrical Fundamentals - Signals and Controls (4)
ENGR 211	Statics (4)
ENGR 212	Dynamics (4)
ENGR 213	Strength of Materials (4)
FN 225	Human Nutrition (4)
FOR 111	Introduction to Forestry (3)
FOR 141	Tree and Shrub Identification (3)
FOR 234	GIS I Introduction to Geographic Information Systems (3)
FOR 240	Forest Biology (4)
FOR 261	Recreation Resource Management (4)
G 140	Volcanoes, Earthquakes and other Geologic Disasters (3)
G 145	Geology of the Pacific Northwest (3)
G 146	Rocks and Minerals (4)
G 180	Regional Field Geology (4)
G 201, 202, 203	General Geology (4, 4, 4)
G 213	Geology of the National Parks (3)
G 221	Environmental Geology (4)
GIS 203	Digital Earth and Geospatial Concepts (4)
GIS 234	GIS I Intro to Geographic Information Systems (3)
GIS 235	GIS II Data Analysis and Application
GS 104, 105, 106	Physical Science (4, 4, 4)
GS 107	Beginning Astronomy (4)
GS 112	Making Sense of Science (4)
GS 113	Intro to Geology (3)
GS 147	Intro to Oceanography (3)
MTH 105	Math in Society (4)
MTH 111	College Algebra (5)
MTH 112	Elementary Functions (4)
MTH 211, 212, 213	Fundamentals of Elementary Math I, II, III (4, 4, 4)
MTH 231	Elements of Discrete Math I (4)

# APPROVED DISCIPLINE STUDIES LISTINGS

## Science / Math / Computer Science, *continued*

MTH 241, 242	Calculus for Management & Social Science I, II (4, 4)
MTH 243	Introduction to Probability & Statistics (5)
MTH 251, 252, 253	Calculus I, II, III (5, 4, 4)
MTH 254	Vector Calculus I (4)
MTH 256	Differential Equations (4)
MTH 265	Statistics for Scientists and Engineers
NR 141	Tree and Shrub Identification (4)
NR 201	Introduction to Natural Resources (3)
NR 221	Water Resource Science (4)
NR 240	Forest Biology (3)
NR 241	Dendrology (4)
NR 242	Ecosystems of SW OR/No CA (4)
NR 243	Historical Ecology of Pacific NW (3)
NR 251	Principles of Fish and Wildlife Conservation (3)
NR 261	Recreation Resource Management (4)
NR 255	Field Sampling of Fish and Wildlife (3)
NR 295	Environmental Dispute Resolution (3)
PE 135	Anatomy & Physiology for Fitness (4)
PH 201, 202, 203	General Physics (5, 5, 5)
PH 211, 212, 213	General Physics w/Calculus (5, 5, 5)
SOIL 205	Soil Science (3)
SOIL 206	Soil Science Lab (1)
SUR 209	Photogrammetry and Intro to Remote Sensing (4)

## Social Sciences

ANTH 150	Intro to Archaeology (3)
ANTH 165	Anthropology of Sex (3)
ANTH 221*, 222*, 223*	Cultural Anthropology (3, 3, 3)
CJ 101	Introduction to Criminology (3)
CJ 110	Introduction to Law Enforcement (3)

## Career & Technical

APR XXX	Apprenticeship
AUT XXX	Automotive
BA 116	Principles of Financial Services
BA 128	Accounting Applications I
BA 129	Accounting Applications II
BA 130	Accounting Applications III
BA 150	Developing a Small Business
BA 151	Practical Accounting I
BA 152	Practical Accounting II
BA 160	Accounting for Managers
BA 165	Customer Service
BA 177	Payroll Accounting
BA 180	Business Mathematics I
BA 181	Business Mathematics II
BA 215	Cost Accounting
BA 228	Computerized Accounting Systems I
BA 229	Computerized Accounting Systems II

BA 230	Computerized Accounting Systems III
BA 235	Intermediate Accounting I
BA 236	Intermediate Accounting II
BA 237	Intermediate Accounting III
BA 240	Introduction to Auditing
BA 256	Tax Accounting I
BA 257	Tax Accounting II
CIS XXX	Computer Information Systems (except CIS 120)
CWE XXX	Cooperative Work Experience
CJ 100X	Law Enforcement Skills Training
DA XXX	Dental Assisting
DRF XXX	Drafting Technology
ED 104	ECE Seminar & Practicum IV
ED 105	ECE Seminar & Practicum V
ED 106	ECE Seminar & Practicum VI
EMS XXX	Emergency Medical Services

## Social Sciences, *continued*

CJ 114*	Cultural Diversity Issues in Criminal Justice (3)
CJ 130	Introduction to Corrections (3)
CJ 275	Comparative Criminal Justice Systems (3)
ECON 201	Microeconomics (4)
ECON 202	Macroeconomics (4)
ED 121, 122, 123	Leadership Development (3, 3, 3)
GIS 203	Digital Earth and Geospatial Concepts (4)
GIS 234	GIS I Introduction to Geographic Information Systems (4)
GIS 235	GIS II Data Analysis and Applications (4)
HD 208	Career/Life Planning (3)
HDFS 201	Individual & Family Development (3)
HDFS 225	Child Development (3)
HDFS 240	Contemporary American Family (3)
HS 100	Introduction to Human Services (3)
HS 154	Community Resources (3)
HST 104*, 105*, 106*	World History (3, 3, 3)
HST 201*, 202*, 203*	History of United States (3, 3, 3)
J 211*	Introduction to Mass Communication (3)
NR 295	Environmental Dispute Resolution (3)
PS 201*, 202*, 203	U.S. Government (3, 3, 3)
PS 205	International Relations (3)
PSY 101	Psychology of Human Relations (3)
PSY 201*, 202*, 203*	General Psychology (3, 3, 3)
PSY 239	Abnormal Psychology (3)
SOC 204*, 205*, 206	Introduction to Sociology (3, 3, 3)
SOC 207	Juvenile Delinquency (3)
SOC 213*	Race, Class, & Ethnicity (3)
SOC 225	Social Aspects of Addiction (3)
SOC 240	Sociology of Work and Leisure (3)
WS 101*	Introduction to Women's Studies (4)

\* meets AA/OT Cultural Literacy Requirement

# TRANSFER PROGRAMS

*All transfer students should work closely with UCC advisors and faculty and representatives of the school(s) to which they may transfer. There may be special requirements for specific programs or schools.*

## **ANTHROPOLOGY**

Majors in anthropology are offered at UO, OSU, and PSU. A combined anthropology-sociology major is offered at EOU and SOU.

## **ART**

### **Art Education, Art History, Pre-Architecture, Studio Art**

The UCC Fine and Performing Arts Department offers a comprehensive two-year course of study in Fine Arts. Classes in drawing, painting, printmaking, basic design, ceramics, and sculpture provide students with a variety of foundation-level studio opportunities. Additional classes in art history and professional practices help prepare students for advanced studies at the university level and other artist opportunities, such as fellowships and internships. All Fine Arts faculty have degrees in the arts, and are practicing professional artists who bring a broad range of world experiences to their classrooms and studios.

Majors in art, art education, art history (or some combination) are offered at UO, OSU, PSU, EOU, WOU, and SOU. UCC offers coursework approved for transfer to these public institutions, Pacific Northwest College of Art and the Oregon College of Arts and Crafts, and other private colleges and universities. PSU and UO offer undergraduate programs in Architecture.

Students wishing to complete degrees in any art-based field should consult with the Fine Arts advisor and representatives of the schools to which they may transfer for assistance in planning their course of study at UCC. B.A., B.F.A. and B.Arch requirements can be stringent; a plan will assist students in completing their studies in a timely manner.

## **BIOLOGY**

Majors in biology and specialized fields within this broad discipline are offered at OSU, UO, PSU, WOU, EOU, and SOU. UCC offers coursework approved for transfer to these institutions.

## **BUSINESS ADMINISTRATION**

A business major will help prepare students for interesting and challenging roles and opportunities in the business field. Students will acquire skills in marketing, management, accounting, human relations, and more. Students interested in pursuing a higher-level degree in the business administrative field can transfer to any number of institutions: including OSU, UO, PSU, WOU, EOU, and SOU.

Students planning to transfer should work closely with UCC faculty and advisors, as well as representatives from the receiving college or university in order to ensure they are meeting all of the specific requirements for their programs or schools.

Students interested in transferring to SOU should review the Associate of Science Degree Articulated with Southern Oregon University - see page 54.

## **CHEMISTRY**

Majors in chemistry are offered at UO, OSU, PSU, SOU and EOU. UCC offers programs of study which are approved for transfer to these institutions. Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

## **COMMUNICATION STUDIES**

### **Journalism, Public Relations, Speech Communications, Certificates**

Oregon universities vary greatly in transfer requirements for Communication Studies and Journalism programs. Students must consult the UCC Advising and Career Center, their advisor and their transfer school as early as possible. Most Bachelor of Arts degrees require a second year of world languages; Bachelor of Science degrees require additional math. Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

## **COMPUTER SCIENCE**

Computer science is the study of programs, data, computing machinery, and how these interact. The computer science program offered at UCC is mathematically-based.

Majors in computer science are offered at UO, OSU, PSU, WOU, and SOU. However, it should be noted that the curriculum does vary at the above schools. You should consult your UCC faculty advisor before your first term at UCC. See page 56

## **CRIMINAL JUSTICE**

Associate of Science Degree Articulated with Southern Oregon University - see page 58

## **EARLY CHILDHOOD DEVELOPMENT**

Associate of Science Degree Articulated with Southern Oregon University - see page 60

## **EDUCATION**

### **Elementary and Secondary**

There are many different educational programs available to prospective elementary and secondary teachers at Oregon universities and colleges. Some incorporate the teaching licensure within a baccalaureate program, and some within a master's program. In secondary education, students are advised to decide what subject matter they plan to teach, and take classes as if that subject were their major. Students should work closely with UCC advisors and representatives of the intended transfer institution(s) to plan their coursework at UCC.

All prospective teachers are urged to take ED 100, which is a teaching practicum. This will help students verify that teaching is a good career choice for them. In addition, students are urged to choose the baccalaureate school program early, and then align coursework at UCC to work best with those requirements. UCC offers several education courses that will transfer into teacher licensure programs. Secondary Education students are urged to work closely with advisors both at UCC and the "target" school in planning classes at UCC. To research Teacher Education programs in Oregon by internet: go to: [www.teachin.oregon.gov/en/](http://www.teachin.oregon.gov/en/)



# TRANSFER PROGRAMS

## ENGINEERING

Associate of Science Degree - see page 62

## ENGLISH

Through reading, discussing, researching, and writing about literature, English majors develop skills that are prized in the professional world: the ability to communicate effectively; to research, analyze, and interpret complex information; to write clear, strong, reasonable arguments; to understand human behavior and the complex issues that surround diversity; to view situations from a variety of perspectives; and to creatively solve problems. Although English majors study nonfiction works such as letters, journals, autobiographies, and essays, they focus primarily on creative works such as poetry, short stories, plays, and novels.

While the most obvious careers for English majors include the fields of teaching, writing, and editing, the degree is remarkably versatile, opening doors into a variety of graduate programs, including law and library science. An English degree also opens doors into business management, public relations, publishing, journalism, advertising, sales, and many other fields.

English majors are offered at UO, OSU, EOU, PSU, WOU, and SOU, and most other colleges and universities across the United States offer degrees in English. UCC offers coursework approved for transfer to these institutions. Students should work with their UCC faculty advisor about any special requirements of the college or university to which they will transfer.

## FORESTRY

The UCC Forest Engineering program prepares students for transfer to the bachelor's degree at Oregon State University (OSU). The curriculum is intended to meet the requirements for the first two years of course work necessary for application to the Forest Engineering professional program at OSU. Students can also take additional courses at UCC for transfer to the dual Civil and Forest Engineering program at OSU.

Students that finish the coursework will complete at UCC with a two-year AS degree. The two-year degree may also provide a direct career pathway to employment as a Forest Technician or Engineering Technician.

## GEOLOGY

Earth Science programs provide a wide variety of employment opportunities, usually available after receiving a bachelor's, master's or doctoral degree. Employment in the mining and petroleum industries continues to expand rapidly, offering exciting opportunities for employment worldwide. Additional private industries hiring geologists include environmental remediation, engineering firms and geological consulting firms. Other strong areas of employment in the earth sciences include state and federal government agencies such as geologic surveys, oceanographic and space agencies, as well as state and national parks and monuments. Research and teaching institutions such as museums, colleges, and universities also employ a variety of earth science specialists. There is also a need for primary and secondary school educators with earth science backgrounds. Numerous non-traditional careers in earth sciences can be explored, including such areas as forensic science, science journalism, and environmental law. Majors in geology and/or Earth Science are offered at UO, OSU, PSU, and WOU. UCC offers coursework approved for transfer to these institutions. Students should consult with their UCC faculty advisor and a representative of the college or university to which they will transfer for any special requirements.

## HEALTH, HEALTH EDUCATION, HEALTH CARE ADMINISTRATION

Majors in the health area are offered at UO, OSU, PSU and WOU. UO offers majors in community health, gerontology, traffic safety, school health, and comprehensive health. OSU offers majors in community health, environmental health, industrial hygiene, school health and safety, health care administration, and safety studies. PSU offers majors in health, health education, and community health. WOU offers a major in health education.

## HISTORY

The history major is offered at public colleges and universities in Oregon, and at most private colleges in the state. UCC offers coursework approved for transfer to these institutions. Careers for students of history include work in

teaching (high school, college, and university), in museums, in editing and publishing, in archives, in historic preservation, and in federal, state, and local governmental agencies and organizations.

Students planning to transfer in history should work closely with UCC advisors and representatives from the school(s) to which they may transfer. There may be special requirements for specific programs or schools.

## HUMAN SERVICES

The UCC Human Services transfer program prepares students to study for a Bachelor of Science (BS) or Bachelor of Arts (BA) in Family and Human Services (FHS) at the University of Oregon, Department of Counseling, Psychology and Human Services. University of Oregon FHS program graduates are directly employable as case managers, youth outreach workers, family support workers, and residential counselors. In addition, students can transfer (their junior year) to Portland State University which offers a Bachelor in Social Work. This BSW Hybrid program provides first year of courses fully online followed by a year of field placements in student's community, additional online classes and required classroom meetings in Eugene five times a term.

For Associate of Science Degree Articulated with Southern Oregon University - see page 74

## INTERNATIONAL STUDIES

Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for programs or schools.

International Studies includes such specialized areas as government service, education, humanitarian aid, international law, international business and peace studies. The student's program choices should be relevant to his/her intended career. It is highly encouraged that the International Studies major should include two full years of the language of choice. Suggested language courses are French and Spanish 100 and 200 level sequences.

# TRANSFER PROGRAMS

## MATHEMATICS

Majors in mathematics are offered at all seven Oregon public university campuses and most independent colleges and universities. UCC offers a program of study for students who plan to transfer to a 4-year institution to complete a bachelor's degree in mathematics. Courses are also offered to help students prepare to teach mathematics at the elementary or high school level.

Students interested in transferring should consult with UCC's math faculty and college advisors for help in planning a transfer curriculum. In addition, students should work closely with a representative from the institution(s) to which they may transfer.

## MUSIC

Associate of Science Degree Articulated with Southern Oregon University - see page 76

## MUSIC STUDIES

The UCC Fine and Performing Arts Department offers a comprehensive two-year Music Studies program for vocal and instrumental students. It is approved for transfer to the University of Oregon School of Music, Southern Oregon University, Western Oregon University, and to liberal arts and education programs at most four-year colleges and universities.

The coursework in Music Studies at UCC includes two (2) years of music theory and ear training, private lessons, and music literature. UCC award-winning performance groups include choir, band and orchestra, with groups specializing in both jazz and classical music. Additional classes are offered in jazz improvisation, music technology, jazz history, rock history, and world music.

Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

## MUSIC: ENTERTAINMENT TECHNOLOGY

Entertainment Technology prepares graduates for careers in the entertainment industry as lighting and sound technicians, recording engineers, theater and auditorium managers, talent

agents, and equipment marketing representatives. Additional career options include film, radio, and television production, casino and theme park operations, music publishing, and all related performing arts production and management.

The program can be easily integrated with AA/OT requirements, and details are available at the UCC Music Department, Advising Center, and <http://www.umpqua.edu/music>. Students planning to transfer in entertainment technology should work closely with UCC faculty and advisors and representatives from the school(s) to which they may transfer.

## NATURAL RESOURCES

This program prepares students for jobs in conservation science, wildlife biology, fisheries science, botany, forestry, watershed management and other fields related to natural resource science and conservation. (Our Associate of Science degree in Natural Resources provides a foundation for <http://nr.forestry.oregonstate.edu> OSU's Bachelor of Science degree in Natural Resources). After completing our Natural Resources AS, all of the remaining classes needed to fulfill OSU's Bachelor's degree requirements can be taken at UCC and through OSU's online Ecampus, making it possible to earn your BS in Natural Resources without relocating to Corvallis. See page 78 for more details, or visit <https://www.umpqua.edu/natural-resources> or <http://tinyurl.com/pfy2er> for OSU Ecampus information.

## OUTDOOR RECREATION

The Outdoor Recreation program is designed to prepare students for careers in the growing fields of outdoor adventure, outdoor programming, outdoor and experiential education and the application of outdoor recreation.

Douglas County is a perfectly suited environment for this type of program. After completing the two-year degree requirements, students are encouraged to continue their education at either: Oregon State University Cascades (Bend) Campus, University of Idaho in Moscow, Eastern Washington University in Cheney, Humboldt State University in Arcata, CA, or Northern Arizona University in Flagstaff.

There are many career opportunities for outdoor recreation majors, including: tourism and leisure services (hostels, hotels, restaurants, resorts, guiding), municipal recreation (city and

school-based recreation programs); therapeutic recreation for special populations, and outdoor and adventure occupations. Students planning to transfer in Outdoor Recreation should work closely with UCC advisors and representatives from the school(s) to which they may transfer. There may be special requirements for specific programs or schools.

## PHILOSOPHY

Majors in Philosophy are offered at UO, OSU, and PSU. UCC offers coursework approved for transfer to these institutions. Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

## PHYSICS

The Physics major is available at UO, OSU, PSU, EOU, WOU and SOU. Programs of study offered at UCC are approved for transfer to these institutions.

Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools. Well-prepared entering students may take additional courses and then transfer upon completion of the first year.

## POLITICAL SCIENCE

Political Science major programs are offered at UO, OSU, PSU, WOU, and SOU. Transfer programs at UCC are approved to meet lower division requirements at these institutions. A bachelor's degree and advanced degrees in political science can lead to careers in federal, state, or local government. The analytical and communications skills gained in the study of political science also lead many political science majors to pursue law degrees, careers in business, political party staffing and campaigning, journalism, and management.

Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

# TRANSFER PROGRAMS

## PRE-LAW

The requirements for law schools varies. Before planning classes at Umpqua Community College, students should consult an advisor at the school they will be transferring to in order to meet the requirements for that school.

## PRE-PROFESSIONAL HEALTH CARE

Pre-Professional: Dentistry, Medical Technology, Medicine, Optometry, Pharmacy, Physical Therapy, Veterinary Medicine

Each course of study is designed to allow students to complete the first two years of a four-year pre-professional program at UCC. The students will then complete the remaining pre-professional prerequisites at a four-year college or university. The majority of students apply to the professional schools after earning a Bachelor's degree. The course work completed at UCC is applied towards a Bachelor's degree in a related field.

The first two years of course work includes prerequisites in mathematics, the sciences (such as chemistry and physics), the humanities and social sciences. Admission to most professional schools is highly competitive, and there are only a few such programs available within the state of Oregon. Students completing one of these professional programs can expect to earn an excellent salary. Employment in these fields is expected to grow at faster rates than the average of other occupations.

Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

## PSYCHOLOGY

Psychology majors are available at UO, OSU, PSU, EOU, WOU and SOU. UCC provides a transfer program for psychology which has been approved by these institutions. Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

## SOCIOLOGY/SOCIAL WORK

A Bachelor's degree in Sociology is offered at UO, OSU, PSU, EOU, and SOU. UCC provides a transfer program for sociology which has been approved by these institutions. Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

## SURVEYING AND GEOMATICS

Associate of Science Degree - see page 80

## THEATRE ARTS

Theatre Arts students at UCC receive current and applicable training to competitively contribute as individually unique artists. Studies in acting and performance, design, and technical crafts are available. Quarterly shows offer opportunities for participants of all levels. Students generally take a range of acting and design classes to transfer to a university and complete a BA or BFA degree. In addition, students work on the shows in various positions to gain experience that prepares them for internships and jobs in their specific fields. More information is available at [www.umpqua.edu/theatre](http://www.umpqua.edu/theatre).

Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be specific requirements for specific programs or schools.

## WORLD LANGUAGES

World languages introduce students to the larger global community and allow them to communicate effectively in the larger arena by mastering the four major language skills: listening, speaking, reading, and writing. The study of a World Language strengthens and reinforces critical thinking and fosters patience and perseverance — valuable skills in today's workplace.

Students studying World Languages enhance their career possibilities, often combining World Languages with other career fields such as Business, International Relations,

Journalism, Law, Medicine, and Tourism. In today's global market, "bilingual" on a resume page is a ticket to a brilliant future!

Majors in a World Language are offered at UO, OSU, PSU, SOU, EOU, and WOU. UCC offers coursework approved for transfer to these institutions. The UCC World Language Department offers students the opportunity to study abroad through an immersion experience.

Students planning to transfer should work closely with UCC faculty and advisors, and with representatives from the receiving college or university. There may be special requirements for specific programs or schools.

# AGRICULTURAL BUSINESS MANAGEMENT

ASSOCIATE OF SCIENCE – MINIMUM 90 CREDITS

## CAREER DESCRIPTION

The agricultural business management degree is designed to help a farm or ranch manager succeed in today's complex business environment where sound business management skills are as important as agriculture production knowledge. Career paths for students completing a four-year degree in Agricultural Business Management include: agricultural program manager, marketing coordinator, agricultural produce broker, investment banker, trade analyst, commodities broker, economic analyst, and compliance analyst.

The Associate of Science degree (Agricultural Business Management) has been developed with the cooperation and support of Oregon State University College of Agricultural Sciences Applied Economics Department. The degree is designed to assist students planning to transfer to Oregon State University or another four-year institution with an Agricultural Business Program. Students should contact the OSU College of Agricultural Sciences early in the first year of their AS program to be advised about additional requirements and procedures for admission to the school or program.

Students planning to transfer to an institution other than OSU should contact that school early in their first year to determine specific requirements of that institution.

## PROGRAM OUTCOMES

Learning outcomes are based on the acquisition of skills and abilities, achievement of knowledge, and refinement of attitudes and values. Students who successfully complete an Associate of Science degree with an emphasis in Agricultural Business Management will:

1. Communicate effectively using oral and written skills
2. Use appropriate current technology such as computers and the internet
3. Understand basic business terminology
4. Exhibit critical thinking and decision-making skills
5. Explain microeconomic theory at the basic level
6. Explain macroeconomic theory at the basic level
7. Perform basic algebra and calculus calculations
8. Analyze and evaluate agribusiness problems and management decisions on a basic level

Students who complete a four-year degree at OSU are expected to:

1. Explain microeconomic theory at the intermediate level
2. Analyze and evaluate agribusiness problems and management decisions using business software
3. Utilize and apply statistical methods to analyze commodity markets and economic data
4. Formulate marketing plans and strategies for both generic commodities and specialized products
5. Explain how external forces such as law, environmental regulations, and government policies impact agribusiness decision making

## ACCEPTANCE REQUIREMENTS

Students are required to take the college placement test to determine skill level and readiness indicated by test scores. As part of the program, students must begin with the courses within their skill level as determined by the placement scores. In addition, students may also be required to enroll in classes that would increase their employability and success.

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted towards course requirements.



# ASSOCIATE OF SCIENCE — Agricultural Business Management

Minimum 90 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	* Introduction to Business BA 101 4 CR	* Discovering Agricultural & Resource Economics AEC 121 1 CR	* Academic Composition WR 121 4 CR	* College Algebra MTH 111 5 CR	<b>CREDITS</b> 14	
	<b>Winter</b>	* Computer Applications in Agriculture AG 111 3 CR	* Argument, Research, and Multimodal Composition WR 122 4 CR	Literature and the Arts (choose 1 from ART, ENG, MUS) 3 CR	Biological Science (choose 1 from BI 101, 102, 103, must include lab) 4 CR	Elective 3 CR	<b>CREDITS</b> 17
	<b>Spring</b>	English Composition: Research WR 123 4 CR	Physical Science (choose 1 from BI or CH, must include lab) 4-5 CR	Fundamentals of Public Speaking SP 111 4 CR OR Persuasive Speech SP 112 3 CR	General Psychology PSY 201 3 CR		<b>CREDITS</b> 14-16
<b>YEAR TWO</b>	<b>Fall</b>	* Principles of Accounting BA 211 3 CR	* Management in Agriculture AEC 211 4 CR	* Microeconomics ECON 201 4 CR	General Chemistry (must include lab) CH 221 5 CR	Perspectives (choose 1 from ANTH 221, HST 104, 105, 106, 201, 202, 203) 3 CR	<b>CREDITS</b> 19
	<b>Winter</b>	* Principles of Accounting II BA 212 3 CR	* Marketing in Agriculture AEC 221 3 CR	* Macroeconomics ECON 202 4 CR	Wellness & Health Assessment HPE 295 3 CR	Western Culture (choose 1 from HST 201, 202, 203) 3 CR	<b>CREDITS</b> 16
	<b>Spring</b>	Principles of Accounting III BA 213 3 CR	Perspectives (choose 1 from ART 204, 205, 206, ENG 253, 254, HST 104, 105, 106, 201, 202, 203, cannot duplicate another row) 3-4 CR	* Calculus for Management MTH 241 4 CR	Business Law BA 226 4 CR		<b>CREDITS</b> 14-15

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Make sure to consult with the program advisor if you need to deviate from the above schedule. Required courses are subject to change. Students should maintain contact with the program advisor to be notified of any change in program requirements.

Please see an advisor for a degree planning worksheet for this program.

\*A grade of C or better must be attained in the courses indicated

# BUSINESS ADMINISTRATION

ASSOCIATE OF SCIENCE: ARTICULATED WITH THE BUSINESS PROGRAM  
AT SOUTHERN OREGON UNIVERSITY AND OREGON STATE UNIVERSITY – MINIMUM 90 CREDITS

## DESCRIPTION

The Associate of Science degree (Business Administration) has been developed with the cooperation and support of Southern Oregon University (SOU). The degree is fully articulated with SOU's Business program and allows students to transfer directly as juniors with no loss of credit in order to pursue a bachelor's degree in business. OSU requires one additional math class not offered at UCC.

Students should contact the School of Business at SOU and OSU early in the first year of their AS program to be advised about additional requirements and procedures for admission to the school or program.

## PROGRAM OUTCOMES

This degree aligns with SOU and OSU Undergraduate Business Majors. Contact the UCC program advisor for additional information. Students who complete the Business Administration Association of Science will have the knowledge, skills, and abilities to:

1. Apply and synthesize the functional areas of business to make sound business decisions
2. Access, use, and evaluate information in business decision making
3. Use quantitative and qualitative analytical and critical thinking skills to evaluate information, solve problems, and make sound decisions
4. Communicate effectively in various forms
5. Demonstrate knowledge and application of prescribed ethical codes and behaviors in the work place

## ACCEPTANCE REQUIREMENTS

Students are required to take the college placement test to determine skill level and readiness indicated by test scores. As part of the program, students must begin with the courses within their skill level as determined by the placement scores. In addition, students may also be required to enroll in classes that would increase their employability and success.

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted towards course requirements.

# ASSOCIATE OF SCIENCE — Business Administration

Minimum 90 Credits — Suggested Transfer Guide for SOU — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Academic Composition WR 121 4 CR	Introduction to Business BA 101 4 CR	Elective 3 CR	* Humanities 3 CR	<b>CREDITS 14</b>	
	<b>Winter</b>	Argument, Research, and Multimodal Composition <i>OR</i> WR 122 4 CR English Composition: Research WR 123 4 CR	MTH 111 5 CR Math in Society MTH 105 4 CR	Public Speaking SP 111 4 CR <i>OR</i> Interpersonal Communication SP 218 3 CR <i>OR</i> Small Group Discussion SP 219 3 CR	* Humanities 3 CR	<b>CREDITS 14-16</b>	
	<b>Spring</b>	Business Law BA 226 4 CR	Introduction to Probability and Statistics MTH 243 5 CR	Elective 3 CR	* Humanities 3 CR	<b>CREDITS 15</b>	
<b>YEAR TWO</b>	<b>Fall</b>	Microeconomics ECON 201 4 CR	Principles of Accounting I BA 211 3 CR	* Science with lab 4 CR	Elective 3 CR	Elective 2 CR	<b>CREDITS 16</b>
	<b>Winter</b>	Macroeconomics ECON 202 4 CR	Principles of Accounting II BA 212 3 CR	* Science with lab 4 CR	Elective 3 CR	Elective 3 CR	<b>CREDITS 17</b>
	<b>Spring</b>	Elective 3 CR	Principles of Accounting III BA 213 3 CR	* Science with or without lab 3-4 CR	Elective 3 CR	Elective 3 CR	<b>CREDITS 15-16</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program. OSU Advising guide is located on their website: [oregonstate.edu/advising](http://oregonstate.edu/advising). Additional courses may be needed by OSU.

\* See SOU General Education Transfer Guide  
Visit: [www.sou.edu/admissions/transfers](http://www.sou.edu/admissions/transfers)  
Select: General Education Transfer Guides  
Select: Umpqua Community College from the drop-down menu

# COMPUTER SCIENCE

ASSOCIATE OF SCIENCE OREGON TRANSFER (ASOT) – MINIMUM 92 CREDITS

## CAREER DESCRIPTION

Computer Science (CS) is the study of programs, data, computing machinery, and how these interact. Majors in computer science are offered at OSU, PSU, SOU, UO, and WOU in Oregon. Please be aware that the core CS curriculum and major options vary at the above-listed schools.

The Associate of Science Oregon Transfer in Computer Science (ASOT-CS) degree has computer science-focused lower division general education requirements accepted by public universities in Oregon, and electives tailored for requirements at each intended transfer institution. The ASOT-CS degree does not guarantee admission to Oregon universities, admission to a competitive computer science major, or junior standing in a major.

Consult with a UCC faculty advisor before beginning your first term at UCC as a CS transfer major.

## PROGRAM OUTCOMES

Students who successfully complete an Associate of Science degree with an emphasis in Computer Science will:

1. Acquire new information and adapt to changes in the computer technology field
2. Apply a logical and systematic approach to solve problems
3. Use written, oral, and visual interpersonal skills to communicate with individuals or small groups
4. Design and implement computer software applications
5. Develop an application for an N-tiered environment
6. Evaluate and compare different algorithms applicable to a given task
7. Apply theoretical foundations learned when developing software
8. Use current database technologies to create and build database objects

## APPROVED ELECTIVES

CIS 125D	Computer Applications – Database	3
CIS 125S	Computer Applications – Spreadsheet Software	3
CIS 151C	Networking Essentials	4
CIS 195	Authoring for the World Wide Web I	4
CIS 295	Authoring for the World Wide Web II	4
CIS 240M	Installing and Configuring Microsoft Windows Server	4
CIS 275	Introduction to Database Management Systems I	4
CIS 276	Introduction to Database Management Systems II	4
CS 271	Computer Architecture & Assembly Language	4
ENGR 201	Electrical Fundamentals I	4
ENGR 271	Digital Logic Design	3
ENGR 272	Digital Logic Design Lab	1
MTH 112	Elementary Functions	4
MTH 231	Elements of Discrete Mathematics I	4
MTH 253	Calculus III	4
MTH 254	Vector Calculus I	4
MTH 261	Linear Algebra	2
PE 102 or higher	Physical Education (exclude PE 199 or PE 299)	1-4
WR 122	English Composition: Style and Argument	4
WR 227	Technical Report Writing	4



# ASSOCIATE OF SCIENCE OREGON TRANSFER (ASOT) — Computer Science

Minimum 92 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	*Academic Composition WR 121 4 CR	Social Sciences Elective <i>from Approved List, pp. 46-47</i> 3 CR	Approved Electives <i>from Approved List, pp. 46-47</i> 4 CR	Orientation to Computer Science CS 160 4 CR	<b>CREDITS</b> 15	
	<b>Winter</b>	*Argument, Research and Multimodal Composition WR 122 4 CR OR Technical Report Writing WR 227 4 CR	Calculus I MTH 251 5 CR	Computer Science I CS 161 4 CR		<b>CREDITS</b> 13	
	<b>Spring</b>	Introduction to Database Management Systems I (recommended CS elective) CS 275 4 CR	Calculus II MTH 252 4 CR	Computer Science II CS 162 4 CR	** Arts & Letters Elective <i>from Approved List, pp. 46-47</i> 3 CR	<b>CREDITS</b> 15	
<b>YEAR TWO</b>	<b>Fall</b>	Wellness & Health Assessment HPE 295 3 CR	** Arts & Letters Elective <i>from Approved List, pp. 46-47</i> CR	** Social Sciences Elective <i>from Approved List, pp. 46-47</i> 3 CR	General Physics w/Calculus PH 211 5 CR	Data Structures CS 260 4 CR	<b>CREDITS</b> 18
	<b>Winter</b>	Fundamentals of Public Speaking SP 111 4 CR	PE 102 (OR HIGHER) (recommended CS Elective) <i>from Approved List, pp. 46-47</i> 1-4 CR	General Physics w/Calculus PH 212 5 CR	** Social Sciences Elective <i>from Approved List, pp. 46-47</i> 3 CR	** Social Sciences Elective <i>from Approved List, pp. 46-47</i> 3 CR	<b>CREDITS</b> 16-19
	<b>Spring</b>	General Physics w/Calculus PH 213 5 CR	Computer Applications – Database (recommended CS Elective) CIS 125D 3 CR	Network Essentials (recommended CS Elective) CIS 151C 4 CR	** Arts & Letters Elective <i>from Approved List, pp. 46-47</i> 3 CR		<b>CREDITS</b> 15

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program and to confirm which quarters the desired Program Electives are offered. Many courses at UCC are only offered one quarter per year.

\*A grade of C or better must be attained in the courses indicated.

\*\* One Arts & Letters Elective or Social Sciences Elective must meet Cultural Literacy requirement.

# CRIMINAL JUSTICE

ASSOCIATE OF SCIENCE: ARTICULATED WITH THE CRIMINOLOGY AND CRIMINAL JUSTICE (CCJ) PROGRAM AT SOUTHERN OREGON UNIVERSITY – 90 CREDITS

## CAREER DESCRIPTION

The Associate of Science degree (Criminal Justice) has been developed with the cooperation and support of Southern Oregon University (SOU). The degree is fully articulated with SOU's Criminology and Criminal Justice program and allows students to transfer directly as juniors as pre-majors in CCJ. After passing CCJ 300 with a grade of B- or better and CCJ 298 with a "Pass" at SOU, they are admitted into the Department of Criminology and Criminal Justice at Southern Oregon University with no loss of credits to pursue a bachelor's degree. Students should contact the Department of Criminology and Criminal Justice at SOU early in the first year of their AS program to be advised about additional requirements and procedures for admission to the school or program. Students should be aware that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements in effect at SOU.

## PROGRAM OUTCOMES

This degree aligns with the Criminology and Criminal Justice Department at Southern Oregon University. Students who complete the Criminal Justice Associate of Science will have the knowledge, skills, and abilities to:

1. Communicate effectively in the criminal justice culture: verbally, non-verbally, and in writing
2. Balance the unique responsibilities of criminal justice work with competing family and other personal needs
3. Work effectively on both independent assignments and team efforts within the criminal justice system
4. Exhibit a commanding presence that is appropriate to specific criminal justice situations
5. Locate and interpret current case law and statutes pertaining to specific criminal justice roles and take action that is supported by current law and statutes
6. Recognize symptoms of mental health and substance abuse issues and take appropriate action
7. Work effectively with persons of different cultural heritage, gender, and age
8. Demonstrate an understanding of cultural norms and their impact on criminal justice interactions

9. Discuss the relationship between the criminal justice system, cultural and other diversity, and police/community dynamics
10. Demonstrate cognitive knowledge focusing on positive criminal justice professional/citizen contacts, with the principle emphasis on the importance of a continuing dialogue between the criminal justice system and all segments of the community

Contact the UCC program advisor for additional information.

## GRADUATION REQUIREMENTS

**Note:** SOU Criminology and Criminal Justice Graduation Requirements: Minimum GPA of 2.0 is required for graduation.

(Students interested in pursuing a Bachelors Degree related to Criminal Justice at other institutions should consider the AA/OT. The AA/OT degree can facilitate a student completing their lower division coursework before transferring to complete their degree [although the AA/OT may not satisfy all "program" requirements in the new setting]. Interested students should consult with the Criminal Justice Program Coordinator as well as Academic Advisors to maximize the Criminal Justice focus for their AA/OT degree).

## REQUIRED CURRICULUM

### Writing and Oral Communication Skills

**(Grade of C or better required) Required Credits: 9**

WR 121	Academic Composition	4
WR 122	Argument, Research, and Multimodal Composition <i>OR</i>	4
WR 123	English Composition: Research	
SP 111	Fundamentals of Public Speaking <i>OR</i>	4
SP 218	Interpersonal Communication <i>OR</i>	3
SP 219	Small Group Discussion	3

### Mathematics: Required Credits 4

MTH 105	Math in Society	4
MTH 243	Introduction to Probability & Statistics	5

**Note:** The Bachelor of Science degree requires two courses (7 credits) of math or designated programming, statistics, or logic courses. Please see your academic advisor for details.

### Humanities Exploration: Required Credits 9

Complete at least three Humanities courses from the SOU General Education Transfer Guide.\*\*\*

### Social Science Exploration: Required Credits 9

CJ 101	Introduction to Criminology	3
CJ 120	Introduction to Judicial Process	3

Plus one additional Social Science course from the SOU General Education Transfer Guide.\*\*\*

### Science Exploration: Required Credits 9

Complete at least three Science courses from the SOU General Education Transfer Guide.\*\*\*

At least two of the science courses must have labs.

### Program Requirements for Criminology & Criminal Justice: Required Credits \*\*9

CJ 101	Introduction to Criminology	**3
CJ 105	Concepts of Criminal Law	3
CJ 110	Introduction to Law Enforcement	3
CJ 120	Introduction to Judicial Process	**3
CJ 130	Introduction to Corrections	3

**\*\*NOTE:** Of the 15 credits listed above, 6 credits (CJ 101& CJ 120) already count as Social Science credits, leaving 9 required program credits.

### Electives: Required Credits 38-39

Complete a sufficient number of transfer-level courses (numbered 100 and above) to meet the total degree requirement of at least 90 credits. A maximum of 12 career/technical course credits may be used toward this degree.

### Total Program Credits 90

\*\*\* <http://tinyurl.com/krpmn52>

\*To view the SOU University Studies (General Education) courses, open the SOU General Education Transfer Guide <http://tinyurl.com/krpmn52>. Select: General Education Transfer Guide. Select: "Umpqua Community College" from the drop-down menu. If you cannot access a computer, please see your academic advisor for assistance.

## ARTICULATION AGREEMENT

The articulation agreement for this program can be found at: <http://www.sou.edu/admissions/transfers/tr-artagree.html>

# ASSOCIATE OF SCIENCE — Criminal Justice

90 Credits — Suggested Transfer Guide for SOU — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Introduction to Law Enforcement CJ 110 3 CR	** Academic Composition WR 121 4 CR	* Required Social Science 3 CR	Elective 3 CR	<b>CREDITS 13</b>
	<b>Winter</b>	Introduction to Judicial Process CJ 120 3 CR	** Argument, Research, and Multimodal Composition WR 122 4 CR	** Fundamentals of Public Speaking SP 111 4 CR OR ** Interpersonal Communication SP 218 3 CR OR ** Small Group Discussion SP 219 3 CR	Elective 3 CR	Elective 2-3 CR <b>CREDITS 15</b>
	<b>Spring</b>	Introduction to Criminology CJ 101 3 CR	Introduction to Corrections CJ 130 3 CR	Elective 3 CR	Elective 3 CR	Elective 3 CR <b>CREDITS 15</b>
<b>YEAR TWO</b>	<b>Fall</b>	* Required Humanities 3 CR	* Required Science 4 CR	Concepts of Criminal Law CJ 105 3 CR	Elective 3 CR	Elective 3 CR <b>CREDITS 16</b>
	<b>Winter</b>	* Required Humanities 3 CR	* Required Science 4 CR	Math in Society MTH 105 4 CR	Elective 3 CR	Elective 2 CR <b>CREDITS 16</b>
	<b>Spring</b>	* Required Humanities 3 CR	* Required Science 3-4 CR	Elective 3 CR	Elective 3 CR	Elective 2-3 CR <b>CREDITS 15</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* See SOU General Education Transfer Guide.

\*\* Grade C or better required.

For more information about the SOU Criminology & Criminal Justice Program, visit: [www.sou.edu/criminology](http://www.sou.edu/criminology)

# EARLY CHILDHOOD DEVELOPMENT

ASSOCIATE OF SCIENCE: ARTICULATED WITH THE EARLY CHILDHOOD PROGRAM  
AT SOUTHERN OREGON UNIVERSITY – MINIMUM 104 CREDITS

## CAREER DESCRIPTION

The Associate of Science degree in Early Childhood Development has been developed with the cooperation and support of Southern Oregon University (SOU). The degree is fully articulated with SOU's Early Childhood Development (ECD) program and allows students to transfer directly as juniors and be able to bring the ECD coursework at SOU with no loss of credits to pursue a bachelor's degree. The program offers an excellent balance of education and general education courses that support advanced study in the field of early childhood development.

Students should contact the SOU School of Education early in the second year of their AS program to be advised about additional requirements and procedures for admission to SOU. Students should be aware that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements in effect at SOU.

## PROGRAM OUTCOMES

This degree aligns with Early Childhood Development Program at Southern Oregon's University. Students who complete the Early Childhood Development Associate of Science will have the knowledge, skills, and abilities to:

1. Communicate effectively with others
2. Be comfortable and effective working with people from diverse backgrounds
3. Assess and address needs of individuals, families, and groups
4. Develop a plan of action and link people with community resources
5. Foster commitment to the field of human services based on the belief that all humans are capable of growth and have a fundamental right to dignity, respect, and self-determination
6. Expand general knowledge and skills in ways that enrich personal and professional lives
7. Use appropriate library and information resources to research professional issues and support lifelong learning
8. Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them

Contact the UCC program advisor for additional information.

## ENTRY REQUIREMENTS

Please refer to Admission to UCC page for more information.

In addition, students will be required to enroll in the Oregon Childcare Registry to complete the background history check, obtain a Food Handler's Certificate, First Aid and CPR card and show proof of immunizations including MMR, in order to participate in the ECE Practicum and Seminar courses.

Students will be required to document the meeting of ECE program outcomes through the development of an electronic portfolio. Portfolio submissions will begin during ED 101 and continue on to completion of certificates and degrees.

## COURSE REQUIREMENTS

Complete up to 120 credits at UCC, followed by 60 Upper Division online credits through SOU (180 credits total). The UCC component consists of the following two requirements:

1. Complete the Associate of Science (AS) in Early Childhood Development Education at UCC (103 credits).
2. Satisfy all of the General Education Requirements described below.

The AS degree satisfies some General Education requirements. The remaining credits should be chosen to complete the requirements described below. Work closely with your academic advisor to plan your course schedule.

### Writing and Oral Minimum Credits: 11

#### Communication Skills

WR 121	Academic Composition	4
WR 122	Argument, Research, and Multimodal Composition <i>OR</i>	4
WR 123	English Composition: Research	4
SP 111	Fundamentals of Public Speaking <i>OR</i>	4
SP218	Interpersonal Communication <i>OR</i>	3
SP219	Small Group Discussion	3

### Mathematics Minimum Credits: 8 (Gen Ed Quantitative Reasoning)

MTH211&212 must both be completed to satisfy SOU's Quantitative Reasoning (math gen ed) requirement.

### Humanities Exploration Minimum Credits: 9

Complete at least three Humanities courses from the [University Studies Transfer Guide\\*](#)

### Social Science Exploration Minimum Credits: 9

Complete at least three Social Science courses from the [University Studies Transfer Guide\\*](#)

\*To view the University Studies (General Education) courses, open the University Studies Transfer Guide link. Select Umpqua Community College from the drop-down menu and view courses that satisfy each category. Alternately, you may follow these instructions:

Visit: [www.sou.edu/admissions/transfers](http://www.sou.edu/admissions/transfers)

Select: General Education Transfer Guides

Select: **Umpqua Community College**  
from the drop-down menu

— If you cannot access a computer, please see your academic advisor for assistance.

For more information about this program:

<http://sou.edu/education/ecd/>

### Contacts

Visit [www.sou.edu/education/med](http://www.sou.edu/education/med)

UCC-SOU Early Childhood Educ Articulation Agreement – Effective AY 2011-12 - Rev 6/10/11 Remains in effect until revised or terminated by UCC or SOU

### ARTICULATION AGREEMENT

The articulation agreement for this program can be found at:

<http://www.sou.edu/admissions/transfers/tr-artagree.html>



# ASSOCIATE OF SCIENCE — Early Childhood Development

Minimum 104 Credits – Suggested Transfer Guide for SOU – Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	** ECE Seminar & Practicum I ED 101 4 CR	Introduction to Early Childhood Education ED 140 2 CR	Child Development HDFS 225 3 CR	* Academic Composition: WR 121 4 CR	General Education Requirement 3-4 CR <i>from list on facing page</i>	CREDITS 16-17	
	<b>Winter</b>	ECE Seminar & Practicum II ED 102 4 CR	Lesson & Curriculum Planning ED 240 3 CR	Literature and Language for Children ED 154 3 CR	Argument, Research, and Multimodal Composition WR 122 4 CR OR English Composition: Research WR 123 4 CR	General Education Requirement 3-4 CR <i>from list on facing page</i>	CREDITS 17-18	
	<b>Spring</b>	ECE Seminar & Practicum III ED 103 4 CR	Creative Activities for Children ED 150 3 CR	Infant & Toddler Development HDFS 226 3 CR	General Education Requirement 3-4 CR <i>from list on facing page</i>	General Education Requirement 3-4 CR <i>from list on facing page</i>	CREDITS 16-18	
<b>YEAR TWO</b>	<b>Fall</b>	ECE Seminar & Practicum IV ED 104 4 CR	Fundamentals of Elementary Math I MTH 211 4 CR	Contemporary American Family HDFS 240 3 CR	Fundamentals of Public Speaking SP 111 4 CR OR Interpersonal Communication SP 218 3 CR OR Small Group Discussion SP 219 3 CR	The Exceptional Child HDFS 228 3 CR	General Education Requirement 3-4 CR <i>from list on facing page</i>	CREDITS 20-22
	<b>Winter</b>	ECE Seminar & Practicum V ED 105 4 CR	Fundamentals of Elementary Math II MTH 212 4 CR	Administration of Child Care Centers ED 247 3 CR	General Education Requirement 4 CR <i>from list on facing page</i>	General Education Requirement 3-4 CR <i>from list on facing page</i>	CREDITS 18-19	
	<b>Spring</b>	ECE Seminar & Practicum VI ED 106 4 CR	Individualized Learning for Preschoolers ED 244 3 CR	Observing/Guiding Behavior ED 178 3 CR	General Education Requirement 3-4 CR <i>from list on facing page</i>	General Education Requirement 3-4 CR <i>from list on facing page</i>	CREDITS 16-18	

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\*A grade of C or better must be attained in the courses indicated  
 \*\*Instructor approval required to ensure students have completed the background history check, MMR vaccination verification and a food handler's certificate before coursework can begin.

# ENGINEERING

ASSOCIATE OF SCIENCE, WITH AN EMPHASIS IN ENGINEERING – MINIMUM 93 CREDITS

## CAREER DESCRIPTION

The UCC Engineering Transfer program prepares students for transfer to a bachelor's degree program. The curriculum provides a broad base of lower-division engineering courses, a solid foundation in mathematics and the physical sciences, and core requirements in general education. The curriculum meets the requirements for admission to most of the engineering programs at Oregon State University (OSU), and satisfies the majority of lower division course requirements for transfer to the Oregon Tech (OT), Portland State University (PSU), and other engineering bachelor's degree programs.

Programs offered at OSU include Electrical and Computer Engineering, Civil Engineering, Construction Engineering Management, Environmental Engineering, Mechanical, Industrial and Manufacturing, and Chemical Engineering, as well as BioMedical, Forest, Geological, Mining, Metallurgical, and Nuclear Engineering. PSU and OIT offer programs in Civil, Mechanical, Manufacturing, Electrical, Renewable Energy, and Computer Engineering.

Prospective students should see an engineering faculty advisor, or Counseling and Career Planning Services, to develop your educational plan. Specific courses required vary according to discipline and transfer school selected. Most core engineering courses at UCC are offered only once each academic year, and must be taken in sequence. A well-planned course of study will help ensure a smooth transition to a university.

## PROGRAM OUTCOMES

Students who complete the Engineering Associate of Science will have the knowledge, skills, and abilities to:

1. Apply knowledge of mathematics to formulate and solve engineering problems
2. Use computers to solve engineering problems
3. Properly set up and follow a process to solve engineering problems

## PROGRAM TRANSFER GUIDES

Courses required for the AS degree are listed on facing page. There are program electives which are specific to the transfer university and specific branch of engineering. Transfer guides are available for:

- Bioengineering – OSU
- Chemical Engineering – OSU
- Civil Engineering – OSU
- Civil Engineering - OIT
- Construction Engineering Management – OSU
- Ecological Engineering – OSU
- Electrical and Computer Engineering – OSU
- Electrical Engineering - OIT
- Environmental Engineering – OSU
- Mechanical, Industrial, Manufacturing and Energy Systems Engineering – OSU
- Mechanical Engineering – OIT
- Nuclear Engineering – OSU
- Renewable Engineering – OIT

Transfer guides can be developed for other majors and transfer universities. UCC offers the majority of lower division courses needed for transfer to any engineering program available at all universities in Oregon. UCC also offers AS degrees in Geomatics & Surveying and Forestry Engineering.

## GRADUATION REQUIREMENTS

Transfer guides are listed on the UCC website: <http://www.umpqua.edu/engineering>. Students should work closely with the UCC advisors and faculty and representatives of the school to which they may transfer. There will be special requirements for specific programs or schools. Curriculum is listed on the following page, including program electives. The program electives are specific to both the transfer university and engineering major.

# ASSOCIATE OF SCIENCE — Engineering

Minimum 93 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

## REQUIRED CURRICULUM

### General Education Requirements

WR 121	Intro to Argument	4
WR 227	Technical Report Writing	4
SP 111	Public Speaking	4
CH 221	Chemistry I	5
MTH 251	Calculus I	5
Social Science Approved Elective <sup>1</sup>		3
Arts & Letters Approved Elective <sup>1</sup>		3
<b>General Education Subtotal</b>		<b>28</b>

### Program Requirements<sup>2</sup>

DRF 112 <sup>3</sup>	CAD I	3
ENGR 111	Engineering Orientation I	3
ENGR 112	Problem Solving & Tech	3
MTH 252	Calculus II	4
PH 211	Physics I w/Calculus	5
PH 212	Physics II w/Calculus	5
<b>Program Requirements Subtotal</b>		<b>23</b>

### Program Electives, Major Specific<sup>2</sup>

BA 211	Princ of Accounting I	3
BA 212	Princ of Accounting II	3
BA 226	Business Law	3
BI 211	Principles of Biology	5
BI 212	Principles of Biology	5
BI 213	Principles of Biology	5
BI 231	Human Anatomy & Phy	4
BI 233	Human Anatomy & Phy	4
BI 234	Microbiology	4
BI Elective <sup>4</sup>	BI Elective w/Lab	4
CS 161	Computer Science I	4
CS 162	Computer Science II	4
CS 260	Data Structures	4
CH 222	General Chemistry II	5

CH 223	General Chemistry III	5
CH 241	Organic Chemistry	4
CH 242	Organic Chemistry	4
CH 243	Organic Chemistry	4
CIV 214	CAD - Civil3D & Design	3
G 221	Environmental Geology	4
GIS 203	Digital World	4
GIS 234	GIS I Intro to GIS	4
GIS 235	GIS II Data Anal & Apps	4
ECON 201	Economics - Micro	3
ECON 202	Economics - Macro	3
ENGR 201	Electrical Fund I	4
ENGR 202	Electrical Fund II	4
ENGR 203	Electrical Fund III	4
ENGR 211	Statics	4
ENGR 212	Dynamics	4
ENGR 213	Strength of Materials	4
ENGR 245	Engineering Graphics	3
ENGR 271	Digital Logic - Lecture	3
ENGR 272	Digital Logic - Lab	1
HPE 295	Wellness & Health	3
MFG 111	Machine Shop Practice I	3
MFG 112	Machine Shop Practice II	3
MTH 253	Calculus III	4
MTH 254	Vector Calculus I	4
MTH 256	Differential Equations	4
MTH 261	Linear Algebra	2
MTH 265	Statistics for Engrs & Sci	4
PH 213	Physics III w/Calculus	5
PHL 202	Ethics	3
SOIL 205	Soils Science Lecture	3
SOIL 206	Soils Science Lab	1
SUR 209	Photogrammetry	4
SUR 161	Surveying I	4
SUR 162	Plane Surveying II	4
SUR 163	Route Surveying	4

SUR 242	Land Desc & Cadastre	3
WLD 101	Welding Process & App	4
WLD 131	Basic Metallurgy	3
WR 122	Style & Argument	4
Perspectives <sup>1</sup> Gen Ed Electives – OSU		9
Humanities <sup>1</sup> Gen Ed Electives – OIT		6
Social Science <sup>1</sup> Gen Ed Elective – OIT		3

**Program Electives Subtotal 42-59**

**Combined Total 93–108 cr**

### Notes

1. Approved UCC electives are in UCC catalog. OSU General Ed requirements include 5 “Perspective” courses, see website info at OSU website. OIT General Ed requirements allow up to 9 cr of Humanities electives and 12 cr of Social Science Electives, see articulation agreements
2. See Advisor and UCC Advising Guides listed on UCC website at: <http://www.umpqua.edu/engineering> Advising guides can be developed for other majors and transfer universities
3. DRF 112 can be substituted with CS 161, CH 223, ENGR 203 or ENGR 245. See Advisor and advising guide for selected major and transfer university
4. OSU General Ed requirements include a Biological elective plus lab. For some majors the elective is a course requirement. See OSU website.
5. See OIT Articulation agreements for General Ed Requirements at OIT

# ASSOCIATE OF SCIENCE — Engineering

Minimum 93 Credits – Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Engineering Orientation ENGR 111 3 CR	Calculus I MTH 251 5 CR	General Chemistry CH 221 5 CR	Computer Aided Drafting I <sup>1</sup> DRF 112 3 CR	CREDITS 16
	<b>Winter</b>	Problem Solving & Technology ENGR 112 3 CR	Calculus II MTH 252 4 CR	Program Elective <sup>2</sup> 4-5 CR	English Composition: Intro to Argument WR 121 4 CR	CREDITS 15-16
	<b>Spring</b>	Fundamentals of Public Speaking SP 111 4 CR	Program Elective 3-5 CR	Program Elective 4-5 CR	Program Elective 2-5 CR	CREDITS 13-19
<b>YEAR TWO</b>	<b>Fall</b>	General Physics w/Calculus PH 211 5 CR	Social Science Elective <sup>3</sup> 3 CR	Program Elective 4-5 CR	Program Elective 4-5 CR	CREDITS 16-18
	<b>Winter</b>	General Physics w/Calculus PH 212 5 CR	Arts & Letters Elective <sup>3</sup> 3 CR	Program Elective 4-5 CR	Program Elective 4-5 CR	CREDITS 16-18
	<b>Spring</b>	Technical Report Writing WR 227 3 CR	Program Elective 3-5 CR	Program Elective 4-5 CR	Program Elective 4-5 CR	CREDITS 14-18

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this degree.

<sup>1</sup> DRF 112 can be substituted with CS 161, CH 223, ENGR 203 or ENGR 245.

<sup>2</sup> Most programs require CH 222.

<sup>3</sup> One of these courses must also meet Cultural Literacy requirement for UCC.







# FOREST ENGINEERING

ASSOCIATE OF SCIENCE WITH AN EMPHASIS IN FOREST ENGINEERING – MINIMUM 106 CREDITS

## PROGRAM DESCRIPTION

The UCC Forest Engineering program prepares students for transfer to the bachelor's degree at Oregon State University (OSU). The curriculum is intended to meet the requirements for the first two years of course work necessary for application to the Forest Engineering professional program at OSU. Students can also take additional courses at UCC for transfer to the dual Civil and Forest Engineering program at OSU.

Students that finish the coursework will complete at UCC with a two-year AS degree. The two-year degree may also provide a direct career pathway to employment as a Forest Technician or Engineering Technician.

For more information about the UCC Forestry Program see the link at: [www.umpqua.edu/forestry](http://www.umpqua.edu/forestry). The following link has additional information about the Forestry program at OSU: [www.forestry.oregonstate.edu](http://www.forestry.oregonstate.edu)

## PROGRAM OUTCOMES

This degree aligns with the Forest Engineering Program offered at Oregon State University. Students who complete the Forest Engineering Associate of Science will have the knowledge, skills, and abilities to:

1. Apply knowledge of mathematics, science, and engineering
2. Design and conduct experiments
3. Analyze and interpret data
4. Function as part of a team
5. Identify, formulate, and solve engineering problems
6. Communicate effectively. Contact the UCC program advisor for additional information

## GRADUATION REQUIREMENTS

Prospective students should see an engineering faculty advisor, or Counseling and Career Planning Services, to develop your educational plan. Most core courses at UCC are offered only once each academic year, and must be taken in sequence. A well-planned course of study will help ensure a smooth transition to a university.

### Additional courses for Dual Civil Engineering and Forest Engineering Major

CH 221	General Chemistry II
MTH 253	Calculus III***
MATH 261	Linear Algebra
PH 213	Physics III w/Calculus

# ASSOCIATE OF SCIENCE — Forest Engineering

Minimum 106 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	General Chemistry CH 221 5 CR	Computer Aided Drafting I DRF 112 3 CR	Engineering Orientation I ENGR 111 3 CR	**** Introduction to Forestry FOR 111 3 CR	Calculus I MTH 251 5 CR	CREDITS 19
	<b>Winter</b>	GIS I Intro to Geographic Information Systems FOR 234 4 CR	* Problem Solving & Technology FOR 112 3 CR	Calculus II MTH 252 4 CR	Academic Composition WR 121 4 CR	* Arts and Letters Elective with Cultural Diversity 3 CR	CREDITS 18
	<b>Spring</b>	Statistics for Scientists and Engineers MTH 265 4 CR	Dendrology FOR 241 4 CR	Fundamentals of Public Speaking SP 111 4 CR	Plane Surveying I FOR 161 4 CR		CREDITS 16
<b>YEAR TWO</b>	<b>Fall</b>	Forest Biology FOR 240 4 CR	Statistics ENGR 211 4 CR	Vector Calculus I MTH 254 4 CR	General Physics w/Calculus PH 211 5 CR		CREDITS 17
	<b>Winter</b>	Dynamics ENGR 212 4 CR	Differential Equations MTH 256 4 CR	Physics II w/Calculus PH 212 5 CR	Photogrammetry and Intro to Remote Sensing FOR 209 4 CR		CREDITS 17
	<b>Spring</b>	Strength of Materials ENGR 213 4 CR	Microeconomics ECON 201 4 CR	Soil Science - Lecture SOIL 205 3 CR	Soil Science - Lab FOR 206 1 CR	Technical Report Writing WR 227 4 CR	Wellness & Health Assessment HPE 295 3 CR

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for a program.

\* Five perspective electives related to humanities/social science is a general education requirement at OSU. Additional perspectives courses could be taken at UCC, depending on maximum total credits for transfer. See advisor for specific course requirements.

\*\* MTH 243 transfers for FE major but not for dual FE/CE major. Need MTH 265 (statistics with calculus) for dual major.

\*\*\* UCC MTH 253 and MTH 261 combined transfer as OSU MTH 306.

\*\*\*\* NR 201 can be substituted for FOR 111.

# FOREST RESTORATION AND FIRE

ASSOCIATE OF SCIENCE WITH AN EMPHASIS IN FOREST RESTORATION AND FIRE – MINIMUM 95 CREDITS

## CAREER DESCRIPTION

Foresters actively plan, observe and manage for the health of the entire forest ecosystem. Foresters play a critical role in understanding and protecting multiple-use natural resources. The primary goals of a forester include managing natural resources for sustainable timber harvesting, and protecting forests for conservation and recreation purposes. The Landscape Processes option focuses on managing for forest disturbance processes, such as wildlife, landslides, insects and disease. Disturbance processes are important considerations in any actively managed forest, regardless of the specific management objective. Skills with these processes are particularly important for managing forests at the landscape scale and in the face of uncertainty and rapid change including climate or land use patterns.

The UCC Forest Restoration and Fire program prepares students for transfer to the Forestry bachelor's degree program at Oregon State University (OSU). The curriculum is intended to meet the requirements for the first two years of coursework necessary for application to the professional program in the College of Forestry Restoration and Fire Option at OSU.

## PROGRAM OUTCOMES

As a graduate you will have:

1. An ability to identify, formulate, and solve technical problems
2. An ability to communicate effectively and work with others as a team
3. A recognition of the need for, and an ability to engage in life-long learning
4. The ability to carry out simple surveying, mapping and geographic location activities
5. Complete courses required to apply to the professional program at the OSU College of Forestry

## GRADUATION REQUIREMENTS

Prospective students should see a faculty advisor, or Counseling and Career Planning Services, to develop your educational plan. Most core courses at UCC are offered once each academic year and must be taken in sequence. A well-planned course of study will help ensure a smooth transition to a university



# ASSOCIATE OF SCIENCE — Forest Restoration and Fire

Minimum 95 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Climate Science ATS 201 3 CR	Introduction to Forestry FOR 111 3 CR	College Algebra MTH 111 5 CR	Academic Composition WR 121 4 CR	CREDITS 15
	<b>Winter</b>	Principles of Biology BI 212 5 CR	Problem Solving and Technology FOR 112 3 CR	GIS I Intro to Geographic Information Systems GIS 234 4 CR	Elementary Functions MTH 112 4 CR	CREDITS 16
	<b>Spring</b>	Intro to Probability & Statistics MTH 243 5 CR	Dendrology FOR 241 5 CR	Fundamentals of Public Speaking SP 111 4 CR	Plane Surveying I FOR 161 4 CR	CREDITS 18
<b>YEAR TWO</b>	<b>Fall</b>	General Chemistry CH 221 5 CR	Microeconomics ECON 201 4 CR	Forest Biology FOR 240 4 CR	General Physics PH 201 5 CR <i>OR</i> General Physics w/Calculus PH 211 5 CR	CREDITS 18
	<b>Winter</b>	** Arts & Letters Elective 3 CR	** Arts & Letters <i>OR</i> Social Sciences Elective 3 CR	Calculus for Management MTH 241 4 CR <i>OR</i> Calculus I MTH 251 5 CR	Photogrammetry and Intro to Remote Sensing FOR 209 4 CR	CREDITS 14-15
	<b>Spring</b>	Wellness & Health Assessment HPE 295 3 CR	** Arts & Letters <i>OR</i> Social Sciences Elective 3 CR	Soil Science – Lecture SOIL 205 3 CR	Soil Science – Lab FOR 206 1 CR	Technical Report Writing WR 227 4 CR CREDITS 14

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for a program.

\*General education requirement for perspectives at OSU. Grade of "C" or better in all courses. UCC Science Department will waive the prerequisite for Forest Restoration and Fire majors.

\*\*Five perspective electives related to humanities/social science is a general education requirement at OSU. Additional courses could be taken at UCC, depending on maximum total credits for transfer. See advisor for specific course requirements. One elective must also meet Cultural Literacy requirement.

# FOREST MANAGEMENT

ASSOCIATE OF SCIENCE WITH AN EMPHASIS IN FOREST MANAGEMENT – MINIMUM 94 CREDITS

## PROGRAM DESCRIPTION

Forest Managers must understand natural resource systems and how to organize the management of forest resources for multiple uses and multiple values. The core curriculum in Forest Management is a broad-based education, including basic courses in mathematics, engineering, statistics, biology and ecology, the physical and social sciences, professional courses in forest biology and ecology and forest management.

The UCC Forest Management program prepares students for transfer to the Forestry bachelor's degree program at Oregon State University (OSU). The curriculum is intended to meet the requirements for the first two years of coursework necessary for application to the professional program in the College of Forestry – Forest Management Option at OSU.

For more information about the UCC Forestry Program see the link at: [www.umpqua.edu/forestry](http://www.umpqua.edu/forestry). The following link has additional information about the Forestry program at OSU: [www.forestry.oregonstate.edu](http://www.forestry.oregonstate.edu)

## PROGRAM OUTCOMES

This degree aligns with the Forestry Program at Oregon State University. Students who complete the Forest Management Associate of Science will have the knowledge, skills, and abilities to:

1. Identify, formulate, and solve technical problems
2. Communicate effectively
3. Function as part of a team
4. Carry out simple surveying, mapping, and geographic location activities. Contact the UCC program advisor for additional information

## GRADUATION REQUIREMENTS

Prospective students should see a faculty advisor, or Counseling and Career Planning Services, to develop your educational plan. Most core courses at UCC are offered once each academic year and must be taken in sequence. A well-planned course of study will help ensure a smooth transition to a university.

# ASSOCIATE OF SCIENCE — Forest Management

Minimum 94 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	General Chemistry CH 221 5 CR	**** Introduction to Forestry FOR 111 3 CR	College Algebra MTH 111 5 CR	Academic Composition WR 121 4 CR	CREDITS 17
	<b>Winter</b>	* Principles of Biology BI 212 5 CR	Problem Solving & Technology FOR 112 3 CR	GIS I Intro to Geographic Information Systems FOR 234 4 CR	Elementary Functions MTH 112 4 CR	CREDITS 16
	<b>Spring</b>	Intro to Probability & Statistics MTH 243 5 CR	Dendrology FOR 241 5 CR	Fundamentals of Public Speaking SP 111 4 CR OR Persuasive Speech SP 112 3 CR	Surveying I FOR 161 4 CR	CREDITS 17-18
<b>YEAR TWO</b>	<b>Fall</b>	** Arts & Letters Elective 3 CR	Microeconomics ECON 201 4 CR	Forest Biology FOR 240 4 CR	General Physics PH 201 5 CR	CREDITS 16
	<b>Winter</b>	** Arts & Letters OR Social Sciences Elective 3 CR	** Arts & Letters OR Social Sciences Elective 3 CR	*** Calculus for Management MTH 241 4 CR	Photogrammetry and Intro to Remote Sensing FOR 209 4 CR	CREDITS 14
	<b>Spring</b>	Wellness & Health Assessment HPE 295 3 CR	Climate Science ATS 201 3 CR	Soil Science – Lecture SOIL 205 3 CR	Soil Science – Lab FOR 206 1 CR	Technical Report Writing WR 227 4 CR CREDITS 14

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for this program.

- \* General education requirement for perspectives at OSU. Grade of "C" or better in all courses. UCC Science Department will waive the prerequisite for BI 211 for Forest Management majors
- \*\* Five perspective electives related to humanities/social science is a general education requirement at OSU. Additional courses could be taken at UCC, depending on maximum total credits for transfer. See advisor for specific course requirements. One elective must also meet Cultural Literacy requirement.
- \*\*\* MTH 251 Calculus I can be substituted for MTH 241.
- \*\*\*\* NR 201 can be substituted for FOR 111.

# FOREST OPERATIONS

ASSOCIATE OF SCIENCE WITH AN EMPHASIS IN FOREST OPERATIONS – MINIMUM 99 CREDITS

## CAREER DESCRIPTION

Forest Operations is designed as a professional forestry degree that blends elements of forest engineering and forest management with business management and entrepreneurship. This unique degree will prepare graduates to support the needs of an evolving forest sector in Oregon and globally. As they gain experience, graduates will have options to serve as project managers for logging or silvicultural contracting service firms, as consultants, or as company or agency contract administrators that supervise a growing contracting work force.

The UCC Forest Operations program prepares students for transfer to the Forestry bachelor's degree program at Oregon State University (OSU). The curriculum is intended to meet the requirements for the first two years of coursework necessary for application to the professional program in the College of Forestry – Forest Operations Management Option at OSU.

For more information about the UCC Forestry Program see the link at: [www.umpqua.edu/forestry](http://www.umpqua.edu/forestry).

The following link has additional information about the Forestry program at OSU: [www.forestry.oregonstate.edu](http://www.forestry.oregonstate.edu)

## PROGRAM OUTCOMES

This degree aligns with the Forestry Program at Oregon State University. Students who complete the Forest Operations Associate of Science will have the knowledge, skills, and abilities to:

1. Identify, formulate, and solve technical problems
2. Communicate effectively
3. Function as part of a team
4. Carry out simple surveying, mapping, and geographic location activities

Contact the UCC program advisor for additional information.

## GRADUATION REQUIREMENTS

Prospective students should see a Business Department faculty advisor, or Counseling and Career Planning Services, to develop your educational plan. Most core courses at UCC are offered only once each academic year and must be taken in sequence. A well-planned course of study will help ensure a smooth transition to a university.



# ASSOCIATE OF SCIENCE — Forest Operations

Minimum 99 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	General Chemistry CH 221 5 CR	**** Introduction to Forestry FOR 111 3 CR	College Algebra MTH 111 5 CR	Academic Composition WR 121 4 CR	CREDITS 17	
	<b>Winter</b>	* Principles of Biology BI 212 5 CR	Problem Solving & Technology FOR 112 3 CR	GIS I Intro to Geographic Information Systems FOR 234 4 CR	Elementary Functions MTH 112 4 CR	CREDITS 16	
	<b>Spring</b>	Intro to Probability & Statistics MTH 243 5 CR	Dendrology FOR 241 5 CR	Fundamentals of Public Speaking SP 111 4 CR	Surveying I FOR 161 4 CR	CREDITS 18	
<b>YEAR TWO</b>	<b>Fall</b>	** Arts & Letters Elective with Cultural Diversity 3 CR	Principles of Accounting I BA 211 3 CR	Forest Biology FOR 240 4 CR	General Physics PH 201 5 CR	CREDITS 15	
	<b>Winter</b>	Principles of Accounting II BA 212 3 CR	Wellness & Health Assessment HPE 295 3 CR	*** Calculus for Management MTH 241 4 CR	Photogrammetry and Intro to Remote Sensing FOR 209 4 CR	Technical Report Writing WR 227 4 CR	CREDITS 18
	<b>Spring</b>	Principles of Accounting III BA 213 3 CR	Business Law BA 226 4 CR	Microeconomics ECON 201 4 CR	Soil Science – Lecture SOIL 205 3 CR	Soil Science – Lab FOR 206 1 CR	CREDITS 15

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for this program.

- \* UCC Science Department will waive the prerequisite for BI 211 for Forest Operations majors.
- \*\* Five perspective electives related to humanities/social science is a general education requirement at OSU. Additional courses could be taken at UCC, depending on maximum total credits for transfer. See advisor for specific course requirements. Grade of "C" or better in all courses.
- \*\*\* MTH 251 Calculus I can be substituted for MTH 241.
- \*\*\*\* NR 201 can be substituted for FOR 111.

# HUMAN SERVICES

ASSOCIATE OF SCIENCE: ARTICULATED WITH THE INTERDISCIPLINARY BACHELOR OF ARTS OR SCIENCE IN SOCIAL SCIENCE (HUMAN SERVICES PROGRAM) AT SOUTHERN OREGON UNIVERSITY – MINIMUM 90 CREDITS

## CAREER DESCRIPTION

The Associate of Science degree is based on a signed articulation agreement with Southern Oregon University (SOU). The SOU departments of psychology and sociology/anthropology offer an interdisciplinary bachelor's degree program focusing on the needs of human service professionals, a Bachelor of Arts or Science in Social Science. The UCC Associate of Science (AS) degree is fully articulated with SOU's Human Service program and allows students to transfer directly as juniors into the program at SOU with no loss of credits to pursue a bachelor's degree. Students should contact the SOU Human Services program early in the first year of the AS program to be advised about additional requirements and procedures for admission to the school or program. Students should be aware that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements in effect at SOU.

## PROGRAM OUTCOMES

This degree aligns with the Human Services program at Southern Oregon University. Students who complete the Human Services Associate of Science will have the knowledge, skills, and abilities to:

1. Communicate effectively with others
2. Be comfortable and effective working with people from diverse backgrounds
3. Assess and address needs of individuals, families, and groups
4. Develop a plan of action and link people with community resources
5. Foster commitment to the field of human services based on the belief that all humans are capable of growth and have a fundamental right to dignity, respect, and self-determination
6. Expand general knowledge and skills in ways that enrich personal and professional lives
7. Use appropriate library and information resources to research professional issues and support lifelong learning
8. Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.  
Contact the UCC program advisor for additional information

## GRADUATION REQUIREMENTS

Students interested in the AA/OT should consult with the Human Services Program coordinator or other advisory staff.

**Note:** SOU Human Services Baccalaureate Graduation Requirements: Minimum GPA of 2.5 is required for graduation and no grade below C- allowed in all upper division HS major coursework or lower division coursework directly applied to the Human Services degree requirements. *For admission to the SOU Human Service Program, UCC students who commence this AS degree Fall 2013 or later must earn a minimum grade of B or higher in MTH 243, PSY 201, PSY 202, PSY 203, HDFS 201, HS 155, HS 229, HS 265, and SOC 204.*

## REQUIRED CURRICULUM

If you cannot access a computer, please see your academic advisor for assistance.

### Writing and Oral Communication Skills (Grade of C or better required) Required Credits: 9

WR 121	Academic Composition <sup>1</sup>	4
WR 122	Argument, Research, and Multimodal Composition <sup>1</sup> <i>OR</i>	4
WR 123	English Composition: Research <sup>1</sup>	4
SP 111	Fundamentals of Public Speaking <sup>1</sup> <i>OR</i>	4
SP 218	Interpersonal Communication <sup>1</sup> <i>OR</i>	3
SP 219	Small Group Discussion <sup>1</sup>	3

### Mathematics: Required Credits 8

MTH 105	Math in Society <i>OR</i>	4
MTH 111	College Algebra <i>OR</i>	5
MTH 211	Fundamentals of Elementary Math I <i>AND</i>	4
MTH 212	Fundamentals of Elementary Math II ( <i>must take both</i> ) <i>AND</i>	4
MTH 243	Introduction to Probability & Statistics <sup>2</sup>	5

### Humanities Exploration: Required Credits 9

Complete at least **three** Humanities courses from the SOU General Education Transfer Guide.

**Note:** A Bachelor of Arts degree requires the equivalent of one year of study of a World Language at the second-year level or above.

### Science Exploration: Required Credits 11

Complete at least three Science courses from the SOU General Education Transfer Guide\*. At least two of the science courses must have labs.

\*To view the SOU University Studies (General Education) courses, open the SOU General Education Transfer Guide link above, or visit: [www.sou.edu/admissions/transfers](http://www.sou.edu/admissions/transfers). Select: General Education Transfer Guide. Select Transfer Courses to SOU Select: "Umpqua Community College" from the drop-down menu. If you cannot access a computer, please see your academic advisor for assistance.

### Social Science Exploration: Required Credits 9

PSY 201	General Psychology <sup>2</sup>	3, 3, 3
+202+203	( <i>must take all three</i> ) <sup>2</sup>	

### Prerequisites/Program Requirements for Human Services: Required Credits 24

HS 100	Introduction to Human Services	3
HS 155	Counseling Skills <sup>2</sup> ***	3
HS 226	Ethics and Law	3
HS 229	Crisis Intervention and Prevention <sup>2**</sup>	3
HS 265	Counseling Services II <sup>2***</sup>	3
HS 267	Cultural Competence in Human Svcs	3
HDFS 201	Individual and Family Development <sup>2</sup>	3
SOC 204	Introduction to Sociology <sup>2</sup>	3

### Electives: (May include HS classes) Required Credits: up to 20

Complete a sufficient number of transfer-level (numbered 100 and above) courses to meet the total degree requirement of at least 90 credits. A maximum of 12 career/technical course credits may be used toward this degree.

### Total Program Credits 90

## ARTICULATION AGREEMENT

The articulation Agreement for this program can be found at <http://www.sou.edu/admissions/transfers/tr-artagree.html>

# ASSOCIATE OF SCIENCE — Human Services

Minimum 90 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Introduction to Human Services HS 100 3 CR	Elective 3 CR	General Psychology <sup>2</sup> PSY 201 3 CR	Academic Composition <sup>1</sup> WR 121 4 CR	CREDITS 13
	<b>Winter</b>	*** Counseling Skills I <sup>2</sup> HS 155 3 CR	** Crisis Intervention and Prevention <sup>2</sup> HS 229 3 CR	General Psychology <sup>2</sup> PSY 202 3 CR	Argument, Research, and Multimodal Composition <sup>1</sup> WR 122 4 CR OR English Composition: Research WR 123 4 CR	Elective 3 CR CREDITS 16
	<b>Spring</b>	Ethics and Law HS 226 3 CR	General Psychology <sup>2</sup> PSY 203 3 CR	Math in Society MTH 105 4 CR OR College Algebra MTH 111 5 CR	Elective 3 CR	CREDITS 13-14
	<b>Summer</b>	*** Counseling Skills II <sup>2</sup> HS 265 3 CR				CREDITS 3
<b>YEAR TWO</b>	<b>Fall</b>	* Required Humanities 3 CR	* Required Science 4 CR	Introduction to Sociology <sup>2</sup> SOC 204 3 CR 3 CR	**** Individual & Family Development <sup>2</sup> HDFS 201 3 CR	Elective 2-3 CR CREDITS 15-16
	<b>Winter</b>	* Required Humanities 3 CR	* Required Science 4 CR	* Introduction to Probability & Statistics <sup>2</sup> MTH 243 5 CR	Fundamentals of Public Speaking <sup>1</sup> SP 111 4 CR OR Small Group Discussion <sup>1</sup> SP 219 3 CR OR Interpersonal Communication <sup>1</sup> SP 218 3 CR	CREDITS 15-16
	<b>Spring</b>	* Required Humanities 3 CR	* Required Science 3-4 CR	Cultural Competence in Human Services HS 267 3 CR	Elective 3 CR	Elective 3 CR CREDITS 15-16

## NOTES

1 Grade of C or better required.

2 Grade of B or better required.

\* See SOU General Education Transfer Guide. A maximum of 124 lower division credits can be transferred from a community college to SOU.

\*\* HS 229 is accepted by SOU as an equivalent to PSY 475 Crisis Intervention Strategies; however, upper division credit for HS 229 is not given. In order for this equivalency to be valid, UCC transfer students must complete the Human Services Associate of Science Degree prior to transfer. Students receiving this equivalency must substitute an upper division psychology course for PSY 475 as suggested and approved by an advisor at SOU.

\*\*\* HS 155 and HS 265 are accepted by SOU as an equivalent to PSY 471 Introduction to Helping Skills; however, upper division credit for HS 155 and HS 265 is not given. In order for this equivalency to be valid, UCC transfer students must complete the Human Services Associate of Science Degree prior to transfer. Students receiving this equivalency must substitute an upper division psychology course for PSY 471 as suggested and approved by an advisor at SOU.

\*\*\*\* HDFS 201 is accepted as an equivalent to PSY 370 Lifespan Development; however, upper division credit for HDFS 201 is not given. Students who complete the Human Service Associate of Science Degree at UCC will not be required to take PSY 471 Introduction to Helping Skills or PSY 475 Crisis Intervention Strategies at SOU; however, substitute upper division level credits in psychology must be taken as suggested and approved by an advisor.

# MUSIC

ARTICULATED WITH THE SCHOOL OF MUSIC OF SOUTHERN OREGON UNIVERSITY – MINIMUM 98 CREDITS

## CAREER DESCRIPTION

The Associate of Science degree (Music) has been developed with the cooperation and support of Southern Oregon University (SOU). The degree is fully articulated with SOU's Music program and allows students to transfer directly as juniors and to become admitted into the Music program at SOU with no loss of credits to pursue a baccalaureate degree. The program offers an excellent balance of music and general education courses that support advanced study in the field of music. Students should contact the SOU Music Department early in the first year of their AS program to be advised about additional requirements and procedures for admission to the school or program. Students should be aware that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements in effect at SOU. All students must pass a New Student Hearing before being accepted as a Music Major at SOU. The student's applied level of study (MUP courses) will be set based on the audition.

## PROGRAM OUTCOMES

This degree aligns with the School of Music at Southern Oregon University. Students who complete the Music Associate of Science will have the knowledge, skills, and abilities to:

1. Demonstrate technical proficiency at reading, writing, and performing music using standard music notation (junior entry level)
2. Achieve aural literacy, promote and model cultural awareness through identification, evaluation, and critical discussion of musical examples
3. Communicate effectively using appropriate listening, speaking, and writing skills
4. Demonstrate adequate problem solving and critical thinking skills

Contact the UCC program advisor for additional information.

## REQUIRED CURRICULUM

### Writing and Oral Communication Skills:

#### Required Credits

WR 121	Academic Composition	9
WR 122	Argument, Research, and Multimodal Composition <i>OR</i>	4
WR 123	English Composition: Research	4
SP 111	Fundamentals of Public Speaking <i>OR</i>	4
SP 218	Interpersonal Communication <i>OR</i>	3
SP 219	Small Group Discussion	3

### Mathematics: Required Credits

Complete at least one Mathematics course from the SOU General Education Transfer Guide\*.

Note: The Bachelor of Science degree requires two courses (7 credits) of math or designated programming, statistics, or logic courses. The second course may be chosen from the following list at UCC as an elective, or completed later at SOU. Please see your academic advisor for details

MTH 105	Math in Society (does not include MTH 105T)	4
MTH 111	College Algebra	5
MTH 112	Elementary Functions	4
MTH 211	Fundamentals of Elementary Math I & II & 212 (must take both)	4
MTH 241	Calculus for Management & Social Science I	4
MTH 243	Introduction to Probability & Statistics	5
MTH 251	Calculus I	5
PHL 203	Introduction to Philosophy	3

### Humanities Exploration: Required Credits

Complete at least three Humanities courses from the SOU General Education Transfer Guide.

### Social Science Exploration: Required Credits

HPE 295 Wellness & Health Assessment  
Plus at least two additional Social Science courses from the General Education Transfer Guide\*

### Science Exploration: Required Credits

Complete at least three Science courses from the SOU General Education Transfer Guide\*. At least two of the science courses must have labs.

\*Use the SOU General Education Transfer Guide to identify courses that satisfy the categories listed above. Select Umpqua Community College from the drop-down menu. Then view courses listed under each category. If you are using a paper copy of this guide, or if the link does not work, follow these steps to see the courses: Visit: [www.sou.edu/admissions/transfers](http://www.sou.edu/admissions/transfers). Select: General Education Transfer Guides. Select: "Umpqua Community College" from drop-down menu.

### Music Requirements Total Required Credits:

54

A. Complete all the following:

Credits: 30

MUS 111, 112, 113	Music Theory I	3,3,3
MUS 211, 212, 213	Music Theory II	3,3,3
MUS 114, 115, 116	Aural Skills I	1,1,1
MUS 224, 225, 226	Aural Skills II	1,1,1
MUP 101-292	Performance Studies	6

B. Demonstrated Piano Proficiency

Credits: 12

MUS 131, 132, 133	Class Piano	2,2,2**
MUS 214, 215, 216	Intermediate Piano	2,2,2**

\*\*Note: MUP 101-292 can be substituted for "piano" credits if student demonstrates proficiency

C. 6 credits from below:

Credits: 6

MUS 201	Introduction to Music and Its Literature****	3
MUS 202	Introduction to Music and Its Literature****	3
MUS 203	Introduction to Music and Its Literature****	3

D. Selected MUP/MUS courses

Credits from below: 6

MUP 195 A/B/C	Concert Band	1,1,1
MUP 196 A/B/C	Chamber Orchestra***	1,1,1
MUP 197 A/B/C	Concert Choir***	1,1,1
MUP 295	Jazz Band****	1,1,1
MUP 189 A/B/C	Chamber Choir-Vocal Jazz****	2,2,2
MUS 134,135,136	Class Voice***	2,2,2
MUS 137,138,139	Beginning Class Guitar***	2,2,2

### Music Electives (Optional)

MUP 101-292	Performance Studies**	
MUS 105	Introduction to Rock Music****	3
MUS 204	Music of the World****	3
MUS 205	Introduction to Jazz History****	3

### Total Degree Credits

96

### Notes

- \* See SOU General Education Transfer Guide
- \*\* MUP 101-292 can be substituted for "piano" credits if student demonstrates proficiency
- \*\*\* Six credits from these selected MUP/MUS courses required (See section D above)
- \*\*\*\* May also be used for Humanities Exploration Credit. Six credits from these MUS courses required (Section C above)



# ASSOCIATE OF SCIENCE —

## Articulated with the School of Music of Southern Oregon University

Minimum 98 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

YEAR ONE	Fall	Individual Lessons MUP 101-292 1 CR	Music Theory I MUS 111 3 CR	*** Selected MUP/MUS credits 1 CR	Aural Skills I MUS 114 1 CR	** Class Piano MUS 131 2 CR	**** Introduction to Music and Its Literature MUS 201 3 CR	Academic Composition WR 121 4 CR	* Required Humanities 3 CR	CREDITS 18
	Winter	Individual Lessons MUP 101-292 1 CR	Music Theory I MUS 112 3 CR	*** Selected MUP/MUS credits 1 CR	Aural Skills I MUS 115 1 CR	Class Piano MUS 132 2 CR	**** Introduction to Music and Its Literature MUS 202 3 CR	Argument, Research, and Multimodal Composition WR 122 4 CR	* Required Humanities 3 CR	CREDITS 18
	Spring	Individual Lessons MUP 101-292 1 CR	Music Theory I MUS 113 3 CR 1 CR	*** Selected MUP/MUS credits	Aural Skills I MUS 116 1 CR	Class Piano MUS 133 2 CR 4 CR	* Required Mathematics MUS 203 3 CR	* Required Humanities	CREDITS 15	
YEAR TWO	Fall	Individual Lessons MUP 101-292 1 CR	Music Theory II MUS 211 3 CR	*** Selected MUP/MUS credits 1 CR	Aural Skills II MUS 224 1 CR	Intermediate Piano MUS 214 2 CR	Wellness & Health Assessment HPE 295 3 CR	Required Science with lab 4 CR	CREDITS 15	
	Winter	Individual Lessons MUP 101-292 1 CR	Music Theory II MUS 212 3 CR	*** Selected MUP/MUS credits 1 CR	Aural Skills II MUS 225 1 CR	Intermediate Piano MUS 215 2 CR	Fundamentals of Public Speaking <i>OR</i> SP 111 4 CR Interpersonal Communication SP 218 3 CR <i>OR</i> Small Group Discussion SP 219 3 CR	Required Social Science 3 CR	Required Science with lab 4 CR	CREDITS 18-19
	Spring	Individual Lessons MUP 101-292 1 CR	Music Theory II MUS 213 3 CR	*** Selected MUP/MUS credits 1 CR	Aural Skills II MUS 226 1 CR	Intermediate Piano MUS 216 2 CR	Required Social Science 3 CR	Required Science 3-4 CR	CREDITS 14-15	

### NOTES

- Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for this program.
- A maximum of 124 lower division credits can be transferred from a community college to SOU.
  - SOU Music Program Graduation Requirements: Baccalaureate students must complete a minimum of 60 credits of upper division work before a degree will be awarded and meet all the requirements of SOU prior to graduation. Upper division is defined as 300- and 400-level classes at a bachelor's degree-granting institution.
  - For more information about the SOU Music Program, visit: [www.sou.edu/music](http://www.sou.edu/music).

# NATURAL RESOURCES

ASSOCIATE OF SCIENCE IN NATURAL RESOURCES – 90 CREDITS

## CAREER DESCRIPTION

The Associate of Science degree in Natural Resources gives students a comprehensive educational foundation for careers related to natural resource science and technology. This program prepares students for jobs in conservation science, wildlife biology, fisheries science, botany, forestry, ecosystem management, watershed management and other fields related to natural resource science and conservation. The program takes advantage of the diversity of resources available on nearby public lands, and the expertise of local professionals who manage those lands, to provide a mix of classroom, lab and field experiences not found at any other institution. Our Landscape Monitoring Option introduces the theory and practice of landscape monitoring, and offers broad laboratory and field training in measuring and analyzing ecological conditions at the microsite, community, and landscape levels. Students are also free to create their own “Individualized Specialty Option” Bachelor of Science degree in consultation with UCC faculty and OSU’s Natural Resources Program Manager that fits their unique goals. See <https://www.umpqua.edu/natural-resources> for more information.

## PROGRAM OUTCOMES

Students who complete the Natural Resources Associate of Science will have the knowledge, skills, and abilities to:

1. Recognize and classify common plant and animal species in the field, and use dichotomous keys to determine or verify their identity
2. Describe key ecological cycles, disturbance processes, and ecological succession in landscapes of the Pacific Northwest
3. Describe the ways in which utilization, management, and allocation of natural resources are affected
4. Recognize and describe the interrelationships between the ecological communities that produce natural resources and the social communities that consume and manage them
5. Discuss historic range of ecosystem variability, human impacts that influence ecosystem change, and the future sustainability of natural resources
6. Work safely and navigate efficiently in the field using map, compass, GPS and other orienteering and data gathering technologies

7. Demonstrate current protocols for gathering and recording data in the field and lab
8. Map and quantify a range of natural resources at multiple scales
9. Analyze numerical and spatial environmental data, and apply current theory to those findings to solve problems in natural resource management
10. Envision and plan desired future landscapes that will achieve a set of natural resource-related objectives, prescribe management actions needed to achieve those objectives, and evaluate the success of these actions
11. Communicate effectively orally, in writing, and through current presentation technologies with audiences of diverse backgrounds
12. Work collaboratively within and among professional interdisciplinary teams and diverse community groups to resolve management problems and achieve management objectives
13. Self-assess professional strengths and weaknesses, and be committed to lifelong learning and professional development

Contact the UCC program advisor for additional information.

## ACCEPTANCE REQUIREMENTS

Students are required to take college placement tests to determine skill level and readiness for college-level courses. Coursework from accredited high schools, colleges and universities will be accepted in accordance with college policies and with the approval of the Science Department Chair.

## PROGRAM INFORMATION

Students who graduate with an Associate of Science degree in Natural Resources will be well-trained for entry-level jobs in the natural resource economy. The program is specifically designed for seamless transfer to the Oregon State University College of Forestry’s Bachelor of Science degree in Natural Resources. Students will receive a solid grounding in the fundamentals of writing, math and science, and will apply those concepts and skills in the lab and in the field. Training will emphasize current monitoring methods and technologies employed by agency field specialists. Transfer agreements between OSU and the UCC Science and Engineering Depts. also allow course transfers into many other degree programs in forestry, fisheries and wildlife science, and others.

## CURRICULUM

The program courses are listed below in 3 categories:

1. OSU Baccalaureate Core Equivalents are courses that meet OSU’s general education requirements for any major.
2. OSU Natural Resources Core Equivalents meet the core requirements of OSU’s Natural Resources major.
3. OSU Landscape Monitoring Option courses meet this specific option that was jointly developed by UCC and OSU.

Once the AS degree is completed, there are a number of other UCC courses that meet additional requirements for a Bachelor of Science degree at OSU or that can be used for individual specialization options. Consult your advisor to learn more about these.

### OSU Baccalaureate Core Equivalents:

BI 211	Principles of Biology I <sup>1</sup>	5
BI 212	Principles of Biology II <sup>1</sup>	5
BI 213	Principles of Biology III <sup>1</sup>	5
ENG 230	Environmental Literature	4
G 221	Environmental Geology <sup>1</sup>	4
MTH 111	College Algebra	5
NR 240	Forest Biology <sup>1</sup>	4
NR 241	Dendrology <sup>1</sup>	4
SOIL 205/206	Soil Science w/Lab <sup>1</sup>	4
SP 111	Fundamentals of Public Speaking	4
WR 121	Academic Composition	4
WR 227	Technical Report Writing	4

### OSU Natural Resources Core Equivalents

BOT 203	Field Botany	4
CH 112	Fundamentals of Chemistry	5
GIS 234	Introduction to GIS	4
MTH 243	Intro to Statistics	4
NR 201	Intro to Natural Resources	3
NR 221	Water Resource Science	4
NR 255	Field Sampling of Fish and Wildlife	3
NR 261	Recreation Resource Management	4
NR 295	Environmental Dispute Resolution	3

### OSU Landscape Monitoring Option

BOT 204	Field Bot. SW OR & N CA (hybrid) <i>OR</i>	
NR 242	Ecosystems of SW OR & N CA (hybrid)	4
NR 243*	Historical Ecology of PNW Landscapes	3
NR 251	Prin. of Fish & Wildlife Conservation	3

\* Course articulation with OSU pending

# ASSOCIATE OF SCIENCE IN NATURAL RESOURCES — Landscape Monitoring Option

97 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Principles of Biology I BI 211 5 CR	Fundamentals of Chemistry CH 112 5 CR	Intro to Natural Resources NR 201 3 CR	Academic Composition WR 121 4 CR	<b>CREDITS 17</b>
	<b>Winter</b>	Principles of Biology II BI 212 5 CR	Principles of Fish and Wildlife Conservation NR 251 3 CR	Environmental Literature <sup>3</sup> ENG 230 4 CR	Technical Report Writing WR 227 4 CR	<b>CREDITS 16</b>
	<b>Spring</b>	Principles of Biology III BI 213 5 CR	Dendrology NR 241 4 CR	Field Botany BOT 203 4 CR	College Algebra MTH 111 5 CR	<b>CREDITS 18</b>
<b>YEAR TWO</b>	<b>Fall</b>	Intro to Statistics MTH 243 5 CR	Forest Biology NR 240 4 CR	Environmental Geology G 221 4 CR	Fundamentals of Public Speaking SP 111 4 CR	<b>CREDITS 17</b>
	<b>Winter</b>	Introduction to GIS GIS 234 4 CR	Environmental Dispute Resolution NR 295 3 CR	Historical Ecology of PNW Landscapes NR 243 3 CR	Water Resource Science NR 221 4 CR	<b>CREDITS 14</b>
	<b>Spring</b>	Soil Science SOIL 205/206 4 CR	Recreation Resource Management NR 261 4 CR	Field Sampling of Fish and Wildlife NR 255 3 CR	Ecosystems of SW OR & N CA NR 242 4 CR <i>OR</i> Flowering Plants of SW OR & N CA BOT 204 4 CR	<b>CREDITS 15</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Course substitutions may only be made with the approval of the Natural Resources advisor in consultation with the Science Dept. Chair. Please see an advisor for a degree planning worksheet for this program.

# SURVEYING AND GEOMATICS

ASSOCIATE OF SCIENCE, WITH AN EMPHASIS IN SURVEYING AND GEOMATICS – 98 CREDITS

## CAREER DESCRIPTION

The surveying and geomatics professions work with private and public projects. Projects may include property surveys, road construction, topographical maps or building layout. The surveying curriculum offers a hands-on approach to learning the principles of surveying. Electronic surveying equipment and computer software are used throughout the coursework.

Geographic information systems (GIS) is a systematic approach to management, analysis, and display of geographic information. Many public agencies now use GIS for most of their mapping. Surveying, geomatics, and GIS often overlap.

## PROGRAM OUTCOMES

Students who successfully complete an Associate of Science with an emphasis in Surveying and Geomatics will:

1. Apply knowledge of mathematics, science, and engineering
2. Design, collect, analyze, and interpret data
3. Function on teams
4. Identify, formulate, and solve surveying problems
5. Communicate effectively

## GRADUATION REQUIREMENTS

Oregon Tech is currently the only university in Oregon that offers either a Bachelor of Science in Geomatics, Surveying Option or a Bachelor of Science in Geomatics, Geographic Information Systems (GIS) Option.

Students interested in a 2-year AAS degree with focus in Surveying & Geomatics may want to consider an AAS in Civil Engineering and Surveying Technology. For more information on the AAS program go to the Career and Technical portion of this catalog under ENGINEERING TECHNOLOGY: Civil Engineering and Surveying Technology, AAS. The UCC Counseling and Career Planning Services can assist with developing a plan for course of study.

## ARTICULATION AGREEMENT

The articulation agreement for this program can be found at <http://tinyurl.com/oituccartical>.



# ASSOCIATE OF SCIENCE — Surveying and Geomatics

98 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Engineering Orientation I ENGR 111 3 CR	Computer Aided Drafting I DRF 112 3 CR	Elementary Functions MTH 112 4 CR	Academic Composition WR 121 4 CR	Digital World and Geospatial Concepts GIS 203 4 CR	CREDITS 18
	<b>Winter</b>	Social Sciences Elective 3 CR	GIS I Intro to Geographic Information Systems GIS 234 4 CR	Calculus I MTH 251 5 CR	Argument, Research, and Multimodal Composition WR 122 4 CR		CREDITS 16
	<b>Spring</b>	CAD-Civil3D and Virtual Design CIV 214 3 CR	Surveying I SUR 161 4 CR	Calculus II MTH 252 4 CR	GIS II Data Analysis and Applications GIS 235 4 CR		CREDITS 15
<b>YEAR TWO</b>	<b>Fall</b>	Plane Surveying II SUR 162 4 CR	Vector Calculus MTH 254 4 CR	General Physics w/Calculus PH 211 5 CR	Arts & Letters Elective 3 CR		CREDITS 16
	<b>Winter</b>	Route Surveying SUR 163 4 CR	Introduction to Probability and Statistics MTH 243 4 CR	General Physics w/Calculus PH 212 5 CR	Photogrammetry and Intro to Remote Sensing SUR 209 4 CR		CREDITS 17
	<b>Spring</b>	Land Descriptions- and Cadastre SUR 242 3 CR	Technical Report Writing WR 227 4 CR	General Physics w/Calculus PH 213 5 CR	Fundamentals of Public Speaking SP 111 4 CR		CREDITS 16

## NOTES

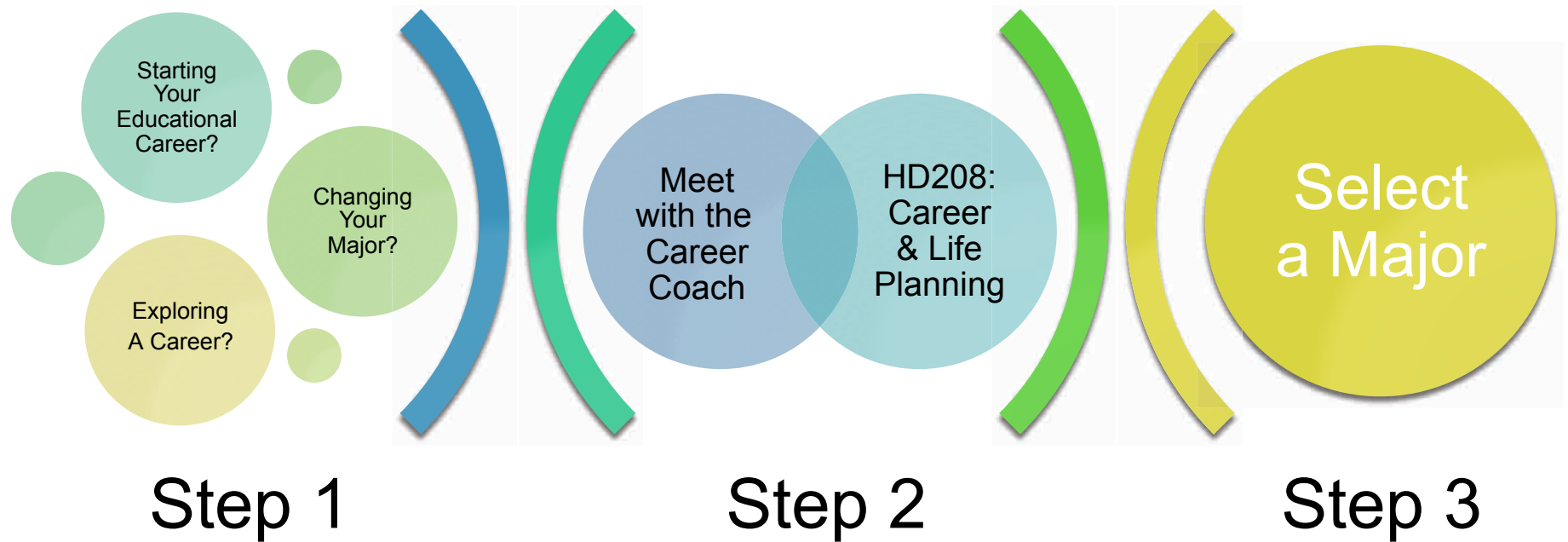
Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for this program.

General Education Requirements. See UCC Engineering Faculty Advisor or UCC Advising Services to review requirements for selected transfer university and AS requirements at UCC.

Students must take one Humanities and one Social Sciences elective 3 credits from a course that meets Cultural Literacy-can also be used to meet Humanities/Social Sciences



# Undecided? Start Your Career With Us!



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# OREGON PUBLIC UNIVERSITIES 2018-19: DISCOVER YOUR FUTURE

Oregon's universities and colleges offer diverse, high-quality programs of study to students from across the state and beyond or abroad. From hundreds of exciting academic majors — many unique to Oregon — to first-rate professors who provide relevant learning and research experiences, Oregon universities will give you the foundation you need to define and excel in your life and career.

Students planning to transfer from Umpqua Community College may identify a summary of programs offered, admission guidelines, campus visit dates and information on cost of attendance on any of the Oregon universities and colleges at: <https://www.oregon.gov/highered/plan-pay-for-college/Pages/public-universities.aspx>

General information on the seven public universities is shown below.

## **Eastern Oregon University**

[www.eou.edu](http://www.eou.edu)

Location: La Grande, Northeast Oregon, 4 hours east of Portland

Approximate number of students: 4,000

Some Notable Majors: Business Administration, Liberal Studies, Multidisciplinary Studies, Elementary Education, Anthropology/Sociology, Physical Activity and Health, Fire Services Administration

## **Oregon Tech**

[www.OIT.edu](http://www.OIT.edu)

Locations: Klamath Falls, Southern Oregon;  
and Wilsonville, 15 minutes south of Portland

Approximate number of students: 4,500

Some Notable Majors: Engineering, Allied Health Professions, Management, Communication Studies, Applied Psychology, Applied Sciences

## **Oregon State University**

[www.oregonstate.edu](http://www.oregonstate.edu)

Location: Corvallis, 1½ hours south of Portland

Approximate number of students: 28,000

Some Notable Majors: Engineering, Computer Science, Business, Science and Natural Resources, Health and Human Sciences, Graphic Design, Apparel Design, Music

## **Portland State University**

[www.pdx.edu](http://www.pdx.edu)

Location: Portland, downtown

Approximate number of students: 29,000

Some Notable Majors: Biology, Engineering and Computer Sciences, Management, Fine and Performing Arts, Psychology, Communication Studies

## **Southern Oregon University**

[www.sou.edu](http://www.sou.edu)

Location: Ashland, Southwestern Oregon, 20 minutes south of Medford

Approximate number of students: 6,000

Some Notable Majors: Business, Computer Science, Criminal Justice, Education, Emerging Media and Digital Arts, Environmental Studies, Outdoor Adventure Leadership, Theatre Arts

## **University of Oregon**

[www.uoregon.edu](http://www.uoregon.edu)

Location: Eugene, 2 hours south of Portland, 2½ hours north of Medford

Approximate number of students: 24,500

Some Notable Majors: Architecture, Business Administration, Computer Science, Educational Studies, Journalism, Human Physiology, Marine Biology, Family and Human Services

## **Western Oregon University**

[www.wou.edu](http://www.wou.edu)

Location: Monmouth, 20 minutes west of Salem, 1½ hours south of Portland

Approximate number of students: 6,000

Some Notable Majors: Computer Science, Criminal Justice, Psychology, Business, Education, Biology, American Sign Language





# CAREER & TECHNICAL EDUCATION

## **READY TO START A CAREER?**

**You could be on your way to a rewarding career in less than a year!  
UCC offers coursework for a variety of careers.**

Career and technical programs provide instruction in the knowledge and skills from a wide variety of occupations that demand education beyond high school. Students prepare for employment by completing a two-year associate degree in applied sciences or by completing shorter term certificate programs. In many fields, career and technical education may enhance employment opportunities by providing students with industry certifications desired by employers.

While career-technical programs are designed primarily to prepare you for immediate employment, many also offer opportunities for transfer to another college or university. You are encouraged to speak with an academic advisor about these possibilities.

**GET STARTED NOW!**

# CAREER & TECHNICAL CERTIFICATES AND DEGREES

## CERTIFICATES OF COMPLETION

Certificates of completion are awarded for occupational content only. They must be state approved, have a defined job entry point, represent collegiate level work, and meet State Board of Education criteria. Certificates of completion programs must be comprised of 12 to 108 credits.

A cumulative grade point of 2.00 minimum and attendance at UCC are required. Satisfactory completion of a course or series of courses may be recognized by the award of a certificate of completion. Specific awards are dependent upon the nature of the program.

Related Instruction requirement for one-year certificate programs (45 or more credits) are as follows. Complete a recognizable core of general education courses, including:

- A. Satisfactory placement scores in mathematics, and/or writing, which meet or exceed the competencies established for each individual program by the program's Advisory Board.

Required learning outcome competency may be provided by:

- a. Embedded Learning
  - b. Completion of required specified content area class(es)
  - c. Competency Testing
- B. WR 115 Introduction to Expository Writing or above
  - C. Three credits of mathematics numbered 52 or above.
  - D. Human Relations Component

## ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) degree is intended to prepare graduates for direct entry into the workforce. The AAS degree may also help to prepare students for career advancement, occupational licensure, or study at the baccalaureate level. As a minimum, the AAS must include 90 quarter credits or equivalent proficiency; a recognizable core

of or demonstrated competencies in specific general education courses; and an established standard of academic achievement. Curricula focuses on the application of knowledge and skills related to the occupations and careers identified by the program. Electives may include a combination of lower division collegiate transfer and/or collegiate-level career and technical education courses.

General requirements for the Associate of Applied Science are:

The Associate of Applied Science will be conferred on students who complete a two-year program in Career-Technical Education.

The Related Instruction component is also required for AAS degree (see above information under Certificates of Completion).

The Associate of Applied Science Degree will be awarded to students who:

1. Satisfactorily complete all required courses in a specified occupational curriculum.
2. Complete a minimum of 90 credit hours or equivalent proficiency.
3. Maintain a cumulative grade point average of 2.00.
4. Complete a recognizable core of related instruction courses, including:
  - A. Demonstrated competency in mathematics and/or writing which meets or exceeds the competencies established for each individual program by the program's Advisory Board.Required learning outcome competency may be provided by:
  - a. Embedded Learning
  - b. Successful completion of required specified content area class(es)
  - c. Competency Testing

- B. Four (4) credit hours of Mathematics numbered 52 or above or demonstrated competency.
  - C. Four (4) credit hours in WR 115 English Composition or above or demonstrated competency.
  - D. Three (3) credit hours of Human Relations as specified by program.
5. Attend UCC for at least two terms, including the term prior to completion.
  6. Complete a minimum of 25% credit hours at UCC, 15 of which must be in a career and technical discipline (see pages 46-47 for a list of approved courses). A maximum of 24 credits of CWE will count towards the Associate of Applied Science Degree.

## Human Relations includes:

1. The ways people interact with each other, either individually or in groups;
2. Basic communication skills such as speaking, listening, and writing; and
3. Interpersonal and intercultural sensitivity.

## Approved Human Relations Courses

HD 136	Strategies for Success	(3)
NRS 110	Foundations of Nursing-Health Promotion	(9)
NRS 111	Foundations of Nursing-Chronic Illness I	(6)
NRS 112	Foundations of Nursing-Acute Illness I	(6)
PN 101	Foundations of Practical Nursing	(9)
PSY 101	Psychology of Human Relations	(3)
SDP 113	Human Relations for Supervisors	(3)
SP 105	Listening	(3)
SP 218	Interpersonal Communication	(3)
SP 219	Small Group Discussion	(3)

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<b>CRIMINAL JUSTICE</b>			Human Services		166	Welding	198	200
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			Maintenance Millwright					

# ELECTRICIAN APPRENTICESHIP TECHNOLOGIES

CERTIFICATE: LIMITED ELECTRICIAN APPRENTICESHIP TECHNOLOGIES – 24 CREDITS

## CAREER DESCRIPTION

Apprenticeship training is based on BOLI-ATD and local JATC trade-specific standards and is restricted to BOLI-ATD registered apprentices. Therefore, this is a closed enrollment program and not available to the general student population.

Apprenticeship training is a two-fold process. The apprentice, as an employee, earns a wage while receiving on-the-job training and also attends related training classes. Local JATCs of both labor and management work with the College to implement the apprenticeship programs. Progress of each apprentice is reviewed and evaluated every six months.

The apprenticeship model provides statewide transfer opportunities, ladder-type Certificates of Completion, Associate of Applied Science degrees and an optional transfer path into a Bachelor of Applied Science degree in Technology and Management at Oregon Tech.

Opportunities statewide and more information about apprenticeship can be obtained at the Oregon Bureau of Labor and Industries Apprenticeship Training Division (BOLI-ATD) website [www.oregon.gov/boli/atd](http://www.oregon.gov/boli/atd).

The following 4000-hour BOLI-ATD registered apprenticeship and Oregon Building Codes licensed trade is offered:

- Limited Maintenance Electrician

## PROGRAM OUTCOMES

This apprenticeship program is designed to provide specialized training for students who are registered with BOLI-ATD as Limited Maintenance Electricians. This course of study is aligned with the Oregon State Standards for Limited Maintenance Electrician.

All required courses must be successfully completed with a grade of “C” or better. Upon completion of the Limited Electrician Apprenticeship Technologies Program, students will be ready to test for the Limited Maintenance Electrician License. Students will:

1. Demonstrate knowledge of electrical fundamentals and safety
  - a. Describe and apply basic theory of electrical sources
  - b. Demonstrate safe working practices in accordance with state and federal regulation
2. Demonstrate accurate measurements, calculations and use of equipment
  - a. Solve electrical equations using trade-specific mathematical formulas
  - b. Calculate voltage drop
  - c. Demonstrate appropriate use and care of trade-specific equipment
  - d. Use test equipment to make electrical measurements
3. Assess and troubleshoot various electrical situations
  - a. Draw and interpret blueprints and schematics
  - b. Describe various troubleshooting techniques of trade-specific equipment

4. Electrical Code and Exam Prep
  - a. Interpret the National Electrical Code (NEC) and Oregon Specialty Code (OSC)
  - b. Use the NEC Articles and Tables to perform various calculations
  - c. Complete and pass timed NEC practice exams with a 75% or higher to prepare for the State license exam

## APPLICATION & ACCEPTANCE

State and federal laws determine entry requirements for all apprenticeship programs. General minimum requirements for entrance are:

- 18 years of age
- High school diploma required; GED accepted
- One year of high school math with a passing grade of C or better or appropriate placement test scores.

Candidates for this program are selected while employed by an approved training agent. Upon being selected as an apprentice and acceptance after interview by the local JATC, a contractual agreement is secured between the apprentice, the JATC, the sponsoring employer, and BOLI-ATD.

Enrollment into this program requires sponsorship by an approved training agent (employer) and successful completion of MTH 052 or MTH 060 with a grade of “C” or better, or equivalent placement scores. CPR/First Aid certification is also required for entry. Additional information can be obtained from the Apprenticeship Coordinator at 541-440-4675.



# CERTIFICATE — Limited Electrician Apprenticeship Technologies

24 Credits — Required Sequence (Students should see the Apprenticeship Coordinator to customize their educational plan.)

**SEQUENCE**

\* Basic Electronics  
and Electricity  
APR 151 4 CR

Electrical Applications  
and Techniques  
APR 153 3 CR

Introduction to the  
National Electrical Code  
APR 157 2 CR

Electrical Blueprint  
Reading  
APR 159 2 CR

AC Electronics  
and Electricity  
APR 165 4 CR

Electric Motors and  
Transformers  
APR 167 3 CR

Electrical Code Study II  
APR 169 2 CR

Electrical Code Study III  
APR 253 2 CR

Motor Controls I  
APR 255 2 CR

CREDITS  
24

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see the Apprenticeship Coordinator for a degree planning worksheet for this program.

# ELECTRICIAN APPRENTICESHIP TECHNOLOGIES

CERTIFICATE: ELECTRICIAN APPRENTICESHIP TECHNOLOGIES – 64 CREDITS

## CAREER DESCRIPTION

Apprenticeship training is based on BOLI-ATD and local JATC trade-specific standards and is restricted to BOLI-ATD registered apprentices. Therefore, this is a closed enrollment program and not available to the general student population.

Apprenticeship training is a two-fold process. The apprentice, as an employee, earns a wage while receiving on-the-job training and also attends related training classes. Local JATCs of both labor and management work with the College to implement the apprenticeship programs. Progress of each apprentice is reviewed and evaluated every six months.

The apprenticeship model provides statewide transfer opportunities, ladder-type Certificates of Completion, Associate of Applied Science degrees and an optional transfer path into a Bachelor of Applied Science degree in Technology and Management at Oregon Tech.

Opportunities statewide and more information about apprenticeship can be obtained at the Oregon Bureau of Labor and Industries Apprenticeship Training Division (BOLI-ATD) website [www.oregon.gov/boli/atd](http://www.oregon.gov/boli/atd).

The following 8000-hour BOLI-ATD registered apprenticeship and Oregon Building Codes licensed trades are offered:

- Manufacturing Plant Inside Electrician
- Inside Electrician

## PROGRAM OUTCOMES

This apprenticeship program is designed to provide specialized training for students who are registered with BOLI-ATD as Manufacturing Plant Electricians or General Journey Inside Electricians. This course of study is aligned with the Oregon State Standards for Manufacturing Plant Electricians and General Journey Inside Electricians.

All required courses must be successfully completed with a grade of “C” or better. Upon completion of the Electrician Apprenticeship Technologies Program, students will be ready to test for the Manufacturing Plant Electrician License or the General Journeyman Electrician License.

Students will:

1. Demonstrate knowledge of electrical fundamentals and safety
  - a. Describe and apply basic theory of electrical sources
  - b. Demonstrate safe working practices in accordance with state and federal regulation
2. Demonstrate accurate measurements, calculations and use of equipment
  - a. Solve electrical equations using trade-specific mathematical formulas
  - b. Calculate voltage drop
  - c. Demonstrate appropriate use and care of trade-specific equipment
  - d. Use test equipment to make electrical measurements
3. Assess and troubleshoot various electrical situations
  - a. Draw and interpret blueprints and schematics
  - b. Describe various troubleshooting techniques of trade-specific equipment
  - c. Operate PLCs according to trade-specific applications and methodology

4. Electrical Code and Exam Prep
  - a. Demonstrate knowledge of industry terminology
  - b. Interpret the National Electrical Code (NEC) and Oregon Specialty Code (OSC)
  - c. Utilize the Oregon Administrative Rules (OARs) in relation to the NEC and OSC
  - d. Use the NEC Articles and Tables to perform various calculations
  - e. Complete and pass timed NEC practice exams with a 75% or higher to prepare for the State Journey level exam

## APPLICATION & ACCEPTANCE

State and federal laws determine entry requirements for all apprenticeship programs. General minimum requirements for entrance are:

- 18 years of age
- High school diploma required; GED accepted
- One year of high school math with a passing grade of C or better or appropriate placement test scores

Candidate selection varies by occupation. Manufacturing Plant Electricians are selected while employed by an approved training agent; Inside Electricians apply when the trade opens for application. Upon being selected as an apprentice and acceptance after interview by the local JATC, a contractual agreement is secured between the apprentice, the JATC, the sponsoring employer, and BOLI-ATD.

Enrollment into this closed-enrollment program requires sponsorship by an approved training agent (employer) and successful completion of MTH 052 or MTH 060 with a grade of C or better, or equivalent placement scores. CPR/First Aid certification is also required for entry. Additional information can be obtained from the Apprenticeship Coordinator at 541-440-4675.

# CERTIFICATE — Electrician Apprenticeship Technologies

64 Credits — Required Sequence (Students should see the Apprenticeship Coordinator to customize their educational plan.)

**SEQUENCE**

<b>Beginning Welding for Apprentices</b> <i>(* Manufacturing Plant Electrician only)</i> APR 140 1 CR	<b>Residential Wiring</b> <i>(* Inside Electrician only)</i> APR 160 3 CR	<b>Electrical Code Study III</b> APR 253 2 CR	<b>Motor Controls II</b> APR 265 2 CR
<b>Basic Electronics and Electricity</b> APR 151 4 CR	<b>Commercial Wiring</b> APR 163 3 CR	<b>Motor Controls I</b> APR 255 2 CR	<b>Advanced Code Study</b> APR 267 3 CR
<b>Electrical Applications and Techniques</b> APR 153 3 CR	<b>AC Electronics and Electricity</b> APR 165 4 CR	<b>High Voltage Applications</b> APR 257 2 CR	<b>Journeyman Exam Preparation</b> APR 269 3 CR
<b>Electrical Best Practices</b> APR 155 2 CR	<b>Electric Motors and Transformers</b> APR 167 3 CR	<b>Solid State and Digital Applications</b> APR 259 4 CR	<b>** Elective</b> <i>(* Manufacturing Plant Electrician only)</i> 2 CR as needed to complete 64 CR
<b>Introduction to the National Electrical Code</b> APR 157 2 CR	<b>Electrical Code Study II</b> APR 169 2 CR	<b>Electrical Code Study IV</b> APR 261 2 CR	<b>Elementary Algebra</b> MTH 065 (OR HIGHER) 4 CR
<b>Electrical Blueprint Reading</b> APR 159 2 CR	<b>Electrical Sensors and Control</b> APR 251 3 CR	<b>Communications, Alarms and Controls</b> APR 263 2 CR	<b>Academic Composition</b> WR 121 4 CR
			<b>Human Relations</b> <i>from Approved List, p. 86</i> 3 CR

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see the Apprenticeship Coordinator for a degree planning worksheet for this program.

\*Course requirements vary slightly based on specific electrical trade. Manufacturing Plant Technicians should take APR 140 (1 cr) and Electives (2 cr); Inside Electricians should take APR 160 (3 cr)

\*\*Contact Apprenticeship Coordinator for approved list of electives.

# ELECTRICIAN APPRENTICESHIP TECHNOLOGIES

ASSOCIATE OF APPLIED SCIENCE: ELECTRICIAN APPRENTICESHIP TECHNOLOGIES – 92 CREDITS

## CAREER DESCRIPTION

Apprenticeship training is based on BOLI-ATD and local JATC trade-specific standards and is restricted to BOLI-ATD registered apprentices. Therefore, this is a closed enrollment program and not available to the general student population.

Apprenticeship training is a two-fold process. The apprentice, as an employee, earns a wage while receiving on-the-job training and also attends related training classes. Local JATCs of both labor and management work with the College to implement the apprenticeship programs. Progress of each apprentice is reviewed and evaluated every six months.

The Certificates and AAS Degrees provide additional access to related training courses across the state for registered apprentices and aligned program outcomes, assessments, and courses. The apprenticeship model provides statewide transfer opportunities, ladder-type Certificates of Completion, Associate of Applied Science degrees and an optional transfer path into a Bachelor of Science degree in Technology and Management at Oregon Institute of Technology.

Opportunities statewide and more information about apprenticeship can be obtained at the Oregon Bureau of Labor and Industries Apprenticeship Training Division (BOLI-ATD) website [www.oregon.gov/boli/atd](http://www.oregon.gov/boli/atd).

The following 8000-hour BOLI-ATD registered apprenticeship and Oregon Building Codes licensed trades are offered:

- Manufacturing Plant Electrician
- Inside Electrician

**NOTE:** Students who transfer to UCC with BOLI-ATD issued Certificates of Completion and/or journey cards seeking a UCC Certificate or degree should contact the Apprenticeship Coordinator at 541-440-4675 for advising.

## PROGRAM OUTCOMES

This apprenticeship program is designed to provide specialized training for students who are registered with BOLI-ATD as Manufacturing Plant Electricians or General Journey Inside Electricians. This course of study is aligned with the Oregon State Standards for Manufacturing Plant Electricians and General Journey Inside Electricians.

All required courses must be successfully completed with a grade of “C” or better. Upon completion of the Electrician Apprenticeship Technologies Program, students will be ready to test for the Manufacturing Plant Electrician License or the General Journeyman Electrician License. Students will:

1. Demonstrate knowledge of electrical fundamentals and safety
  - a. Describe and apply basic theory of electrical sources
  - b. Demonstrate safe working practices in accordance with state and federal regulation
2. Demonstrate accurate measurements, calculations and use of equipment
  - a. Solve electrical equations using trade-specific mathematical formulas
  - b. Calculate voltage drop
  - c. Demonstrate appropriate use and care of trade-specific equipment
  - d. Use test equipment to make electrical measurements
3. Assess and troubleshoot various electrical situations
  - a. Draw and interpret blueprints and schematics
  - b. Describe various troubleshooting techniques of trade-specific equipment
  - c. Operate PLCs according to trade-specific applications and methodology
4. Electrical Code and Exam Prep
  - a. Demonstrate knowledge of industry terminology

- b. Interpret the National Electrical Code (NEC) and Oregon Specialty Code (OSC)
- c. Utilize the Oregon Administrative Rules (OARs) in relation to the NEC and OSC
- d. Use the NEC Articles and Tables to perform various calculations
- e. Complete and pass timed NEC practice exams with a 75% or higher to prepare for the State Journey level exam

## APPLICATION & ACCEPTANCE

State and federal laws determine entry requirements for all apprenticeship programs. General minimum requirements for entrance are:

- 18 years of age
- High school diploma required; GED accepted
- One year of high school math with a passing grade of C or better or better or appropriate placement test scores

Candidate selection varies by occupation. Manufacturing Plant Electricians are selected while employed by an approved training agent; Inside Electricians apply when the trade opens for application. Upon being selected as an apprentice and acceptance after interview by the local JATC, a contractual agreement is secured between the apprentice, the JATC, the sponsoring employer, and BOLI-ATD.

Enrollment into this closed-enrollment program requires sponsorship by an approved training agent (employer) and successful completion of MTH 052 or MTH 060 with a grade of C or better, or equivalent placement scores. CPR/First Aid certification is also required for entry. Additional information can be obtained from the Apprenticeship Coordinator at 541-440-4675.



# ASSOCIATE OF APPLIED SCIENCE — Electrician Apprenticeship Technologies

92 Credits — Required Sequence (Students should see the Apprenticeship Coordinator to customize their educational plan.)

**SEQUENCE**

<b>Beginning Welding for Apprentices</b> <i>(* Manufacturing Plant Electrician only)</i> APR 140 1 CR	<b>Commercial Wiring</b> APR 163 3 CR	<b>High Voltage Applications</b> APR 257 2 CR	<b>Elementary Algebra</b> MTH 065 (OR HIGHER) 4 CR	
<b>Basic Electronics and Electricity</b> APR 151 4 CR	<b>AC Electronics and Electricity</b> APR 165 4 CR	<b>Solid State and Digital Applications</b> APR 259 4 CR	<b>Academic Composition</b> WR 121 4 CR	
<b>Electrical Applications and Techniques</b> APR 153 3 CR	<b>Electric Motors and Transformers</b> APR 167 3 CR	<b>Electrical Code Study IV</b> APR 261 2 CR	<b>Human Relations</b> <i>from Approved List, p. 86</i> 3 CR	
<b>Electrical Best Practices</b> APR 155 2 CR	<b>Electrical Code Study II</b> APR 169 2 CR	<b>Communications, Alarms and Controls</b> APR 263 2 CR	<b>6 credits of Related Instruction from the list below:</b>  <b>Intermediate Algebra</b> MTH 095 (OR HIGHER) 4 CR <i>AND/OR</i>  <b>Argument, Research, and Multimodal Composition</b> WR 122 (OR HIGHER) 4 CR <i>AND/OR</i>  <b>Human Relations</b> <i>from Approved List, p. 86</i> 3 CR	
<b>Introduction to the National Electrical Code</b> APR 157 2 CR	<b>Electrical Sensors and Control</b> APR 251 3 CR	<b>Motor Controls II</b> APR 265 2 CR		
<b>Electrical Blueprint Reading</b> APR 159 2 CR	<b>Electrical Code Study III</b> APR 253 2 CR	<b>Advanced Code Study</b> APR 267 3 CR		
<b>Residential Wiring</b> <i>(* Inside Electrician only)</i> APR 160 3 CR	<b>Motor Controls I</b> APR 255 2 CR	<b>Journeyman Exam Preparation</b> APR 269 3 CR		
				<b>Credit for Prior Certification (Journeyman Card)</b> 22 CR
				<b>** Electives</b> <i>(* Manufacturing Plant Electrician only)</i> 2 CR <i>as needed to complete 92 cr</i>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see the Apprenticeship Coordinator for a degree planning worksheet for this program.

\*Course requirements vary slightly based on specific electrical trade. Manufacturing Plant Technicians should take APR 140 (1 cr) and Electives (2 cr); Inside Electricians should take APR 160 (3 cr)

\*\*Contact Apprenticeship Coordinator for approved list of electives.

# INDUSTRIAL MECHANICS AND MAINTENANCE TECHNOLOGY APPRENTICESHIP

CERTIFICATE: INDUSTRIAL MECHANICS AND MAINTENANCE TECHNOLOGY APPRENTICESHIP – 49\* CREDITS

## CAREER DESCRIPTION

Apprenticeship training is based on BOLI-ATD and local JATC trade-specific standards and is restricted to BOLI-ATD registered apprentices. Therefore, this is a closed enrollment program and not available to the general student population.

Apprenticeship training is a two-fold process. The apprentice, as an employee, earns a wage while receiving on-the-job training and also attends related training classes. Local JATCs of both labor and management work with the College to implement the apprenticeship programs. Progress of each apprentice is reviewed and evaluated every six months.

The apprenticeship model provides statewide transfer opportunities, ladder-type Certificates of Completion, Associate of Applied Science degrees and an optional transfer path into a Bachelor of Applied Science degree in Technology and Management at Oregon Tech.

Opportunities statewide and more information about apprenticeship can be obtained at the Oregon Bureau of Labor and Industries Apprenticeship Training Division (BOLI-ATD) website [www.oregon.gov/boli/atd](http://www.oregon.gov/boli/atd).

The following 8000-hour BOLI-ATD registered apprenticeship are offered:

- Industrial Maintenance Millwright
- Industrial Maintenance Machinist

## PROGRAM OUTCOMES

This apprenticeship program is designed to provide specialized training for students who are registered with BOLI-ATD as Industrial Maintenance Millwrights, Industrial Maintenance Machinists. This course of study is aligned with the Oregon State Standards Industrial Maintenance Millwrights, Industrial Maintenance Machinists.

All required courses must be successfully completed with a grade of “C” or better. Upon completion of the Industrial Mechanics and Maintenance Apprenticeship Technology Program, students will be issued trade-specific Oregon State Journey Card. Students will:

1. Demonstrate knowledge of machinery operation and maintenance
  - a. Demonstrate the functions of trade-specific industrial systems
  - b. Define lubrication processes with trade-specific industrial materials and equipment
  - c. Identify mechanical and/or electrical industrial systems
  - d. Demonstrate the proper care, use, and storage of hand and power tools
  - e. Develop machine shop skills in troubleshooting
2. Demonstrate fabrication techniques
  - a. Read and interpret trade-specific industrial blueprints
  - b. Perform trade-specific welding applications
  - c. Analyze the properties of materials and how they apply to trade-specific fabricating applications
  - d. Fabricate industrial materials in appropriate trade-specific applications

3. Demonstrate mathematics of the trade
  - a. Calculate elementary algebraic equations and formulas
  - b. Apply appropriate formulas to mathematical situations
4. Demonstrate safe working practices in accordance with state and federal regulations
  - a. Apply standardized OSHA practices to specific trade applications
  - b. Describe procedures for proper removal and disposal of hazardous materials

## APPLICATION & ACCEPTANCE

State and federal laws determine entry requirements for all apprenticeship programs.

General minimum requirements for entrance are:

- 18 years of age
- High school diploma required; GED accepted

Candidates for this program are selected while employed by an approved training agent. Upon being selected as an apprentice and acceptance after interview by the local JATC, a contractual agreement is secured between the apprentice, the JATC, the sponsoring employer, and BOLI-ATD.

Enrollment into this closed-enrollment program requires sponsorship by an approved training agent (employer) and successful completion of MTH 052 or MTH 060 with a grade of C or better, or equivalent placement scores. CPR/First Aid certification is also required for entry. Additional information can be obtained from the Apprenticeship Coordinator at 541-440-4675.

# CERTIFICATE — Industrial Mechanics and Maintenance Technology Apprenticeship

\*49 Credits — Required Sequence (Students should see an advisor to customize their educational plan.)

**SEQUENCE**

## MAINTENANCE MACHINIST, MILLWRIGHT

Beginning Welding for Apprentices  
APR 140 1 CR

\*\* Machine Shop Practices I  
APR 111 3 CR

Hydraulics I  
APR 121 3 CR

Basic Metallurgy  
APR 131 3 CR

Introduction to Expository Writing  
(OR HIGHER) WR 115 4 CR

Human Relations  
*from Approved List, p. 86*  
3 CR

Credit for Prior Certification  
(Journeyman Card) 22 CR

6 credits Related Instruction from the list below:

Elementary Algebra  
MTH 065 (OR HIGHER) 4 CR *AND/OR*  
Academic Composition  
WR 121 (OR HIGHER) 4 CR *AND/OR*  
Human Relations  
*from Approved List, p. 86* 3 CR

## MAINTENANCE MILLWRIGHT

Industrial Safety APR 120 3 CR	Rigging Fundamentals APR 228 3 CR	Machine Shop Practices II APR 112 3 CR	Blueprint Reading and Sketching APR 145 3 CR
Mechanical Principles & Drive Designs APR 130 3 CR	Basic Pneumatics APR 229 3 CR	Hydraulics II APR 122 3 CR	* Electives
Intermediate Welding for Apprentices APR 141 1 CR	Computer Aided Drafting I APR 115 3 CR	Hydraulics III APR 123 3 CR	As needed to complete 49 CR
		Applied Geometry MTH 075 3 CR	

## MACHINIST

Industrial Safety APR 120 3 CR	Intro to Computer Information Systems CIS 120 4 CR	Applied Geometry MTH 075 3 CR
Mechanical Principles & Drive Designs APR 130 3 CR	Computer Aided Drafting 1 APR 115 3 CR	Blueprint Reading and Sketching APR 145 3 CR
Intermediate Welding for Apprentices APR 141 1 CR	Machine Shop Practices II APR 112 3 CR	* Electives
Rigging Fundamentals APR 228 3 CR	Machine Shop Practices III APR 113 3 CR	As needed to complete 49 CR

## NOTES

\* Contact Apprenticeship Coordinator for approved list of electives.

# INDUSTRIAL MECHANICS AND MAINTENANCE TECHNOLOGY APPRENTICESHIP

ASSOCIATE OF APPLIED SCIENCE:  
INDUSTRIAL MECHANICS AND MAINTENANCE TECHNOLOGY APPRENTICESHIP – 91 CREDITS

## CAREER DESCRIPTION

Apprenticeship training is based on BOLI-ATD and local JATC trade-specific standards and is restricted to BOLI-ATD registered apprentices. Therefore, this is a closed enrollment program and not available to the general student population.

Apprenticeship training is a two-fold process. The apprentice, as an employee, earns a wage while receiving on-the-job training and also attends related training classes. Local JATCs of both labor and management work with the College to implement the apprenticeship programs. Progress of each apprentice is reviewed and evaluated every six months.

The apprenticeship model provides statewide transfer opportunities, ladder-type Certificates of Completion, Associate of Applied Science degrees and an optional transfer path into a Bachelor of Applied Science degree in Technology and Management at Oregon Tech.

Opportunities statewide and more information about apprenticeship can be obtained at the Oregon Bureau of Labor and Industries Apprenticeship Training Division (BOLI-ATD) website [www.oregon.gov/boli/atd](http://www.oregon.gov/boli/atd).

The following 8000-hour BOLI-ATD registered apprenticeship are offered:

- Industrial Maintenance Millwright
- Industrial Maintenance Machinist
- Fabricator/Welder

## PROGRAM OUTCOMES

This apprenticeship program is designed to provide specialized training for students who are registered with BOLI-ATD as Industrial Maintenance Millwrights, Industrial Maintenance Machinists. This course of study is aligned with the Oregon State Standards Industrial Maintenance Millwrights, Industrial Maintenance Machinists.

All required courses must be successfully completed with a grade of “C” or better. Upon completion of the Industrial Mechanics and Maintenance Apprenticeship Technology Program, students will be issued trade-specific Oregon State Journey Card. Students will:

1. Demonstrate knowledge of machinery operation and maintenance
  - a. Demonstrate the functions of trade-specific industrial systems
  - b. Define lubrication processes with trade-specific industrial materials and equipment
  - c. Identify mechanical and/or electrical industrial systems
  - d. Demonstrate the proper care, use, and storage of hand and power tools
  - e. Develop machine shop skills in troubleshooting
2. Demonstrate fabrication techniques
  - a. Read and interpret trade-specific industrial blueprints
  - b. Perform trade-specific welding applications
  - c. Analyze the properties of materials and how they apply to trade-specific fabricating applications
  - d. Fabricate industrial materials in appropriate trade-specific applications
3. Demonstrate mathematics of the trade
  - a. Calculate elementary algebraic equations and formulas
  - b. Apply appropriate formulas to mathematical situations
4. Demonstrate safe working practices in accordance

with state and federal regulations

- a. Apply standardized OSHA practices to specific trade applications
- b. Describe procedures for proper removal and disposal of hazardous materials

NOTE: Students who transfer to UCC with BOLI-ATD issued Certificates of Completion and/or journey cards seeking a UCC Certificate or degree should contact the Apprenticeship Coordinator at 541-440-4675 for advising.

## APPLICATION & ACCEPTANCE

State and federal laws determine entry requirements for all apprenticeship programs. General minimum requirements for entrance are:

- 18 years of age
- High school diploma required; GED accepted

Candidates for this program are selected while employed by an approved training agent. Upon being selected as an apprentice and acceptance after interview by the local JATC, a contractual agreement is secured between the apprentice, the JATC, the sponsoring employer, and BOLI-ATD.

Enrollment into this program requires sponsorship by an approved training agent (employer) and successful completion of MTH 052 or MTH 060 with a grade of “C” or better, or equivalent placement scores. CPR/First Aid certification is also required for entry. Additional information can be obtained from the Apprenticeship Coordinator at 541-440-4675.

Enrollment into this closed-enrollment program requires vsponsorship by an approved training agent (employer) and successful completion of MTH 052 or MTH 060 with a grade of C or better, or equivalent placement scores. CPR/First Aid certification is also required for entry. Additional information can be obtained from the Apprenticeship Coordinator at 541-440-4675.



# ASSOCIATE OF APPLIED SCIENCE — Industrial Mechanics and Maintenance Technology – Millwright, Machinist, Fabricator/Welder

91 Credits — Required Sequence (Students should see the Apprenticeship Coordinator to customize their educational plan.)

**SEQUENCE**

Beginning Welding for Apprentices  
APR 140 1 CR

\*\* Machine Shop Practices I  
APR 111 3 CR

Hydraulics I  
APR 121 3 CR

Basic Metallurgy  
APR 131 3 CR

Introduction to Expository Writing  
(OR HIGHER) WR 115 4 CR

Human Relations  
*from Approved List, p. 86*  
3 CR

Credit for Prior Certification  
(Journeyman Card) 22 CR

*6 credits Related Instruction  
from the list below:*

Elementary Algebra  
MTH 065 (OR HIGHER) 4 CR *AND/OR*

Academic Composition  
WR 121 (OR HIGHER) 4 CR *AND/OR*

Human Relations  
*from Approved List, p. 86* 3 CR

## MAINTENANCE MILLWRIGHT

Mechanical Principles  
& Drive Designs  
APR 130 3 CR

Basic Pneumatics  
APR 229 3 CR

Machine Shop Practices II  
APR 112 3 CR

Hydraulics II  
APR 122 3 CR

Hydraulics III  
APR 123 3 CR

Industrial Safety  
APR 120 3 CR

Intermediate Welding  
for Apprentices  
APR 141 1 CR

Rigging Fundamentals  
APR 228 3 CR

Applied Geometry  
MTH 075 3 CR

Computer Aided Drafting I  
APR 115 3 CR

Blueprint Reading  
and Sketching  
APR 145 3 CR

\* Electives  
14 CR

## MACHINIST

Mechanical Principles  
& Drive Designs  
APR 130 3 CR

Intro to Computer  
Information Systems  
CIS 120 4 CR

Machine Shop Practices II  
APR 112 3 CR

Machine Shop Practices III  
APR 113 3 CR

Industrial Safety  
APR 120 3 CR

Intermediate Welding  
for Apprentices  
APR 141 1 CR

Rigging Fundamentals  
APR 228 3 CR

Applied Geometry  
MTH 075 3 CR

Computer Aided Drafting I  
APR 115 3 CR

Blueprint Reading  
and Sketching  
APR 145 3 CR

\* Electives  
16 CR

## FABRICATOR/WELDER

Industrial Safety  
APR 120 3 CR  
*OR* Rigging Fundamentals  
APR 228 3 CR

Blueprint Reading and Sketching  
APR 145 3 CR

*OR* Computer Aided Drafting I  
APR 115 3 CR

Machine Shop Practices II  
APR 112 3 CR

Hydraulics II  
APR 122 3 CR

Mechanical Principles  
& Drive Designs  
APR 130 3 CR

Intermediate Welding  
for Apprentices  
APR 141 1 CR

Basic Pneumatics  
APR 229 3 CR

\* Electives  
25 CR

**NOTES** \* Contact Apprenticeship Coordinator for approved list of electives.

# AUTOMOTIVE TECHNOLOGY

## CAREER PATHWAYS CERTIFICATE – AUTOMOTIVE BASIC TECHNICIAN – 33 CREDITS

### CAREER DESCRIPTION

The Automotive Program is designed to provide basic skills and technical knowledge required to achieve an entry-level position as an Automotive Technician. Courses offered may be transferred to other community colleges and four-year schools. A basic tool set is required of all entering students and a list of those required tools are available from the automotive instructors. UCC offers Automotive Certificates and AAS options.

Minimum GPA in automotive classes shall be 2.00.

For current program requirements, students are strongly urged to consult with a member of the automotive staff or an advisor. Automotive courses are offered in four- to six-week modules. Check the class schedule to determine

the sequence of courses and the order in which they will be taught each year. The UCC Automotive program is accredited by the National Automotive Technical Education Foundation.

### PROGRAM OUTCOMES

The technical knowledge required to achieve an entry-level position as an Automotive Technician to meet current industry standards require courses that enhance critical problem solving and advance practical diagnostic skills.

Students who successfully complete the Automotive Basic Technician Pathways Certificate will:

1. Apply fundamentals of automotive service training, including the basics of automotive diagnostics and repair, pre-delivery inspection and warranty repair procedures
2. Identify, inspect, disassemble and assemble basic components of automotive power plants
3. Apply knowledge of the function, construction, operation, troubleshooting and service of disc, drum and ABS brake systems
4. Apply knowledge of electrical principles, semi-conductors, microprocessors and wiring diagrams to diagnose and repair malfunctions of automotive electrical systems
5. Apply knowledge of the function, construction, operation, troubleshooting and service of front and rear wheel drive manual and automatic transmissions and transaxles

## PATHWAYS CERTIFICATE — Automotive Basic Technician

33 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**SEQUENCE**

Orientation to  
Automotive Technology  
AUT 100 1 CR

Internal Combustion  
Engines  
AUT 151 6 CR

Automotive Brakes  
AUT 155 6 CR

Power Trains  
AUT 161 5 CR

Automotive Electricity I  
AUT 168 5 CR

Automotive Electricity II  
AUT 169 5 CR

Automotive Electricity III  
AUT 170 5 CR

CREDITS  
33

### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# AUTOMOTIVE TECHNOLOGY

CAREER PATHWAYS CERTIFICATE – AUTOMOTIVE ADVANCED TECHNICIAN – 31 CREDITS

## CAREER DESCRIPTION

Students should have received the Basic Technician certificate before pursuing this certificate. This is a continuation of the skills learned in Basic Technician. The Automotive Program is designed to provide basic skills and technical knowledge required to achieve an entry-level position as an Automotive Technician. Courses offered may be transferred to other community colleges and four-year schools. A basic tool set is required of all entering students and a list of those required tools are available from the automotive instructors. UCC offers Automotive Certificates and AAS options.

Minimum GPA in automotive classes shall be 2.00. For current program requirements, you are strongly urged to consult with a member of the automotive staff or an advisor. Automotive courses are offered in four- to six-week modules.

Check the class schedule to determine the sequence of courses and the order in which they will be taught each year. The UCC Automotive program is accredited by the National Automotive Technical Education Foundation.

## PROGRAM OUTCOMES

The technical knowledge required to achieve an entry-level position as an Automotive Technician to meet current industry standards require courses that enhance critical problem solving and advance practical diagnostic skills.

Students who successfully complete the Automotive Advanced Technician Pathways Certificate will:

1. Apply knowledge of the function, construction, operation, troubleshooting and service of steering, suspension, and wheel alignment
2. Use electronic engine analyzers and scanners to test and tune ignition, fuel injection, and emission systems
3. Apply fundamentals of automotive service training, including the basics of automotive diagnostics and repair, pre-delivery inspection and warranty repair procedures
4. Identify, inspect, disassemble and assemble basic components of automotive power plants
5. Apply knowledge of the function, construction, operation, troubleshooting and service of front and rear wheel drive automatic transmissions and transaxles
6. Test, service, and repair heating and air-conditioning systems

## PATHWAYS CERTIFICATE — Advanced Automotive Technician

31 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

SEQUENCE

Suspension and Alignment  
AUT 250 5 CR

Electronic Engine  
Controls I  
AUT 259 5 CR

Electronic Engine  
Controls II  
AUT 260 5 CR

Climate Control  
Systems  
AUT 286 5 CR

Electronic Engine  
Controls III  
AUT 289 5 CR

Automatic  
Transmissions  
AUT 263 6 CR

CREDITS  
31

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# AUTOMOTIVE TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE: AUTOMOTIVE SERVICE TECHNOLOGY – 93 CREDITS

## CAREER DESCRIPTION

The Automotive Program is designed to provide basic skills and technical knowledge required to achieve an entry-level position as an Automotive Technician. Courses offered may be transferred to other community colleges and four-year schools. A basic tool set is required of all entering students and a list of those required tools are available from the automotive instructors. UCC offers Automotive Certificates and AAS options.

Minimum GPA in automotive classes shall be 2.00. For current program requirements, you are strongly urged to consult with a member of the automotive staff or an advisor.

Automotive courses are offered in four- to six-week modules. Check the class schedule to determine the sequence of courses and the order in which they will be taught each year.

The UCC Automotive program is accredited by the National Automotive Technical Education Foundation.

Prior to taking AUT 286 (Climate Control Systems) an Air Conditioning Certificate is required from one of the following organizations:

ASE (Refrigerant recovery and recycling certification test)

Mobile Air Conditioning Society International

Mobile Air Conditioning Association

NOTE: Students may be able to attend different courses (tracks) through FIRST YEAR Automotive classes — see your automotive instructors/advisors for track advising.

## PROGRAM OUTCOMES

The technical knowledge required to achieve an entry-level position as an Automotive Technician to meet current industry standards require courses that enhance critical problem solving and advance practical diagnostic skills.

Students who successfully complete the Associate of Applied Science degree in Automotive Service Technology will:

1. Apply fundamentals of automotive service training, including the basics of automotive diagnostics and repair, pre-delivery inspection and warranty repair procedure
2. Identify, inspect, disassemble and assemble basic components of automotive power plants
3. Apply knowledge of the function, construction, operation, troubleshooting and service of disc, drum and ABS brake systems, steering, suspension and wheel alignment
4. Use electronic engine analyzers and scanners to test and tune ignition, fuel injection, and emission systems
5. Apply knowledge of electrical principles, semi-conductors, microprocessors and wiring diagrams to diagnose and repair malfunctions of automotive electrical systems
6. Apply knowledge of the function, construction, operation, troubleshooting and service of front and rear wheel drive manual and automatic transmissions and transaxles
7. Test, service and repair heating and air-conditioning systems

## APPLICATION & ACCEPTANCE

### Program Admission Process

The Automotive AAS program have limited enrollment — applications are due by August 24, 2017 for the general program. Applicants must successfully complete the admission application form and process and must meet program

requirements described below. Admission to the program will be based on accepted application to the program and then on a first-come, first-served basis as space allows. (Applications submitted after August 23, 2018 for the general program may be considered on a space-available basis.)

### Entry Requirements

1. Prerequisites: program applicants must have completed MTH 010, RD 080, and WR 090 with a grade of C or better-equivalent math, reading or writing courses and/or placement scores may be accepted with department approval.
2. Drug screening: program applications must have successfully passed a drug screening test, and may be subject to a random drug screening test. UCC's Automotive Department will designate which company will conduct the drug screen testing.
3. In accordance with industry standards, the Automotive Program maintains a no-tolerance policy regarding substance abuse, as outlined in UCC's Student Code of Conduct, 721.3.
4. Automotive Program orientation: attend the orientation session as scheduled. A screening interview may be required.
5. Students in the Automotive program may be required to enroll in other classes or participate in supplementary activities to increase their success.
6. Students must be in the Automotive program to enroll in any of the Automotive program courses, or have special permission from the Automotive Department.

The Automotive Program courses, policies and graduation requirements are under constant review and subject to change. (Contact the department for details, or see updates at [www.umpqua.edu/Automotive](http://www.umpqua.edu/Automotive).)

## APPROVED ELECTIVES

Electives for the program are offered F, W, S, Su. See program advisor or automotive staff.



# ASSOCIATE OF APPLIED SCIENCE — Automotive Service Technology

93 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Orientation to Automotive Technology AUT 100 1 CR	Automotive Brakes AUT 155 6 CR	Power Trains AUT 161 5 CR	Intro to Algebra for the Trades MTH 052 (OR HIGHER) 4 CR Based on placement test scores. Reading as needed	CREDITS 16
	<b>Winter</b>	Internal Combustion Engines AUT 151 6 CR	Automotive Electricity I AUT 168 5 CR	Introduction to Windows and PC's CIS 100 3 CR		CREDITS 14
	<b>Spring</b>	Automotive Electricity II AUT 169 5 CR	Automotive Electricity III AUT 170 5 CR	Introduction to Expository Writing (OR HIGHER) WR 115 4 CR		CREDITS 14
<b>YEAR TWO</b>	<b>Fall</b>	Electronic Engine Controls I AUT 259 5 CR	Electronic Engine Controls II AUT 260 5 CR	Psychology of Human Relations PSY 101 3 CR		CREDITS 13
	<b>Winter</b>	Electronic Engine Controls III AUT 289 5 CR	Automatic Transmissions AUT 263 6 CR	Welding Processes and Applications WLD 101 4 CR		CREDITS 15
	<b>Spring</b>	Climate Control Systems AUT 286 5 CR	Suspension and Alignment AUT 250 5 CR	First Aid HE 252 3 CR OR Wellness & Health Assessment HPE 295 3 CR		CREDITS 13

\* CWE/Electives  
(100 level or higher) 8 CR  
May be taken over several terms.  
Must total 8 CR

## NOTES

Students may be able to attend different courses (tracks) through FIRST YEAR Automotive classes — see your automotive instructors/advisors for track advising.

Please see an advisor for a degree planning worksheet for this program.

# AUTOMOTIVE TECHNOLOGY - T-TEN

CAREER PATHWAYS CERTIFICATE – AUTOMOTIVE BASIC TECHNICIAN – T-TEN – 40 CREDITS

## CAREER DESCRIPTION

The goal of the T-TEN program is to train future automotive technicians to work for Toyota dealership service Departments. The T-TEN standard requires student technicians to receive 2 years of training that is divided between technical college classroom/lab education and Toyota dealership internship education experience. The Basic Certificate covers the first year series of courses needed to meet the T-TEN standards.

The T-TEN program requires each student to be sponsored by a Toyota dealer before entry into the program. The student works at the dealer in a paid internship position for approximately one half of the T-TEN training program.

The individual sponsorship agreements are determined using recruiting and application processes between the student and the T-TEN coordinator prior to entry in the program.

The T-TEN Basic Certificate program at UCC consists of 2 quarter/terms of classroom and hands-on automotive systems instruction and 2 quarter/terms of Toyota dealer internship hands-on instruction. Each college quarter (term), the student-technicians alternate between instruction classes at UCC and internships at the sponsoring Toyota dealer. This alternate instruction will give the student-technician on-the-job training to support their UCC instruction classes.

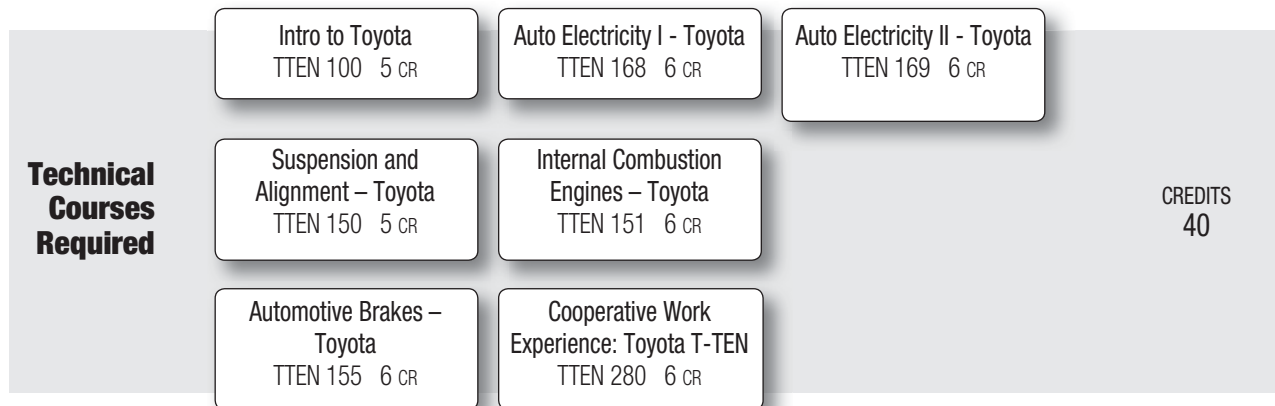
## PROGRAM OUTCOMES

Students who successfully complete the Automotive Basic Technician - T-TEN Certificate will:

1. Apply fundamentals of automotive service training, including the basics of automotive diagnostics and repair, pre-delivery inspection and warranty repair procedures
2. Identify, inspect, disassemble and assemble basic components of automotive power plants
3. Apply knowledge of the function, construction, operation, troubleshooting and service of disc, drum and ABS brake systems, steering, suspension and wheel alignment
4. Apply knowledge of electrical principles, semi-conductors, microprocessors and wiring diagrams to diagnose and repair malfunctions of automotive electrical systems

## PATHWAYS CERTIFICATE — Automotive Technology – Basic – T-TEN

40 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a planning worksheet for this program.

# AUTOMOTIVE TECHNOLOGY - T-TEN

CAREER PATHWAYS CERTIFICATE – AUTOMOTIVE ADVANCED TECHNICIAN – T-TEN – 34 CREDITS

## CAREER DESCRIPTION

The goal of the T-TEN program is to train future automotive technicians to work for Toyota dealership service departments. The T-TEN standard requires student technicians to receive 2 years of training that is divided between technical college classroom/lab education and Toyota dealership internship education experience. The Advanced Certificate covers the second year series of courses needed to meet the T-TEN standards. Completing UCC's Basic Certificate/T-TEN is a prerequisite to the Advanced Certificate.

The T-TEN program requires each student to be sponsored by a Toyota dealer before entry into the program. The student works at the dealer in a paid internship position for approximately one half of the T-TEN training program.

When students complete the program, they are available for full-time employment at the sponsoring dealer. The individual sponsorship agreements are determined using recruiting and application processes between the student and the T-TEN coordinator prior to entry in the program.

The T-TEN Advanced Certificate at UCC consists of two quarter/terms of classroom and hands-on automotive systems instruction and up to 2 quarter/terms of Toyota dealer internship hands-on instruction. Each college quarter (term), the student-technicians alternate between instruction classes at UCC and internships at the sponsoring Toyota dealer. This alternate instruction will give the student-technician on-the-job training to support their UCC instruction classes. The student will achieve Toyota technician certifications upon completion of the Basic and Advanced T-TEN certificates.

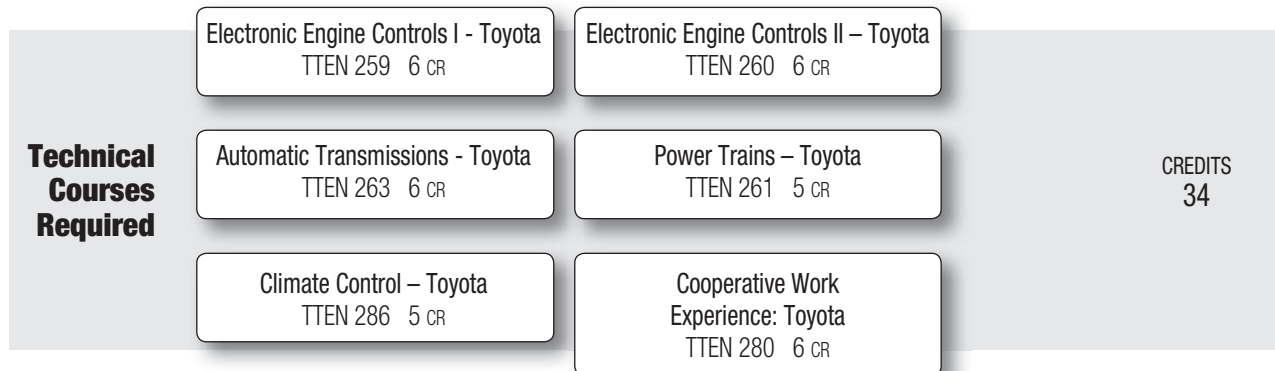
## PROGRAM OUTCOMES

Students who successfully complete Automotive Advanced Technician Pathways Certificate will:

1. Apply fundamentals of automotive service training, including the basics of automotive diagnostics and repair, pre-delivery inspection and warranty repair procedures
2. Identify, inspect, disassemble and assemble basic components of automotive power plants
3. Apply knowledge of the function, construction, operation, troubleshooting and service of disc, drum and ABS brake systems, steering, suspension and wheel alignment
4. Apply knowledge of electrical principles, semi-conductors, microprocessors and wiring diagrams to diagnose and repair malfunctions of automotive electrical systems

## PATHWAYS CERTIFICATE — Automotive Technology – Advanced

34 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a planning worksheet for this program.

# AUTOMOTIVE TECHNOLOGY - T-TEN

ASSOCIATE OF APPLIED SCIENCE: AUTOMOTIVE TECHNOLOGY – T-TEN – 91 CREDITS

## CAREER DESCRIPTION

The goal of the T-TEN program is to train future automotive technicians to work for Toyota dealership service departments. The T-TEN standard requires student technicians to receive 2 years of training that is divided between technical college classroom/lab education and Toyota dealership internship education experience.

The T-TEN program requires each student to be sponsored by a Toyota dealer before entry into the program. The student works at the dealer in a paid internship position for approximately one half of the T-TEN training program. When students complete the program, they are available for full-time employment at the sponsoring dealer. The individual sponsorship agreements are determined using recruiting and application processes between the student and the T-TEN coordinator prior to entry in the program.

The T-TEN program at UCC consists of four quarter/terms of classroom and hands-on automotive systems instruction and 3 quarter/terms of Toyota dealer internship hands-on instruction. Each college quarter (term), the student-technicians alternate between instruction classes at UCC and internships at the sponsoring Toyota dealer. This alternate instruction will give the student-technician on-the-job training to support their UCC instruction classes. The student will achieve Toyota technician certifications upon completion of the T-TEN program.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Automotive Technology - T-TEN degree will:

1. Apply fundamentals of automotive service training, including the basics of automotive diagnostics and repair, pre-delivery inspection and warranty repair procedures
2. Identify, inspect, disassemble and assemble basic components of automotive power plants
3. Apply knowledge of the function, construction, operation, troubleshooting and service of disc, drum and ABS brake systems, steering, suspension and wheel alignment
4. Use electronic engine analyzers and scanners to test and tune ignition, fuel injection, and emission systems
5. Apply knowledge of electrical principles, semi-conductors, microprocessors and wiring diagrams to diagnose and repair malfunctions of automotive electrical systems
6. Apply knowledge of the function, construction, operation, troubleshooting and service of front and rear wheel drive manual and automatic transmissions and transaxles
7. Test, service and repair heating and air-conditioning systems

## APPLICATION & ACCEPTANCE (if applicable)

### Program Admission Process

The Automotive AAS and T-TEN programs have limited enrollment.

Applicants must successfully complete the admission application form and process and must meet program requirements described below. Admission to the program will be based on accepted application to the program.

1. Prerequisites: program applicants must have completed MTH 010, RD 080, and WR 090 with a grade of C or better equivalent math, reading or writing courses and/or placement scores may be accepted with department approval
2. In accordance with industry standards, the Automotive Program maintains a no-tolerance policy regarding substance abuse, as outlined in UCC's Student Code of Conduct, 721.3
3. Automotive Program orientation: Attend the orientation session as scheduled. A screening interview may be required
4. Students in the Automotive program may be required to enroll in other classes or participate in supplementary activities to increase their success
5. Students must be in the Automotive program to enroll in any of the Automotive program courses, or have special permission from the Automotive Department

The Automotive Program courses, policies and graduation requirements are under constant review and subject to change. (Contact the department for details, or see updates at [www.umpqua.edu/Automotive](http://www.umpqua.edu/Automotive).)



# ASSOCIATE OF APPLIED SCIENCE — Automotive Technology – T-TEN

91 Credits — Recommended Sequence for Students (Students should see an Automotive advisor to customize their educational plan)

	Intro to Toyota TTEN 100 5 CR	Auto Electricity I TTEN 168 6 CR	Auto Electricity II TTEN 169 6 CR	Internal Combustion Engines – Toyota TTEN 151 6 CR	Suspension and Alignment – Toyota TTEN 150 5 CR	
<b>Technical Courses Required</b>	Automotive Brakes – Toyota TTEN 155 6 CR	Electronic Engine Controls I – Toyota TTEN 259 6 CR	Electronic Engine Controls II – Toyota TTEN 260 6 CR	Automatic Transmissions – Toyota TTEN 263 6 CR	Power Trains – Toyota TTEN 261 5 CR	CREDITS 74
	Climate Control – Toyota TTEN 286 5 CR	Cooperative Work Experience Automotive – Toyota TTEN 280 12 CR				
	<b>General Education</b>	Introduction to Algebra for the Trades MTH 052 4 CR (OR HIGHER)	Introduction to Windows and Personal Computers CIS 100 3 CR	Introduction to Expository Writing WR 115 4 CR (OR HIGHER)	Psychology of Human Relations PSY 101 3 CR	First Aid HE 252 3 CR OR Wellness & Health Assessment HPE 295 3 CR

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an Automotive advisor for a degree planning worksheet for this program.

Students may be able to attend different courses (tracks) through FIRST YEAR Automotive classes — see automotive instructors/advisors for track advising.

Students in the T-TEN program will be responsible for travel, housing and living expenses during the required internship.

# BUSINESS TECHNOLOGY

## PATHWAYS CERTIFICATE: ENTREPRENEURSHIP – MINIMUM 42 CREDITS

### CAREER DESCRIPTION

The Entrepreneurship Career Pathways provides basic training and knowledge needed to start and effectively operate your own small business. The program builds skills in many areas critical to the success of a small business owner such as written and verbal communication, marketing, business law, accounting, financial management, and small business development. Many aspects of starting and running a small business are encompassed in the certificate from initial evaluation of a business opportunity and developing a business plan, to managing the small business and recordkeeping.

The less than one-year certificate has the flexibility to meet your individual needs. Over a quarter of the required curriculum is made up of electives where a student can choose from an entrepreneur's dream list of subjects including international business for those interested in taking advantage of global market opportunities, web page design, communicating with employees, and technical report writing.

Students should take the classes in the order listed on the facing page. Please see a faculty advisor if there are schedule conflicts.

### PROGRAM OUTCOMES

Students who successfully complete the Entrepreneurship Pathways Certificate will:

1. Illustrate basic management functions and principles
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Apply appropriate ethical choices on both a professional and personal basis
5. Function effectively as a member of a team
6. Utilize appropriate technology relevant to the profession
7. Explain business vocabulary
8. Interpret financial reports
9. Demonstrate effective personal presentation skills

### APPLICATION & ACCEPTANCE

Students entering the program are expected to have basic keyboarding and computer skills with business application software such as Word and Excel. If these skills are needed, you should take Intro to Computer Information Systems (CIS 120) during the first term at UCC. Placement scores indicating MTH 020 or higher and WR 115 or higher are required for entry into the program.

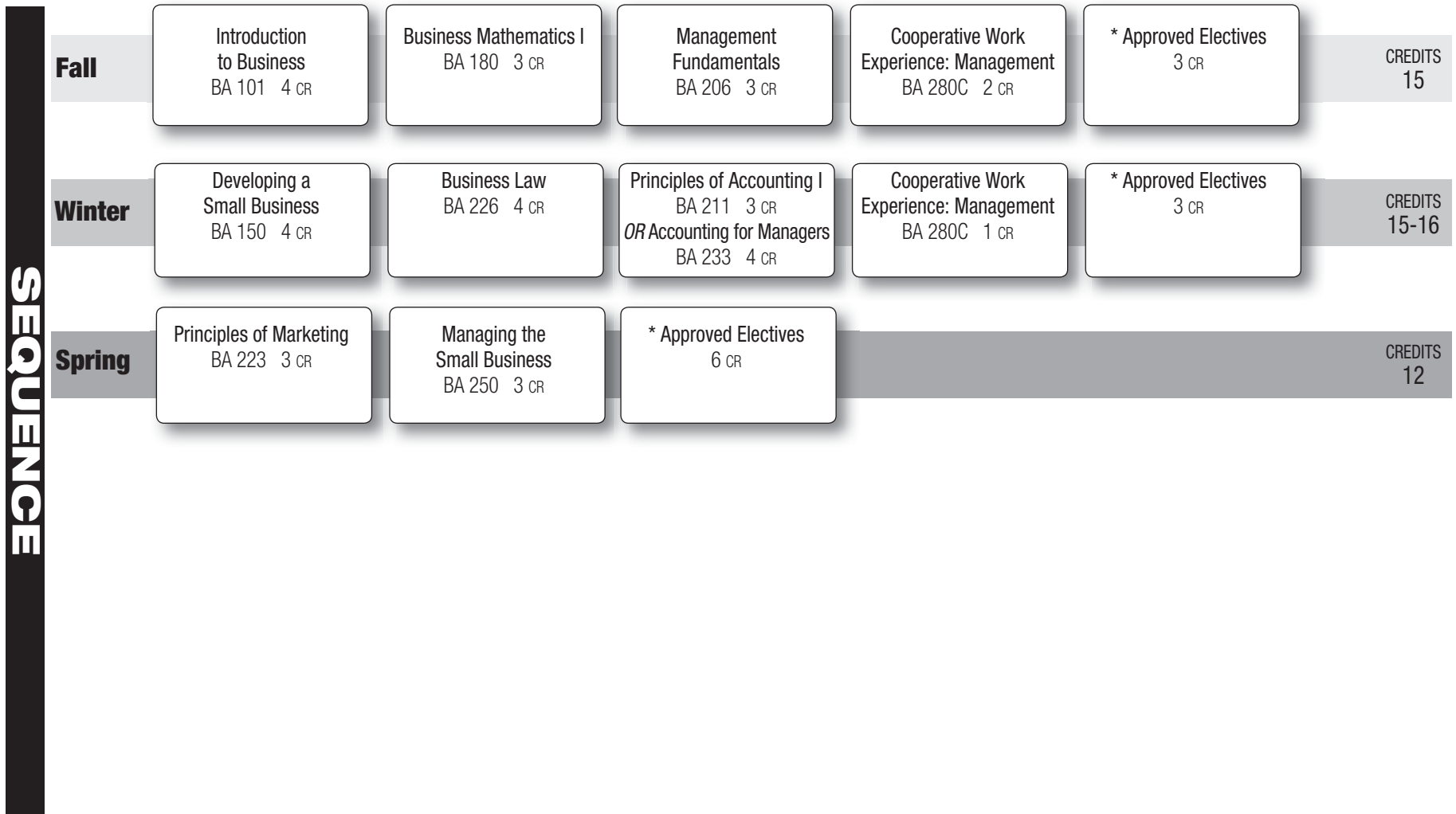
### APPROVED ELECTIVES

The following is a list of the approved electives for the Entrepreneurship Certificate. Electives must be selected from this list.

BA 165	Customer Service	3
BA 207	Introduction to E-Commerce	3
BA 214	Business Communications	3
BA 222	Financial Management	3
BA 238	Professional Selling	3
BA 239	Advertising	3
BA 249	Retailing	3
CIS 125D	Computer Applications – Database	3
CIS 195	Authoring for the World Wide Web I	4
SDP 109	Elements of Supervision	3
SDP 208	Human Resources for Supervisors	3
SDP 223	Employee Development and Performance Management	3
WR 121	Academic Composition	4
WR 227	Technical Report Writing	4

# PATHWAYS CERTIFICATE — Entrepreneurship

Minimum 42 Credits — Recommended Sequence for Students (Students should see a faculty advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Entry Management degree can be connected to this certificate with careful course selection.

Please see an advisor for a degree planning worksheet for this program.

\* A total of 12 credits are required from the list of Approved Electives on facing page.

# BUSINESS TECHNOLOGY

CERTIFICATE: FINANCIAL SERVICES – 26 CREDIT

## CAREER DESCRIPTION

This program is designed to prepare students for entry-level teller positions in banks or credit unions. Students will gain the theoretical knowledge and will learn practical skills necessary for success in this field. The program can be completed in two school terms. Minimum placement scores include college-level reading, WR 115, and MTH 060 or higher.

## PROGRAM OUTCOMES

Students who successfully complete the Financial Services Certificate will:

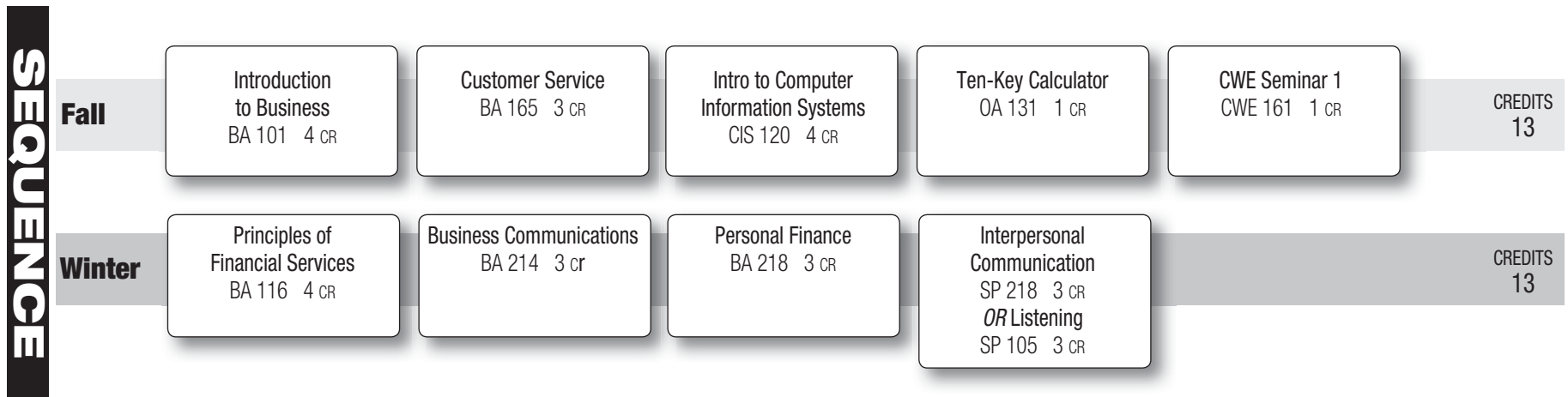
1. Demonstrate professional skills in the financial services industry that will ensure workplace success
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Apply appropriate ethical choices on both a professional and personal basis
5. Function effectively as a member of a team
6. Utilize appropriate technology relevant to the profession

## APPLICATION & ACCEPTANCE

Minimum exit-level keyboarding speed and accuracy: 30 net wpm with 95% or better accuracy. Students should seek placement keyboarding test from the Business Department. If skills are not adequate, then student should plan to take OA 110 and OA 124 to meet the exit-level keyboarding requirement. See academic advisor for occupational requirements.

## CERTIFICATE — Financial Services

26 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# BUSINESS TECHNOLOGY

ONE-YEAR CERTIFICATE: SUPERVISION – MINIMUM 46 CREDITS

## CAREER DESCRIPTION

This certificate program is designed to give students flexibility in course selection while specializing in topics relevant to supervisors. Students must meet with academic advisor to review course selections.

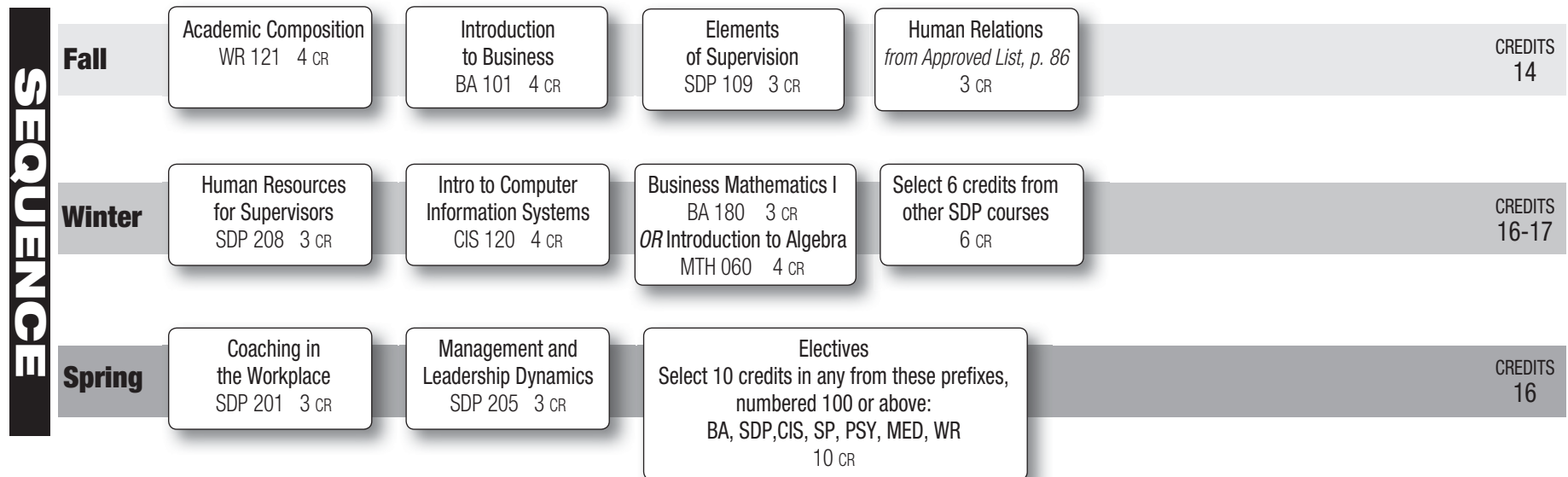
## PROGRAM OUTCOMES

Students who successfully complete the Supervision Certificate will:

1. Illustrate basic management functions and principles
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Apply appropriate ethical choices on both a professional and personal basis
5. Function effectively as a member of a team
6. Utilize appropriate technology relevant to the profession
7. Explain business vocabulary
8. Interpret financial reports
9. Demonstrate effective personal presentation skills.
10. Use effective personal presentation skills
11. Exhibit critical thinking and decision-making skills

## ONE-YEAR CERTIFICATE — Supervision

Minimum 46 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.



# BUSINESS TECHNOLOGY

## PATHWAYS CERTIFICATE: RETAIL MANAGEMENT BUSINESS ESSENTIALS – 13 CREDITS

### CAREER DESCRIPTION

This pathway certificate consists of the first four courses of the 8-course Retail Management Certificate (RMC). This certificate gives students essential business skills and prepares them for retail middle-skills jobs such as those found in counter service/sales, stockers, cashiers, and entry-level managers.

Completion of the last four courses of the 8-course RMC enables students to apply for an industry recognized certificate from the Western Association of Food Chains (WAFC). Students who opt to move into the Marketing AAS program gain additional skills which build and strengthen their business and marketing background. Students must apply to the Retail program by contacting a Business Department faculty.

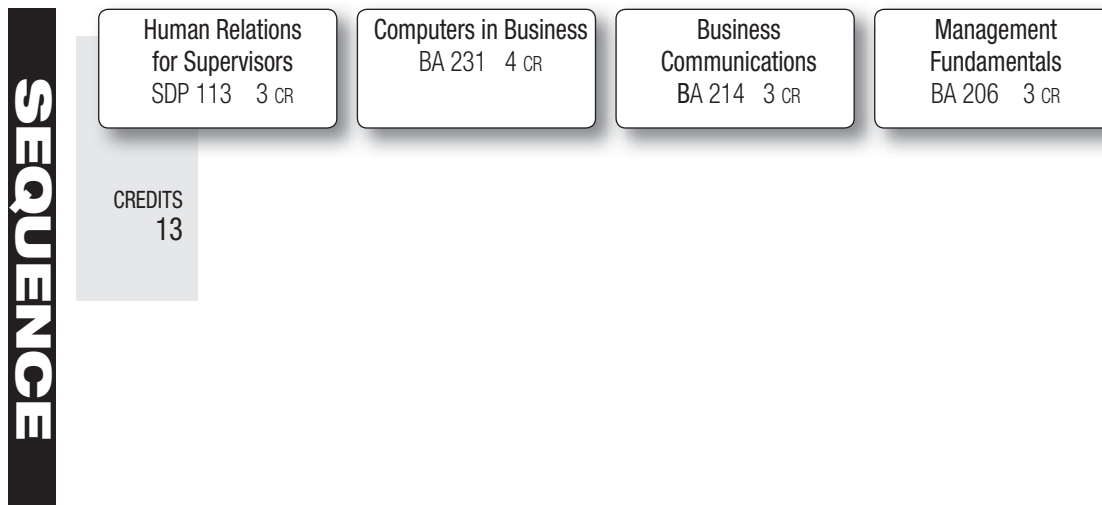
### PROGRAM OUTCOMES

Students who successfully complete the Retail Management Business Essentials Pathways Certificate will:

1. Communicate effectively using verbal and written skills
2. Identify and examine human relations skills within the retail organization
3. Understand business vocabulary
4. Understand basic management and supervision functions and principles
5. Apply appropriate ethical choices
6. Exhibit critical thinking and decision-making skills
7. Use appropriate current technology to support business decision making

## PATHWAYS CERTIFICATE — RETAIL MANAGEMENT BUSINESS ESSENTIALS

13 Credits — Recommended Sequence for Students (Students should see an RMC program advisor to customize their educational plan.)



### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an RMC program advisor for a degree planning worksheet for a program.

A grade of C or better must be earned in all courses within this certificate.

Recommended to take classes in order listed.

# BUSINESS TECHNOLOGY

## CERTIFICATE: WAFC RETAIL MANAGEMENT – 26 CREDITS

### CAREER DESCRIPTION

The Retail Management Certificate is an exciting program that will help prepare students to take on entry-level management positions in the retail industry. The program builds skills in many areas critical to the success of retail management. Courses of study will include management, marketing, supervision, human resources, communications, and more.

This 8-course program of study is sponsored by the Western Association of Food Chains (WAFC).

Additional information on the WAFC can be found on their website at [www.wafc.com/](http://www.wafc.com/)

Additional information on the WAFC/Retail Management Certificate at UCC is available at [www.uccrmc.com](http://www.uccrmc.com)

### PROGRAM OUTCOMES

Students who successfully complete the WAFC Retail Management Certificate will:

1. Communicate effectively using verbal and written skills

2. Identify and examine human relations skills within the retail organization

3. Understand business vocabulary

4. Understand and properly interpret financial reports

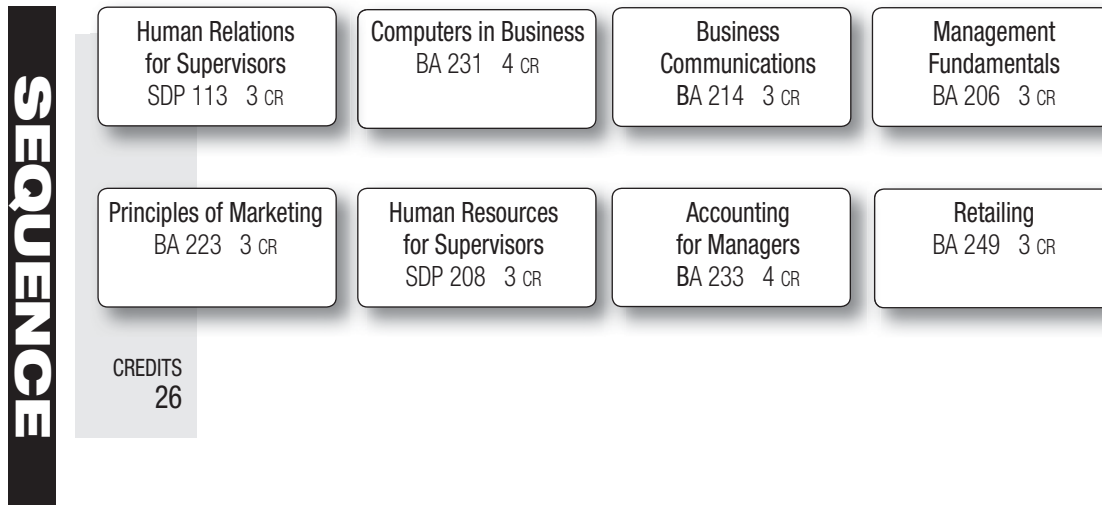
5. Understand basic management, supervision, and human resource functions and principles

6. Apply appropriate ethical choices

7. Exhibit critical thinking and decision-making skills

## CERTIFICATE — WAFC Retail Management

26 Credits — Recommended Sequence for Students (Students should see an RMC program advisor to customize their educational plan.)



### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Students should speak with an RMC program advisor for a degree planning worksheet for this program.

A grade of C or better must be earned in all courses within this certificate.

Recommended to take classes in order listed.

# BUSINESS TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE: ENTRY MANAGEMENT – MINIMUM 91 CREDITS

## CAREER DESCRIPTION

The two-year Entry Management degree prepares students to become an effective business leader in today's rapidly-changing competitive business environment. The program develops skills in accounting, motivating and managing employees, communication, marketing, public speaking, business software, community service, and financial management. Whether new to the business world or are seeking to upgrade your skills, the program will provide the training needed to succeed.

The curriculum combines "leading edge" classroom instruction with on-the-job training (Cooperative work experience). Students should take classes in the order listed on the facing page. If classes do not fit within your schedule, please see a faculty advisor for help.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science degree in Entry Management will:

1. Illustrate basic management functions and principles
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Apply appropriate ethical choices on both a professional and personal basis
5. Function effectively as a member of a team
6. Utilize appropriate technology relevant to the profession
7. Explain business vocabulary
8. Interpret financial reports
9. Demonstrate effective personal presentation skills

## APPLICATION & ACCEPTANCE

Students entering the program are expected to have basic keyboarding and computer skills with business application software such as Word and Excel. If these skills are needed, you should take Intro to Computer Information Systems (CIS120) during your first term at UCC. Placement scores indicating MTH 020 or higher and WR 115 or higher are required for entry into the program.

## RECOMMENDED ELECTIVES

BA 130	Accounting Applications III	2
BA 150	Developing a Small Business	4
BA 165	Customer Service	3
BA 207	Introduction to E-Commerce	3
BA 214	Business Communications	3
BA 238	Professional Selling	3
BA 239	Advertising	3
CIS 125D	Computer Applications - Database	3
CIS 195	Authoring for the World Wide Web I	4
MTH 060	Introduction to Algebra	4
SDP 223	Employee Development and Performance Management	3
OA 131	Ten-Key Calculator	1
HPE 295	Wellness & Health Assessment	3
CIS 120	Intro to Computer Information Systems	4

# ASSOCIATE OF APPLIED SCIENCE — Entry Management

Minimum 91 Credits — Recommended Sequence for Students (Students should see a faculty advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Business Leadership I BA 106A 1 CR	* Introduction to Business BA 101 4 CR	Business Mathematics I BA 180 3 CR	Fundamentals of Public Speaking SP 111 4 CR	* Academic Composition WR 121 4 CR	<b>CREDITS 16</b>	
	<b>Winter</b>	Business Leadership II BA 106B 1 CR	Retailing BA 249 3 CR OR Human Resources for Supervisors SDP 208 3 CR	* Business Law BA 226 4 CR	* Argument, Research, and Multimodal Composition WR 122 4 CR	* Business Communications BA 214 3 CR	<b>CREDITS 15</b>	
	<b>Spring</b>	Business Leadership III BA 106C 1 CR	* Principles of Marketing BA 223 3 CR	* Technical Report Writing WR 227 4 CR	Business Mathematics II BA 181 3 CR	Management and Leadership Dynamics *** SDP 205 3 CR	** Human Relations course 3 CR <i>from Approved List, p. 86</i>	<b>CREDITS 17</b>
<b>YEAR TWO</b>	<b>Fall</b>	* Principles of Accounting I BA 211 3 CR	* Accounting Applications I BA 128 2 CR	CWE Seminar I CWE 161 1 CR	* Management Fundamentals BA 206 3 CR	* Computers in Business BA 231 4 CR	Cooperative Work Experience: Management BA 280C 3 CR	<b>CREDITS 15</b>
	<b>Winter</b>	* Principles of Accounting II BA 212 3 CR	* Accounting Applications II BA 129 2 CR	CWE Seminar II CWE 162 1 CR	* Cooperative Work Experience: Management BA 280C 2 CR	Introduction to Economics ECON 115 3 CR	Elective 3 CR	<b>CREDITS 14</b>
	<b>Spring</b>	* Principles of Accounting III BA 213 3 CR	Managing the Small Business BA 250 3 CR OR Elements of Supervision SDP 109 3 CR	Financial Management BA 222 3 CR	Introduction to Business Statistics BA 232 3 CR	* Cooperative Work Experience: Management BA 280C 2 CR	<b>CREDITS 14</b>	

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Please see an advisor for a degree planning worksheet for this program. In addition, the Entrepreneur certificate can be obtained in addition to degree with careful course selection.

Placement scores indicating MTH 020 or higher and WR 115 or higher are required for entry into the program.

\* A grade of C or better must be attained in the courses indicated.

\*\* Choice of Human Relations is from list of approved Human Relations courses not already required by program.

\*\*\* SDP 205 will be only be offered every other year.

# BUSINESS TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE: MARKETING – MINIMUM 90 CREDITS

## CAREER DESCRIPTION

The two-year Marketing degree provides training for many solid well-paid opportunities in the exciting field of marketing. The program is designed to prepare students for a career and leadership role in business by developing your skills in building customer value and satisfaction, working with teams, supervising employees, communicating effectively both orally and in writing, understanding business terminology, presenting information, and using business software. Whether seeking to upgrade skills or are new to business, this program will help students become successful in a competitive, rapidly changing business environment.

The curriculum combines “leading edge” instruction with on-the-job training (Cooperative Work Experience). Students should take the classes in the order listed on the facing page. If classes do not fit within your schedule, please see a faculty advisor for assistance.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Marketing will:

1. Demonstrate professional skills in marketing that will assure workplace success
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Apply appropriate ethical choices on both a professional and personal basis
5. Function efficiently as a member of a team
6. Utilize appropriate technology relevant to the profession

## GETTING STARTED

Students entering the program are expected to have basic keyboarding and computer skills with business application software such as Word and Excel. If these skills are needed, you should take Intro to Computer Information Systems (CIS120) during the first term at UCC. Placement scores indicating MTH 020 or higher and WR 115 or higher are required for entry into the program.

NOTE: See a business faculty advisor for assistance in planning your schedule. BA 101, Introduction to Business, should be taken during the first term or as soon as possible.

## RECOMMENDED ELECTIVES

BA 250	Managing the Small Business	3
OA 131	Ten-Key Calculator	1
PS 205	International Relations	3



# ASSOCIATE OF APPLIED SCIENCE — Marketing

Minimum 90 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**PREREQUISITES:** Additional skill requirements for individual business courses are listed in the course description section of this catalog.

<b>YEAR ONE</b>	<b>Fall</b>	* Introduction to Business BA 101 4 CR	Business Leadership I BA 106A 1 CR	Customer Service BA 165 3 CR	Human Relations for Supervisors SDP 113 3 CR	* Academic Composition WR 121 4 CR	<b>CREDITS 15</b>
	<b>Winter</b>	Business Mathematics I BA 180 3 CR	Business Leadership II BA 106B 1 CR	* Business Communications BA 214 3 CR	* Fundamentals of Public Speaking SP 111 4 CR	* Argument, Research, and Multimodal Composition WR 122 4 CR	<b>CREDITS 15</b>
	<b>Spring</b>	Business Mathematics II BA 181 3 CR	Business Leadership III BA 106C 1 CR	* Business Law BA 226 4 CR	CWE Seminar I CWE 161 1 CR	* Principles of Marketing BA 223 3 CR	Elective 3 CR
<b>YEAR TWO</b>	<b>Fall</b>	* Technical Report Writing WR 227 4 CR	Computers in Business BA 231 4 CR	* Professional Selling BA 238 3 CR	CWE Seminar II CWE 162 1 CR	Elements of Supervision SDP 109 3 CR OR** Management Fundamentals BA 206 3 CR	<b>CREDITS 15</b>
	<b>Winter</b>	* Retailing BA 249 3 CR	* Cooperative Work Experience: Marketing BA 280B 3 CR	Introduction to Economics ECON 115 3 CR	Human Resources for Supervisors SDP 208 3 CR	* Principles of Accounting I BA 211 3 CR OR*** Accounting for Managers BA 233 4 CR	<b>CREDITS 15-16</b>
	<b>Spring</b>	Introduction to E-Commerce BA 207 3 CR	* Cooperative Work Experience: Marketing BA 280B 3 CR	Social Media Marketing BA 253 3 CR	* Advertising BA 239 3 CR	CWE Seminar III CWE 163 1 CR	Electives 1-2 CR

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\*A grade of C or better must be attained in the courses indicated.

\*\* Retail Management students must take BA 206.

\*\*\* Retail Management students must take BA 233.

# COMMUNICATIONS STUDIES

PATHWAYS CERTIFICATE: COMMUNICATIONS SPECIALIST IN ORGANIZATIONS – 16 CREDITS

## CAREER DESCRIPTION

Opportunities in the communication field are growing at a faster-than-average rate. Students who earn four-year degrees in communication may choose to work in such fields as media or broadcasting, journalism, public relations, marketing, education, or business leadership, among others. Degrees can be earned in any of these specializations at four-year colleges and universities. The Communication Studies coursework at UCC prepares students for career applications and transfer into four-year degree programs. Students may choose from one of three program areas of concentration: Journalism, Public Relations/General Communication, or Speech.

This certificate will represent coursework completed in the Communication Studies area that applies to positions such as customer service or other communication-related jobs including marketing and sales. Students who complete this certificate will have demonstrated skill in listening, developing persuasive messages, problem solving, team work, decision making, clearly communicating information, developing rapport, and technical writing.

## PROGRAM OUTCOMES

Students who successfully complete the Communications Specialist in Organizations Pathways Certificate will

1. Apply ethical principles to communication tasks, including decision-making and the crafting of public messages
2. Practice systemic critical thinking processes related to communication issues, developing tactical strategies, and implementing creative solutions
3. Critically analyze and evaluate written, verbal, and nonverbal messages
4. Communicate effectively and appropriately with diverse and multicultural audiences using appropriate speaking, listening, and writing skills
5. Take responsibility for establishing collaborative work settings; conceptualize, organize, participate in and actualize teams in a creative, flexible, and collegial manner.
6. Use information technology effectively and efficiently to conduct research and to create and deliver messages

## PATHWAYS CERTIFICATE — Communications Specialist in Organizations

16 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# COMMUNICATIONS STUDIES

## PATHWAYS CERTIFICATE: PUBLIC RELATIONS COMMUNICATION ASSISTANT – 18 CREDITS

### CAREER DESCRIPTION

Opportunities in the communication field are growing at a faster-than-average rate. Students who earn four-year degrees in communication may choose to work in such fields as media or broadcasting, journalism, public relations, marketing, education, or business leadership, among others. Degrees can be earned in any of these specializations at four-year colleges and universities. The Communication Studies coursework at UCC prepares students for career applications and transfer into four-year degree programs. Students may choose from one of three program areas of concentration: Journalism, Public Relations/General Communication, or Speech.

This certificate will represent coursework completed in the Communication Studies area that applies to positions such as public relations specialists or other communication-related jobs such as marketing, sales, journalism and advertising.

Students who complete this certificate will have demonstrated skill in analyzing needs of different publics, listening, developing persuasive messages, understanding the history and influence of mass media, writing for the media, problem solving, team work, decision-making, and applying relevant theories to work and public situations.

### PROGRAM OUTCOMES

Students who successfully complete the Public Relations Communication Assistant Pathways Certificate will:

1. Apply ethical principles to communication tasks, including decision-making and the crafting of public messages
2. Practice systemic critical thinking processes related to communication issues, developing tactical strategies, and implementing creative solutions
3. Critically analyze and evaluate written, verbal, and nonverbal messages

4. Communicate effectively and appropriately with diverse and multicultural audiences using appropriate speaking, listening, and writing skills
5. Take responsibility for establishing collaborative work settings; conceptualize, organize, participate in and actualize teams in a creative, flexible, and collegial manner.
6. Develop, maintain and nurture relationships in professional contexts
7. Project a professional and personable image (includes utilizing appropriate language, attire, nonverbal signals, technology, and document presentation)
8. Demonstrate a clear ability to interview, research, plan, secure resources for, initiate, complete and evaluate projects and events.
9. Use information technology effectively and efficiently to conduct research and to create and deliver messages.

## PATHWAYS CERTIFICATE — Public Relations Communication Assistant

18 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**SEQUENCE**

Intro to Public Relations  
J 205 3 CR

Writing for the Media  
J 251 3 CR

Persuasive Speech  
SP 112 3 CR

Introduction to  
Mass Communication  
J 211 3 CR

Listening  
SP 105 3 CR

CREDITS  
18

In addition to required courses (listed above) students must complete 3 additional credits from the following:

Writing Web Pages  
CIS 125H 2 CR  
OR Journalism Production  
J 215 1-3 CR  
OR Layout Basics  
VC 121 3 CR

### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# COMMUNICATIONS STUDIES

ONE-YEAR CERTIFICATE: PUBLIC RELATIONS SPECIALIST – 50 CREDITS

## CAREER DESCRIPTION

Opportunities in the communication field are growing at a faster-than-average rate. Students who earn four-year degrees in communication may choose to work in such fields as media or broadcasting, journalism, public relations, marketing, education, or business leadership, among others. Degrees can be earned in any of these specializations at four-year colleges and universities. The Communication Studies coursework at UCC prepares students for career applications and transfer into four-year degree programs. Students may choose from one of three program areas of concentration: Journalism, Public Relations/General Communication, or Speech.

Though individuals who work in the public relations field as specialists generally have a bachelor's degree, this certificate may lead to some entry-level public relations positions (e.g., assisting with event coordination or meeting planning, developing marketing tools and press releases, etc.) or related areas in marketing and sales.

For more information on the program, contact Melinda Benton or Paula Usrey.

## PROGRAM OUTCOMES

Students who successfully complete the Public Relations Specialist Certificate will:

1. Apply ethical principles to communication tasks, including decision-making and the crafting of public messages
2. Practice systemic critical thinking processes related to communication issues, developing tactical strategies, and implementing creative solutions
3. Critically analyze and evaluate written, verbal, and nonverbal messages
4. Communicate effectively and appropriately with diverse and multicultural audiences using appropriate speaking, listening, and writing skills
5. Take responsibility for establishing collaborative work settings; conceptualize, organize, participate in and actualize teams in a creative, flexible, and collegial manner.
6. Demonstrate an understanding of and act in the mediating role of the professional communicator within organizations, between organizations, and between the organization and the general public.
7. Develop, maintain and nurture relationships in professional contexts
8. Project a professional and personable image (includes utilizing appropriate language, attire, nonverbal signals, technology, and document presentation)
9. Demonstrate a clear ability to interview, research, plan, secure resources for, initiate, complete and evaluate projects and events.
10. Use information technology effectively and efficiently to conduct research and to create and deliver messages

## APPROVED ELECTIVES

BA 165	Customer Service	3
BA 214	Business Communication	3
SP 218	Interpersonal Communication	3
SP 219	Small Group Discussion (3 credits)	3
SP 298	Independent Study: Speech (see Paula Usrey for details)	3
WR 227	*Technical Report Writing	4

\* For WR 227, students must pass a WR 121 course or equivalent with C or better.

# ONE-YEAR CERTIFICATE — Public Relations Specialist

50 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	<b>Writing for the Media</b> J 251 3 CR	<b>Writing Web Pages</b> CIS 125H 2 CR	<b>** Academic Composition</b> WR 121 4 CR	<b>Layout Basics</b> VC 121 3 CR	<b>Professional Selling</b> BA 238 3 CR	<b>Journalism Production</b> J 215 2 CR	<b>CREDITS</b> <b>17</b>
	<b>Winter</b>	<b>Introduction to Business</b> BA 101 4 CR	<b>Listening</b> SP 105 3 CR	<b>Fundamentals of Public Speaking</b> SP 111 4 CR	<b>Math in Society</b> MTH 105 (OR HIGHER) 4 CR	<b>*** Approved Elective</b> 3 CR		<b>CREDITS</b> <b>18</b>
	<b>Spring</b>	<b>Introduction to Public Relations</b> J 205 3 CR	<b>* Principles of Marketing</b> BA 223 3 CR	<b>Introduction to Mass Communications</b> J 211 3 CR	<b>Persuasive Speech</b> SP 112 3 CR	<b>*** Approved Elective</b> 3 CR		<b>CREDITS</b> <b>15</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\*For BA 223, students must pass BA101 with at least a C.

\*\*For WR 121 students must pass ACCUPlacer equivalent writing placement exam with at least a minimum score of 78 OR must pass a WR 115 course or equivalent with at least a C.

\*\*\* Two electives required from the list of Approved Electives on facing page.



# COMPUTER INFORMATION SYSTEMS

PATHWAYS CERTIFICATE – CISCO NETWORKING SECURITY SUPPORT TECHNICIAN,  
MICROSOFT NETWORKING SUPPORT TECHNICIAN, SERVER ADMINISTRATOR

## PREREQUISITES

Students should be digitally literate with the ability to use a Windows-based PC, including file management; use the Internet to locate information; and send and receive email. Also, students interested in any CIS certificate or degree should contact John Blackwood (541-440-7686, John.Blackwood@umpqua.edu) or Vincent Yip (541-440-7886, Vincent.yip@umpqua.edu) before enrolling in any CIS course.

## CISCO NETWORKING SECURITY SUPPORT TECHNICIAN

### CAREER DESCRIPTION

Students completing the courses necessary to earn the Cisco Networking Security Support Technician certificate will possess the skills needed to analyze, design, implement, and support Cisco routers and switches in a small- to medium-sized standalone or domain-based environment; and exhibit problem-solving and critical-thinking skills in an individual and/or team environment.

### PROGRAM OUTCOMES

Students who successfully complete the Cisco Networking Support Technician Pathways Certificate will:

1. Analyze, design, implement and support basic network systems such as Cisco routers and switches
2. Exhibit problem-solving and critical thinking skills in an individual and/or team environment

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

## MICROSOFT NETWORKING SUPPORT TECHNICIAN

### CAREER DESCRIPTION

Students completing the courses necessary to earn the Microsoft Networking Support Technician Support certificate will possess the skills needed to analyze, design, implement, and support computers running the Windows Server in a small- to medium-sized standalone or domain-based environment; and exhibit problem-solving and critical thinking skills in an individual and/or team environment.

### PROGRAM OUTCOMES

Students who successfully complete the Microsoft Networking Support Technician Pathways Certificate will:

1. Provide traditional technical support to users in a Microsoft desktop and server environment
2. Exhibit problem-solving and critical-thinking skills in an individual and/or team environment.

## SERVER ADMINISTRATOR

### CAREER DESCRIPTION

This Pathway Certificate is a short-term educational goal aimed towards specific areas in Computer Information Systems. This certificate will address the need for a logical pathway of success for students. A student will be able to earn the certification and then continue seamlessly on to existing CIS courses. Those who are already employed in the profession that want to upgrade their server administration skills may also benefit from this certificate. This certificate may also lead to employment in server administration.

### PROGRAM OUTCOMES

Students who successfully complete the Server Administrator Pathways Certificate will:

1. Be prepared for entry- or mid-level employment in Microsoft Windows Server administration
2. Develop new or upgrade existing server administration skills

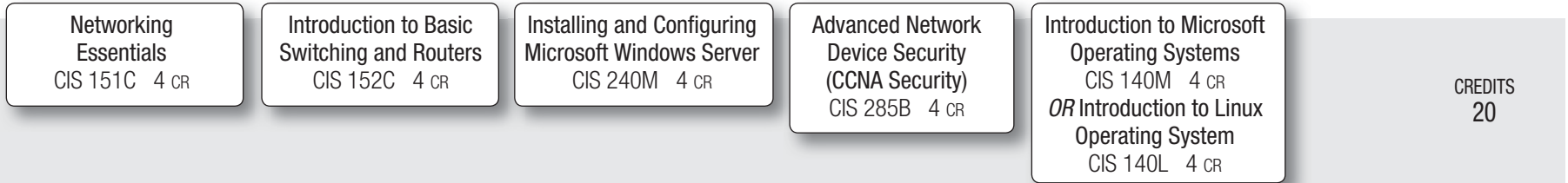
Please see an advisor for a degree planning worksheet for this program.

# PATHWAYS CERTIFICATE — Cisco Networking Security Support Technician, Microsoft Networking Support Technician, Server Administrator

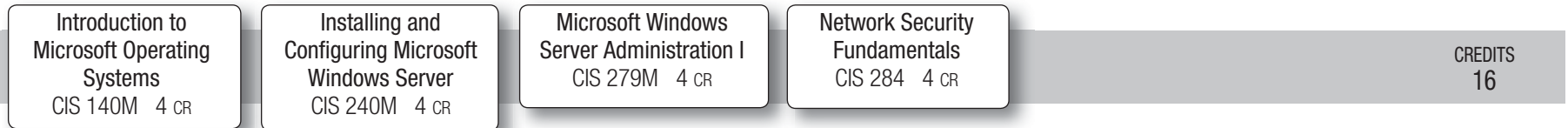
Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

SEQUENCE

## Cisco Networking Security Support Technician



## Microsoft Networking Support Technician



## Server Administrator



### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# COMPUTER INFORMATION SYSTEMS

PATHWAYS CERTIFICATE – JUNIOR DATABASE ADMINISTRATOR, PROGRAMMER, WEB DEVELOPER

## CAREER DESCRIPTION

This Pathways Certificate is a short-term educational goal aimed towards specific areas in Computer Information Systems. This certificate will address the need for a logical pathway of success for students. A student will be able to earn the certification and then continue seamlessly on to the existing CIS program. Those who are already employed in the profession that want to upgrade their job skills in a specific area may also benefit from this certification. This certificate may lead to entry-level database programming and administrator jobs.

## PROGRAM OUTCOMES

### Junior Database Administrator

Students who successfully complete the Junior Database Administrator Pathways Certificate will:

1. Demonstrate the skills necessary for entry-level jobs in database administration
2. Develop database programming and administration skills

### Junior Web Developer

Students who successfully complete the Junior Web Developer Pathways Certificate will:

1. Demonstrate the skill necessary for entry-level jobs in web development
2. Develop web development skills

### Junior Programmer

Students who successfully complete the Junior Programmer Pathways Certificate will:

1. Demonstrate the skills necessary for entry-level jobs in computer programming
2. Develop programming skills

## APPLICATION & ACCEPTANCE

This certificate recognizes student's achievement and validates skills learned. In addition, the certificate can be placed on the student's resume, increasing the student's chances of obtaining employment while continuing to attend college (on a full- or part-time basis).

According to Oregon Labor Statistics (OLMIS), the total number of job openings for Database Administrators (15-1141), Web Developers (15-1134) and Computer Programmers (15-1131) is "projected to be at about the statewide average number of job openings for all occupations through 2022."

## PREREQUISITES

Completion of MTH 095 or placement test scores indicating MTH 105 or higher and WR 121 or higher is required.

UCC faculty strongly recommends that CIS certificate- (or degree-) seeking students have access to a personally-owned, 64-bit Windows 7/8 (or newer) laptop with at least 16 GB of RAM, 1-2 TB hard disk, and other standard laptop accessories. Students can purchase a full version of Microsoft Office in the UCC bookstore at a very low, discounted student price.

# PATHWAYS CERTIFICATE — Junior Database Administrator, Programmer, Web Developer

Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

SEQUENCE

## Jr. Database Administrator

Introduction to  
Programming II - Visual C#  
CIS 233CS 4 CR

Introduction to Database  
Management Systems I  
CIS 275 4 CR

Introduction to Database  
Management Systems II  
CIS 276 4 CR

CREDITS  
12

## Jr. Web Developer

Authoring for the  
World Wide Web I  
CIS 195 4 CR

Authoring for the  
World Wide Web II  
CIS 295 4 CR

Introduction to Database  
Management Systems I  
CIS 275 4 CR

CREDITS  
12

## Jr. Programmer

Orientation to  
Programming  
CIS 122 4 CR

Introduction to  
Programming I - Visual C#  
CIS 133CS 4 CR

Introduction to  
Programming II-Visual C#  
CIS 233CS 4 CR

CREDITS  
12

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# COMPUTER INFORMATION SYSTEMS

ONE-YEAR CERTIFICATE – COMPUTER INFORMATION SYSTEMS – 51 CREDITS

## CAREER DESCRIPTION

This one-year certificate program prepares students for employment in entry-level information technology (IT) employment. The certificate builds skills in many areas critical to the success of employment in IT.

Course emphasis is placed on current concepts of computer programming, server administration, database, Cisco networking, and general business-required education.

Students should complete the classes in the order listed. If the classes do not fit within your personal schedule, please see a faculty advisor for help.

## PROGRAM OUTCOMES

The certificate entails 47-48 Credit Hours, depending on the accounting course selected by the student. The CIS One-Year Certificate is also a completion certificate. All courses in the certificate are found in the CIS AAS Degree.

Students who successfully complete the Computer Information Systems One-Year Certificate

1. Develop problem-solving skills for working with software, hardware, and networks through programming logic and hands-on lab simulations
2. Use common Microsoft Office applications
3. Demonstrate practical experience with a variety of operating systems
4. Work with typical hardware configurations
5. Demonstrate the skills necessary for entry- or mid-level employment in the Computer Information Systems field

## APPLICATION & ACCEPTANCE

This certificate recognizes student achievement and validates skills learned in the first year of the CIS AAS degree program. In addition, the certificate can be placed on the student's resume, increasing the student's chances of obtaining employment while continuing to attend college (on a full- or part-time basis).

According to Oregon Labor Statistics (OLMIS), the total number of job openings for *Network and Computer Systems Administrators*, *Computer Programmers and Database Administrators* is “projected to be somewhat higher than the statewide average number of job openings for all occupations through 2022.”

## PREREQUISITES

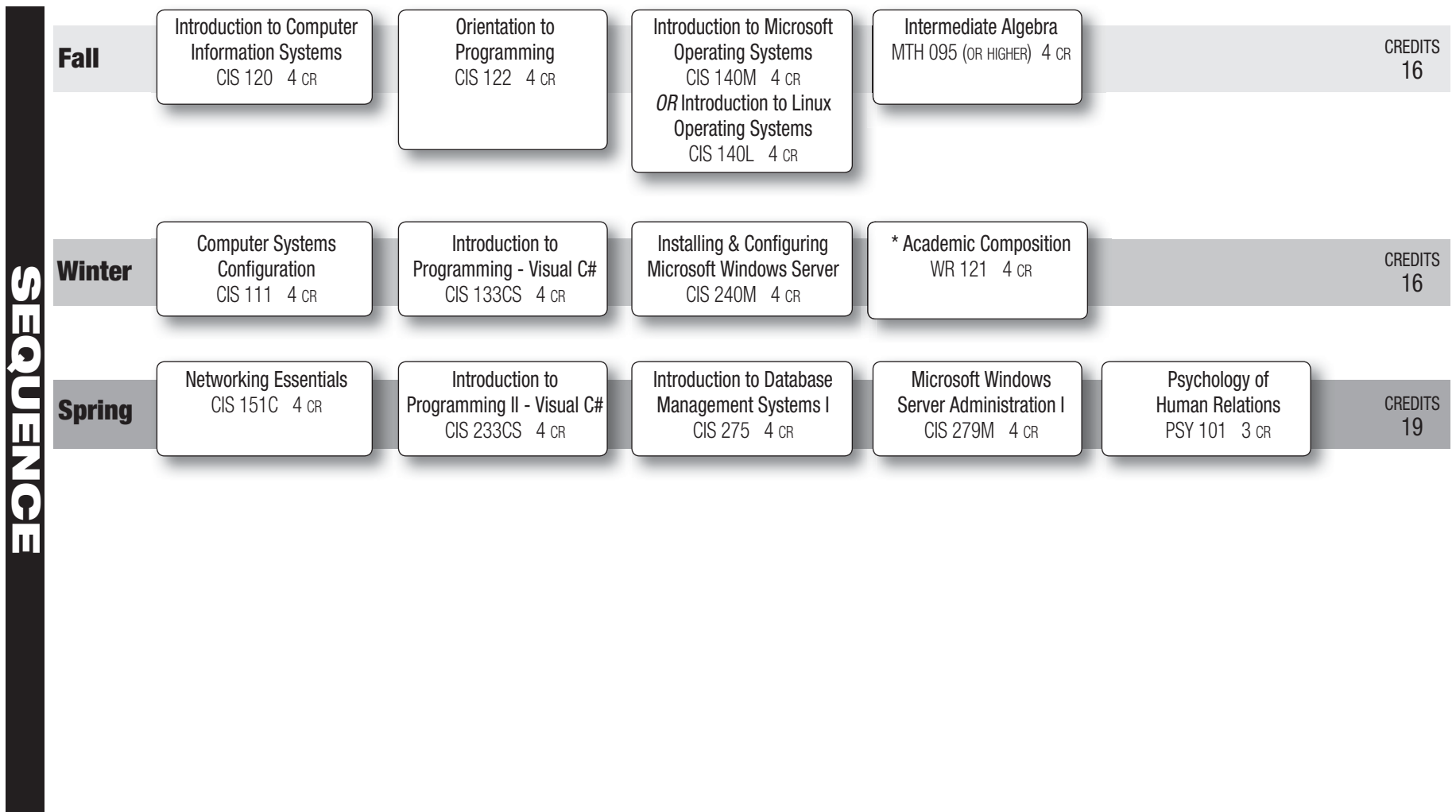
Completion of MTH 095 or placement test scores indicating MTH 105 or higher and WR 121 or higher is required for entry into the CIS program.

UCC faculty strongly recommends that CIS certificate- (or degree-) seeking students have access to a personally-owned, 64-bit Windows 7/8 (or newer) laptop with at least 16 GB of RAM, 1-2 TB hard disk, and other standard laptop accessories. Students can purchase a full version of Microsoft Office in the UCC bookstore at a very low, discounted student price.



# ONE YEAR CERTIFICATE — Computer Information Systems

51 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* A grade of C or better must be attained in the courses indicated.

# COMPUTER INFORMATION SYSTEMS

ASSOCIATE OF APPLIED SCIENCE: COMPUTER INFORMATION SYSTEMS – MINIMUM 95 CREDITS

## CAREER DESCRIPTION

This curriculum is designed to train students in a variety of modern Internet and business-oriented computer skills. Students will initially develop software and hardware problem-solving skills using programming logic and hands-on lab situations. Students will learn to efficiently use common office applications, receive practical experience with current mainstream operating systems (OS), and work with typical hardware configurations. Advanced databases (DBMS), Internet resource design (web pages & database use) project management, Microsoft Server management, Cisco Networking and networking security are focal areas in the second year.

Students will also be trained in basic business procedures, accounting and communication skills. Several of the Computer Information System (CIS) program's classes map directly to leading industry certifications such as the Microsoft Certified Systems Administrator (MCSA) and the Cisco Certified Network Administrator (CCNA) credential. The CIS program is designed to prepare students for employment in (or for a job path leading to) any one of several career opportunities as listed by the Oregon Department of Labor. The Network and Computer Systems Administrators, Computer Support Specialist, Computer Operator, Computer and Information Systems Manager, Computer Programmer, Network Administrator, Network Systems and Communications Analyst, Internet Service Technician, and Database Administrator are among those targeted job paths or job market careers.

To qualify for the AAS degree you must satisfactorily complete all required courses. If planning on entering other than Fall term or desire to transfer to a four-year CIS degree program, consult with a CS/CIS faculty advisor as soon as possible.

Note: Completion of MTH 095 or placement scores indicating MTH 105 or higher and WR 121 or higher is required for entry into the CIS degree program.

UCC faculty strongly recommends that CIS degree-seeking students have access to a personally-owned, 64-bit, Windows-based laptop with at least 6 GB of RAM, 2 TB hard disk, and other standard laptop accessories. Students can purchase Microsoft Office in the UCC bookstore at a very low, discounted student price.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Computer Information Systems will:

1. Develop problem-solving skills for working with software, hardware, and networks through programming logic and hands-on lab simulations
2. Use common Microsoft Office applications
3. Demonstrate practical experience with a variety of operating systems
4. Work with typical hardware configurations
5. Demonstrate the skills necessary for entry- or mid-level employment in the Computer Information Systems field

# ASSOCIATE OF APPLIED SCIENCE — Computer Information Systems

Minimum 95 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Introduction to Computer Information Systems CIS 120 4 CR	Orientation to Programming CIS 122 4 CR	Introduction to Microsoft Operating Systems CIS 140M 4 CR <i>OR</i> Introduction to Linux Operating Systems CIS 140L 4 CR	Intermediate Algebra MTH 095 (OR HIGHER) 4 CR	CREDITS 16
	<b>Winter</b>	Computer Systems Configuration CIS 111 4 CR	Introduction to Programming - Visual C# CIS 133CS 4 CR	Installing and Configuring Microsoft Windows Server CIS 240M 4 CR	* Academic Composition WR 121 4 CR	CREDITS 16
	<b>Spring</b>	Network Essentials CIS 151C 4 CR	Introduction to Programming II - Visual C# CIS 233CS 4 CR	Introduction to Data Management Systems I CIS 275 4 CR	Microsoft Windows Server Administration I CIS 279M 4 CR	CREDITS 16
<b>YEAR TWO</b>	<b>Fall</b>	Introduction to Basic Switching and Routers CIS 152C 4 CR	Authoring for the World Wide Web I CIS 195 4 CR	Introduction to Data Management Systems II CIS 276 4 CR	Microsoft Windows Server Administration II CIS 288M 4 CR	CREDITS 16
	<b>Winter</b>	Computer Applications – Spreadsheets CIS 125S 3 CR	Network Security Fundamentals CIS 284 4 CR	Advanced Network Device Security (CCNA Security) CIS 285B 4 CR	Authoring for the World Wide Web I CIS 295 4 CR	CREDITS 15
	<b>Spring</b>	Computer Applications – Database Software CIS 125D 3 CR	Project Management CIS 245 4 CR	Cooperative Work Experience: Computer Information Systems CIS 280 2 CR	Psychology of Human Relations PSY 101 3 CR	Fundamentals of Public Speaking SP 111 4 CR CREDITS 16

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* A grade of C or better must be attained in the courses indicated.

# COMPUTER INFORMATION SYSTEMS

ASSOCIATE OF APPLIED SCIENCE: CYBERSECURITY – MINIMUM 106 CREDITS

## CAREER DESCRIPTION

The Computer Information Systems: Cybersecurity program is a two-year sequence of classes designed to prepare the student, via hands-on training, for employment in the computer area as an entry-level network administrator, computer support person, web designer, or computer programmer, while developing general problem-solving and troubleshooting skills that can be applied to networking, server, computer, web, and business programming environments.

Further, this degree adds hands-on cybersecurity training in ethical hacking, computer hardware, computer forensics, cloud services, virtualization, switches, routers, and Adaptive Security Appliance (ASA) devices.

At UCC, you will learn to program in a high-level programming language and to apply programming concepts in a variety of environments. You will become proficient as a user and manager of server and desktop operating systems, switches, routers and ASAs. You will also learn how to configure and modify the hardware components of server and desktop systems. In addition, the CIS program provides a strong foundation in basic business and project management principles and practices. Finally, the program develops verbal and written communication skills.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Cybersecurity will:

1. Become proficient in a variety of modern internet and business-oriented computer skills
2. Develop software and hardware problem-solving skills using programming logic and hands-on lab situations
3. Learn to efficiently use common office applications, receive practical experience with a variety of operating systems, and work with typical hardware configurations
4. Demonstrate proficiency in information technology related to computer programming; device initiation, configuration, and management; project management; and webpage design
5. Employ common cybersecurity practices to eliminate or mitigate threats that originate from inside and outside of the organization

## PROGRAM AFFILIATION

UCC's Cybersecurity degree program benefits from a partnership with Mount Hood Community College (MHCC), which is recognized by the National Security Agency (NSA) and the Department of Homeland Security as a Center of Academic Excellence (CAE-2Y).

UCC's Cybersecurity degree instructional team will work to attain its own CAE-2Y designation as they gather the data required to meet its requirements.

# ASSOCIATE OF APPLIED SCIENCE — Cybersecurity

Minimum 106 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Introduction to Computer Information Systems CIS 120 4 CR	Orientation to Programming CIS 122 4 CR	Introduction to Microsoft Operating Systems CIS 140M 4 CR <i>OR</i> Introduction to Linux Operating Systems CIS 140L 4 CR	Intermediate Algebra MTH 095 (OR HIGHER) 4 CR	<b>CREDITS 16</b>	
	<b>Winter</b>	Computer Systems Configuration CIS 111 4 CR	Introduction to Programming - Visual C# CIS 133CS 4 CR	Installing and Configuring Microsoft Windows Server CIS 240M 4 CR	* Academic Composition WR 121 4 CR	<b>CREDITS 16</b>	
	<b>Spring</b>	Networking Essentials CIS 151C 4 CR	Introduction to Programming II - Visual C# CIS 233CS 4 CR	Introduction to Data Management Systems I CIS 275 4 CR	Microsoft Windows Server Administration I CIS 279M 4 C	Psychology of Human Relations PSY 101 3 CR	<b>CREDITS 19</b>
<b>YEAR TWO</b>	<b>Fall</b>	Introduction to Basic Switching and Routers CIS 152C 4 CR	Authoring for the World Wide Web I CIS 195 4 CR	Introduction to Data Management Systems II CIS 276 4 CR	Microsoft Windows Server Administration II CIS 288M 4 CR	Cooperative Work Experience: Computer Information Systems CIS 280 2 CR	<b>CREDITS 18</b>
	<b>Winter</b>	Computer Applications – Spreadsheets CIS 125S 3 CR	Network Security Fundamentals CIS 284 4 CR	Ethical Hacking CIS 285A 4 CR	Advanced Network Device Security (CCNA Security) CIS 285B 4 CR	Authoring for the World Wide Web I CIS 295 4 CR	<b>CREDITS 19</b>
	<b>Spring</b>	Project Management CIS 245 4 CR	Virtualization Technologies CIS 286A 3 CR	Cloud Services Technologies CIS 285C 3 CR	Computer Forensics For Ethical Hackers CIS 145 4 CR	Fundamentals of Public Speaking SP 111 4 CR	<b>CREDITS 18</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* A grade of C or better must be attained in the courses indicated.



# CRIMINAL JUSTICE

## POLICE RESERVE ACADEMY – 25 CREDITS

### CAREER DESCRIPTION

The Public Safety Department offers several programs related to a career in criminal justice. For students interested in becoming a law enforcement officer, the Police Reserve Academy provides a 320-hour program over the course of three terms. For students interested in working in the field of juvenile corrections, the one-year Juvenile Corrections Certificate Program is available. The AAS Degree in Criminal Justice is a two-year Associate of Applied Science degree that provides a strong basis for employment in the field. For those students intending to proceed on to a related Bachelor's degree, the AA/OT (Associate of Arts Oregon Transfer) Degree is available with a Criminal Justice focus, as well as Associate of Science (AS) articulated transfer programs. For more information, see the following program descriptions.

This is a 320-hour program designed to train police reserve officers to enter a career in law enforcement. Students interested in this program must apply to the Public Safety Department Chair prior to Fall Term. All program participants must meet all of the following criteria:

- Not have been convicted by any state or by the federal government of a crime, the punishment for which could have been imprisonment in a federal penitentiary or state prison.
- Be a high school graduate or have passed the General Education Development test.
- Possess a valid Oregon driver's license with an acceptable driving record.

This nine-month Academy program is instructed on Saturdays between early September and mid-May of each year. The classes are scheduled from 7 a.m. to 5:30 p.m. each Saturday. Students are required to provide their own uniforms, equipment, and supplies.

Participating law enforcement agencies in Douglas County may select candidates for their Reserve Officer Program or full-time positions from the class at any time. These classes are taught by personnel from throughout the criminal justice system in Douglas County.

This program may be taken in conjunction with the AAS, AS, or AA/OT Criminal Justice Program. For further information, contact the Criminal Justice Program Coordinator.

### PROGRAM OUTCOMES INFORMATION

Students who successfully complete the Criminal Justice Police Reserve Academy will:

1. Communicate effectively in the criminal justice culture: verbally, non-verbally, and in writing
2. Balance the unique responsibilities of criminal justice work with competing family and other personal needs
3. Work effectively on both independent assignments and team efforts within the criminal justice system
4. Exhibit a commanding presence that is appropriate to specific criminal justice situations
5. Locate and interpret current case law and statutes pertaining to specific criminal justice roles; take action that is supported by current law and statutes
6. Recognize symptoms of mental health and substance abuse issues; take appropriate action
7. Work effectively with persons of different cultural heritage, gender, and age
8. Acquire an understanding of cultural norms and their impact on criminal justice interactions
9. Discuss the relationship between the criminal justice system, cultural and other diversity, and police/community dynamics
10. Demonstrate cognitive knowledge focusing on positive

criminal justice professional/citizen contacts, with the principle emphasis on the importance of a continuing dialogue between the criminal justice system and all segments of the community

### INFORMATION

UCC's program overall is monitored through rubrics, but the program coordinator uses several specialty areas throughout our curriculum:

- The physical fitness testing administered to the students sets the standard for all Oregon peace officers on the ORPAT test.
- The program physical fitness evaluations use the US Army physical fitness test that has set standards and is adjusted by age and gender and is employed by the Oregon State Police.
- As the students are presented with their target goal, then tested at several points throughout the program, they are able to focus clearly on where they need to improve.

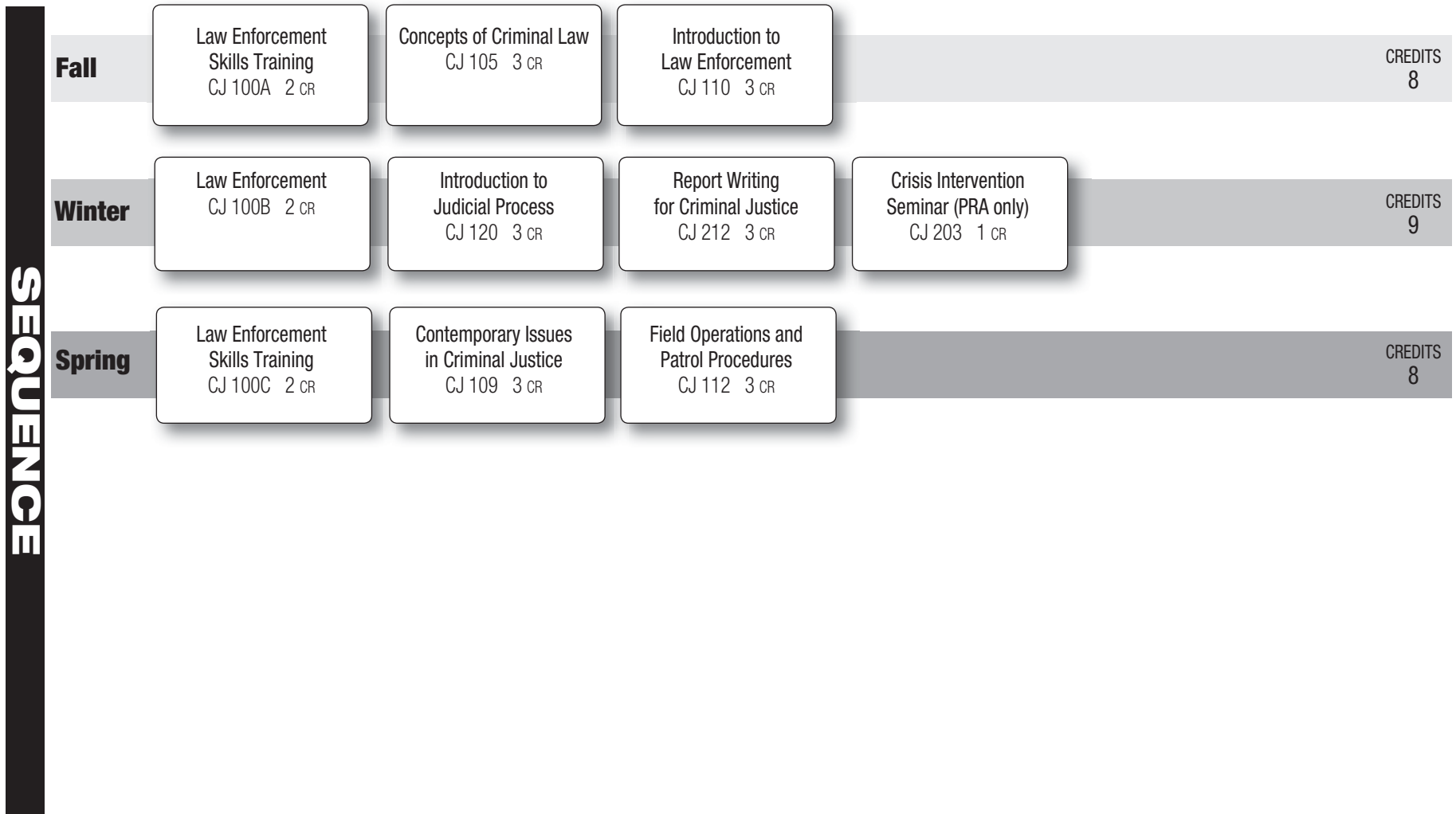
Achieving the set standards for our students is the ultimate goal of the program and insures maximum hiring potential for graduates.

- Lowering or easing of those standards whether for academics, physical fitness, or ethics, will not do justice to our graduates that face entry into a professional field that will not lower their standards.

Continuous monitoring of all students and documentation of improvements ensures they meet our standards and their individual goals by the end of spring term.

# Police Reserve Academy

25 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Please see an advisor for a degree planning worksheet for this program.

# CRIMINAL JUSTICE

ONE-YEAR CERTIFICATE: JUVENILE CORRECTIONS – 49 CREDITS

## CAREER DESCRIPTION

The Juvenile Corrections one-year certificate program 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 non-profit agencies/programs. As a statewide cooperative effort among several Oregon community colleges, this program is transferable among the participating schools. In addition, required courses may be applied to an AAS, AS or other 2-year degrees either as required, technical option, or elective courses.

Juvenile corrections workers provide supervision, facilitate in the treatment process and crisis intervention, provide social and life skills training, maintain records and documentation, engage in support services, monitor and ensure a secure environment. The occupational outlook for juvenile corrections workers is better than average. While the certificate prepares individuals for entry-level employment, advancement in salary and responsibility may require additional education. Agencies employing certificate holders are likely to have additional job specific requirements such as age, physical abilities, drug screening, and background history checks. Beginning wage for an OYA Youth Corrections Unit Coordinator is approximately \$2,800 per month; however, salary and benefit packages vary greatly depending upon the employing agency and geographical location.

## PROGRAM OUTCOMES

Students who successfully complete the Criminal Justice Certificate will:

1. Communicate effectively in the criminal justice culture: verbally, non-verbally, and in writing
2. Balance the unique responsibilities of criminal justice work with competing family and other personal needs
3. Work effectively on both independent assignments and team efforts within the criminal justice system
4. Exhibit a commanding presence that is appropriate to specific criminal justice situations
5. Locate and interpret current case law and statutes pertaining to specific criminal justice roles; take action that is supported by current law and statutes
6. Recognize symptoms of mental health and substance abuse issues; take appropriate action
7. Work effectively with persons of different cultural heritage, gender, and age
8. Acquire an understanding of cultural norms and their impact on criminal justice interactions
9. Discuss the relationship between the criminal justice system, cultural and other diversity, and police/community dynamics
10. Demonstrate cognitive knowledge focusing on positive criminal justice professional/citizen contacts, with the principle emphasis on the importance of a continuing dialogue between the criminal justice system and all segments of the community

# ONE-YEAR CERTIFICATE — Criminal Justice, Juvenile Corrections

49 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	General Psychology PSY 201 3 CR	Academic Composition WR 121 4 CR	Intro to Computer Information Systems CIS 120 4 CR	Individual & Family Development HDFS 201 3 CR	<b>CREDITS 14</b>	
	<b>Winter</b>	Community Resources HS 154 3 CR	Understanding Dysfunctional Families HS 227 3 CR	Introduction to Algebra for the Trades MTH 052 (OR HIGHER) 4 CR	Juvenile Delinquency SOC 207 3 CR	* Interpersonal Communication SP 218 3 CR	<b>CREDITS 16</b>
	<b>Spring</b>	*** Coop. Work Experience: Criminal Justice CJ 280 2 CR	Introduction to Criminology CJ 101 3 CR	Introduction to Juvenile Justice Systems CJ 230 3 CR	Social Problems & Issues SOC 206 3 CR	Social Aspects of Addiction SOC 225 3 CR	<b>CREDITS 14</b>
	<b>Summer</b>	** Introduction to Corrections Casework CJ 232 3 CR	*** Coop. Work Experience: Criminal Justice CJ 280 2 CR				<b>CREDITS 5</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* Meets Human Relations class requirement.  
\*\* Prerequisite: CJ 230 OR CJ 261 OR Instructor Approval  
\*\*\* CWE must be in juvenile-related settings.

# CRIMINAL JUSTICE

ASSOCIATE OF APPLIED SCIENCE: CRIMINAL JUSTICE – 90 CREDITS

## CAREER DESCRIPTION

The Public Safety Department offers several programs related to a career in criminal justice. For students interested in becoming a law enforcement officer, the Police Reserve Academy provides a 320-hour program over the course of three terms. For students interested in working in the field of juvenile corrections, the one-year Juvenile Corrections Certificate Program is available. The AAS Degree in Criminal Justice is a two-year Associate of Applied Science degree that provides a strong basis for employment in the field. For those students intending to proceed on to a related Bachelor's degree, the AA/OT (Associate of Arts Oregon Transfer) Degree is available with a Criminal Justice focus, as well as Associate of Science (AS) articulated transfer programs. For more information, see the following program descriptions.

An Associate of Applied Science degree is awarded upon successful completion of the 90 credit hours. Criminal Justice related majors are offered at SOU (Criminology and Criminal Justice) PSU (Administration of Justice) and WOU (Corrections and Law Enforcement.) Note: Students expecting to continue on to attain a B.A. or B.S. should consider the AA/OT or AS – Criminal Justice Program- see the transfer section for more details.

## PROGRAM OUTCOMES

Students who successfully complete an Associate of Applied Science degree in Criminal Justice will:

1. Communicate effectively in the criminal justice culture: verbally, non-verbally, and in writing
2. Balance the unique responsibilities of criminal justice work with competing family and other personal needs
3. Work effectively on both independent assignments and team efforts within the criminal justice system
4. Exhibit a commanding presence that is appropriate to specific criminal justice situations

5. Locate and interpret current case law and statutes pertaining to specific criminal justice roles; take action that is supported by current law and statutes
6. Recognize symptoms of mental health and substance abuse issues; take appropriate action
7. Work effectively with persons of different cultural heritage, gender, and age
8. Acquire an understanding of cultural norms and their impact on criminal justice interactions
9. Discuss the relationship between the criminal justice system, cultural and other diversity, and police/community dynamics
10. Demonstrate cognitive knowledge focusing on positive criminal justice professional/citizen contacts, with the principle emphasis on the importance of a continuing dialogue between the criminal justice system and all segments of the community

CJ 212	Report Writing for Criminal Justice <sup>PRA</sup>	3
CJ 226	Introduction to Constitutional Law	3
CJ 280	Cooperative Work Experience: Criminal Justice/Corrections <sup>2</sup>	1-4
CJ 298	Criminal Justice Independent Study <sup>2</sup>	1-3
SOC 207	Juvenile Delinquency	3

### Spring

CJ 100C	Law Enforcement Skills Training <sup>PRA</sup>	2
CJ 109	Contemporary Issues in Criminal Justice	3
CJ 112	Field Operations and Patrol Procedures <sup>PRA</sup>	3
CJ 210	Criminal Investigations	3
CJ 230	Introduction to Juvenile Justice Systems	3
CJ 240	Criminalistics II	3
CJ 280	Cooperative Work Experience: Criminal Justice/Corrections <sup>2</sup>	1-4
CJ 298	Criminal Justice Independent Study <sup>2</sup>	1-3
SOC 225	Social Aspects of Addiction	3
***SPAN 122	Spanish for Safety & Emergency Personnel	4

### Summer

CJ 105	Concepts of Criminal Law	3
CJ 232	Introduction to Corrections Casework <sup>3</sup>	3
CJ 280	Cooperative Work Experience: Criminal Justice/Corrections <sup>2</sup>	1-4
CJ 298	Criminal Justice Independent Study <sup>2</sup>	1-3

- \* A grade of C or better must be attained in these courses
- \*\* Meets Human Relations class requirement
- \*\*\* seldom offered

PRA Police Reserve Academy only

+ Any unlisted CJ classes may be applied as approved electives.

- 1 Available in another term
- 2 Three (3) credits of CJ 298 or four (4) credits of CJ 280 can be applied to AAS degree
- 3 Prerequisite: CJ 230 or CJ 261 or Instructor Approval
- 4 Prerequisite: CJ 140 or instructor approval

## APPROVED ELECTIVES

### Fall

CIS 120	Intro to Computer Information Systems <sup>1</sup>	4
CJ 100A	Law Enforcement Skills Training <sup>PRA</sup>	2
CJ 216	Law Enforcement Supervision and Management	3
CJ 243	Narcotics and Dangerous Drugs	3
CJ 275	Comparative Criminal Justice Systems	3
CJ 280	Cooperative Work Experience: Criminal Justice/Corrections <sup>2</sup>	1-4
CJ 298	Criminal Justice Independent Study <sup>2</sup>	1-3
HS 227	Understanding Dysfunctional Families <sup>1,3</sup>	

### Winter

CJ 100B	Law Enforcement Skills Training <sup>PRA</sup>	2
CJ 140	Introduction to Criminalistics	3
CJ 169	Terrorism & Homeland Security	3
CJ 211	Ethics in Criminal Justice	3



# ASSOCIATE OF APPLIED SCIENCE — Criminal Justice

90 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Introduction to Law Enforcement CJ 110 3 CR	Introduction to Parole & Probation CJ 261 3 CR	* Academic Composition WR 121 4 CR	Approved Elective 3 CR	CREDITS 13	
	<b>Winter</b>	Introduction to Judicial Process CJ 120 3 CR	Introduction to Sociology SOC 204 3 CR	** Psychology of Human Relations <i>OR</i> PSY 101 3 CR ** Interpersonal Communication SP 218 3 CR	Approved Elective 3 CR	Approved Elective 3 CR	CREDITS 15
	<b>Spring</b>	Introduction to Criminology <sup>1</sup> CJ 101 3 CR	Introduction to Corrections CJ 130 3 CR	Technical Report Writing WR 227 4 CR	Approved Elective 3 CR	Cultural Diversity Issues in Criminal Justice CJ 114 3 CR	CREDITS 16

**Summer Term (Optional)** Approved Electives (*see list on facing page*)

<b>YEAR TWO</b>	<b>Fall</b>	Concepts of Criminal Law <sup>1</sup> CJ 105 3 CR	General Psychology PSY 201 3 CR	Social Sciences Elective 3 CR	Approved Elective 3 CR	Approved Elective 3 CR	CREDITS 15
	<b>Winter</b>	Crisis Intervention CJ 203 1 CR	Introduction to Algebra for the Trades (OR HIGHER) MTH 052 4 CR	Social Sciences Elective 3 CR	Approved Elective 3 CR	Approved Elective 4 CR	CREDITS 15
	<b>Spring</b>	Fundamentals of Public Speaking SP 111 4 CR	US Government PS 203 3 CR	Social Sciences Elective 3 CR	Approved Elective 3 CR	Approved Elective 3 CR	CREDITS 16

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* A grade of C or better must be attained in these courses.

\*\* Meets Human Relations class requirement <sup>1</sup> Available in another term

# DENTAL ASSISTING

ONE-YEAR CERTIFICATE: DENTAL ASSISTING – 67 CREDITS

## CAREER DESCRIPTION

This one-year certificate program is to prepare graduates for employment in the dental setting with emphasis on current concepts of clinical chairside assisting. A dental assistant may serve as a clinical chairside assistant, receptionist, bookkeeper, office manager or laboratory technician.

For entry into Dental Assisting program, Orientation Seminar is required. Seminar will include information about the program, and paperwork that will need to be completed prior to attending classes. Questions and concerns will also be discussed.

Packet information will be turned in prior to starting classes. This includes:

1. Physical
2. Vaccination records, including updates
3. Background history check
4. Drug screening
5. Current HealthOcc CPR with AED

The cost to student is not included in program fees.

## PROGRAM OUTCOMES

UCC's Dental Assisting program is accredited by the Commission of Dental Accreditation, in association with the US Department of Education and the Dental Assisting National Board. The one-year certificate program is designed to prepare graduates for an exciting career in the dental profession. The program prepares the assistant for licensing exams, obtaining their Oregon Dental Radiology license (RHS), Basic Examination along with Expanded Functions Dental Assistant (EFDA). These exams prepare the dental assistant for a lifelong career in the dental profession.

Students who successfully complete the Dental Assisting certificate will:

1. Demonstrate knowledge and skills required to perform a variety of chairside skills during comprehensive patient care and treatment
2. Apply infection control procedures
3. Recognize and respond to medical emergencies in the dental setting
4. Practice appropriate communication skills to establish professional working relationships in a team-centered dental office environment
5. Demonstrate safe working habits with the knowledge in Occupational Safety and Health Administration Hazard Communication Standard
6. Demonstrate ethical conduct, moral attitudes and principles essential for maintaining trust of professional associates, the support of the community, and the confidence of the patient
7. Be prepared to sit for the required state and national licensure exams

## ENTRY REQUIREMENTS

Program admission occurs once a year in fall term. The application process begins in February of each calendar year.

Students are eligible to be considered for admission to the Dental Assisting program after completing the Required Prerequisite Courses listed below. These courses must be completed with a grade of C or better prior to beginning the Dental Assisting program.

## Required Prerequisite Courses

MTH 060	Introduction to Algebra or higher	4
PSY 101	Psychology of Human Relations	3
CIS 120	Intro to Computer Information Systems	4
WR 115	Introduction to Expository Writing or higher	4
		total 15 credits

## Drug Screening

All dental students must successfully pass a drug screening test at the time of admission into the Dental Program and are subject to random drug screening throughout the program. Failure to submit to a random drug screen or having a positive drug screen will result in sanctions per the UCC Student Code of Conduct (721.3). The cost is not covered by the student fees.

## Background Check

All accepted dental assisting students will be required to undergo a background check prior to entering the program. Individuals with a criminal record may not be allowed into a healthcare facility as a student. Information pertaining to background checks and disqualifying crimes can be found online through The Department of Human Services (DHS) website <http://www.oregon.gov/dhs/business-services/chc/Pages/index.aspx>. The program is required to deny admission or continuation in the Dental Assisting program to any student whose background poses a threat to an individual, the college, or the dental profession, or the community.

## GRADUATION REQUIREMENTS

Students must complete all courses on this advising guide with a grade of C or better to continue in and complete the program, receive their certificates, and meet the educational requirements to apply to take the national licensure exams through DANB (Dental Assisting National Board).

# ONE-YEAR CERTIFICATE — Dental Assisting

67 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	Dental Health Education I DA 107 1 CR	Dental Health Education II DA 108 1 CR	Dental Materials I DA 192 3 CR	Dental Radiology I DA 210 4 CR	Chairside Procedures I DA 195 4 CR	* Dentistry Law & Ethics DA 103 1 CR	Health Sciences DA 110 3 CR	<b>CREDITS 17</b>
	<b>Winter</b>	Dental Anatomy DA 115 3 CR	Dental Terminology DA 111 2 CR	Dental Materials II DA 198 2 C	Dental Radiology II DA 211 3 CR	Chairside Procedures II DA 196 4 CR	Medical Emergencies in the Dental Office DA 139 2 CR	Coop. Work Experience: Dental Assisting DA 280 1 CR	<b>CREDITS 17</b>
	<b>Spring</b>	Advanced Clinical Experiences DA 102 4 CR	Oral Pathology DA 135 2 CR	* Dental Office Procedures DA 199 3 CR	Coop. Work Experience: Dental Assisting DA 280 9 CR	<b>CREDITS 18</b>			

## NOTES

Please see an advisor for a degree planning worksheet for this program.

\* DA 103 and DA 199 are online courses.

All courses required grade of C or better for advancement in the program.

# EARLY CHILDHOOD EDUCATION

## PATHWAYS CERTIFICATE: INFANT/TODDLER – 20 CREDITS

### CAREER DESCRIPTION

The State of Oregon requires individuals working in a licensed child care facility to have at least fourteen (14) college credits of Early Childhood Education. The classes offered in this certification are specific to those seeking to work with infants and toddlers under age three. All credits earned as part of the Early Childhood Certificate may be applied to the Associate's degree.

You will earn a Infant/Toddler Career Pathway Certificate by successfully completing the required twenty (20) credit hours with a grade of C or better in all courses. Students will be required to register in the Oregon Registry before beginning coursework and pay for a background check. Proof of MMR vaccinations and a Food Handler's Certificate is also required for ED 101. CPR and First Aid, are required before ED 103.

### PROGRAM OUTCOMES

This certificate provides students with basic skills in the early care and education of infants and toddlers. It is designed for students just entering the early care and education field, those who wish to focus their education and work experience with infants and toddlers, and for those already employed in child care, but who need an immediate certificate to continue working in an Oregon licensed facility. A student may continue to seek the associate degree seamlessly, since all of the certificate classes are wholly contained within the degree program.

Students who successfully complete the Infant/Toddler Pathways Certificate will:

1. Create healthy, respectful, supportive and challenging learning environments for young children based on knowledge of child development
2. Create respectful, reciprocal relationships that support and empower families and involve all families in their student's development and learning
3. Develop and use effective and responsible assessment including observation, documentation and other appropriate tools in partnership with families and professional colleagues to promote positive outcomes for each child
4. Use a whole array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning
5. Design, implement and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child
6. Demonstrate behavior reflective of ethical guidelines and professional practices associated with early childhood careers

### APPLICATION & ACCEPTANCE

Entrance into UCC's Early Childhood Program only requires regular application procedures for UCC. To enroll in ED 101, the first Seminar/Practicum course, students must receive approval from the instructor to ensure they have completed the background check, MMR vaccination verification and food handler's certificate before coursework can begin. CPR and First Aid certification must be completed before beginning ED 103.

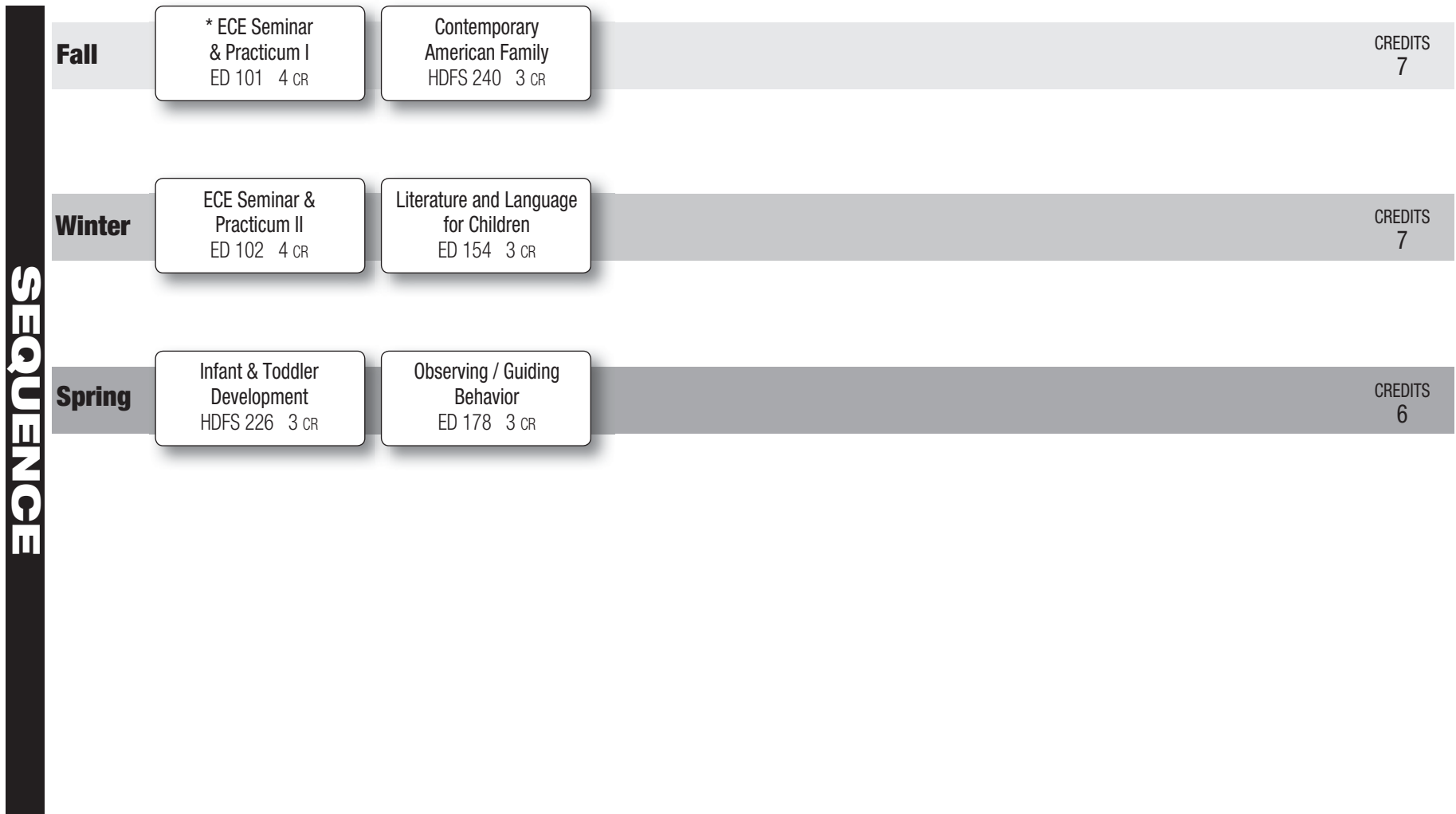
### PROFESSIONAL REQUIREMENTS

Students will be required to enroll in the Oregon Registry Online (ORO) and begin mapping their educational and professional journey by the beginning of ED 102 Early Childhood Education Seminar/Practicum II coursework. Please go to [www.pdx.edu/occd/oregon-registry-2](http://www.pdx.edu/occd/oregon-registry-2) for more information, and check with your instructor for guidance.

Students will be required to document the meeting of ECE program outcomes through the development of an electronic portfolio. Portfolio submissions will begin during ED 101 and continue on to completion of certificates and degrees.

# PATHWAYS CERTIFICATE — Infant / Toddler

20 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for this program.

This will place you at Step 7.5 of the Oregon Registry and meets coursework requirement for the Infant/Toddler CDA and Oregon Infant/Toddler Registry Certificate. The certificate will also assist the student in earning the Child Development Associate Certificate (CDA).

\*Instructor approval required to ensure students have completed the background history check, MMR vaccination verification and a food handler's certificate before coursework can begin.



# EARLY CHILDHOOD EDUCATION

PATHWAYS CERTIFICATE: PRE-SCHOOL – 23 CREDITS

## CAREER DESCRIPTION

This certificate provides students with basic skills in the early care and education of preschool children age two-and-a-half to six years. It is designed for students just entering the early care and education field, those who wish to focus their education and work experience with preschoolers, and for those already employed in child care, but who need an immediate certificate to continue working in an Oregon licensed facility.

You will earn a Pre-School Career Pathway Certificate by successfully completing the required twenty-three (23) credit hours with a grade of C or better in all courses. Students will be required to register in the Oregon Registry before beginning coursework and pay for a background check. Proof of MMR vaccinations is also required for ED 101. CPR and First Aid, and a Food Handler's Certificate are required before ED 103.

## PROGRAM OUTCOMES

This certificate provides students with the skills needed in the early care and education of children infant to age six years. It is designed for students just entering the early care and education field, those who wish to focus their education and work experience with preschoolers, and for those already employed in child care, but who need an immediate certificate to continue working in an Oregon licensed facility. A student may continue to seek the UCC One-Year Early Childhood Education Certificate, the Associate of Applied Science degree or the Associate of Science degree, seamlessly, since all of the certificate classes are wholly contained within the degree programs.

Students who successfully complete the Pre-School Pathways Certificate will:

1. Create healthy, respectful, supportive and challenging learning environments for young children based on knowledge of child development
2. Create respectful, reciprocal relationships that support and empower families and involve all families in their student's development and learning
3. Develop and use effective and responsible assessment including observation, documentation and other appropriate tools in partnership with families and professional colleagues to promote positive outcomes for each child
4. Use a whole array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning
5. Design, implement and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child
6. Demonstrate behavior reflective of ethical guidelines and professional practices associated with early childhood careers

## APPLICATION & ACCEPTANCE

Entrance into UCC's Early Childhood Program only requires regular application procedures for UCC. To enroll in ED 101, the first Seminar/Practicum course, students must receive approval from the instructor to ensure they have completed the background check, MMR vaccination verification and food handler's certificate before coursework can begin. CPR and First Aid certification must be completed before beginning ED 103.

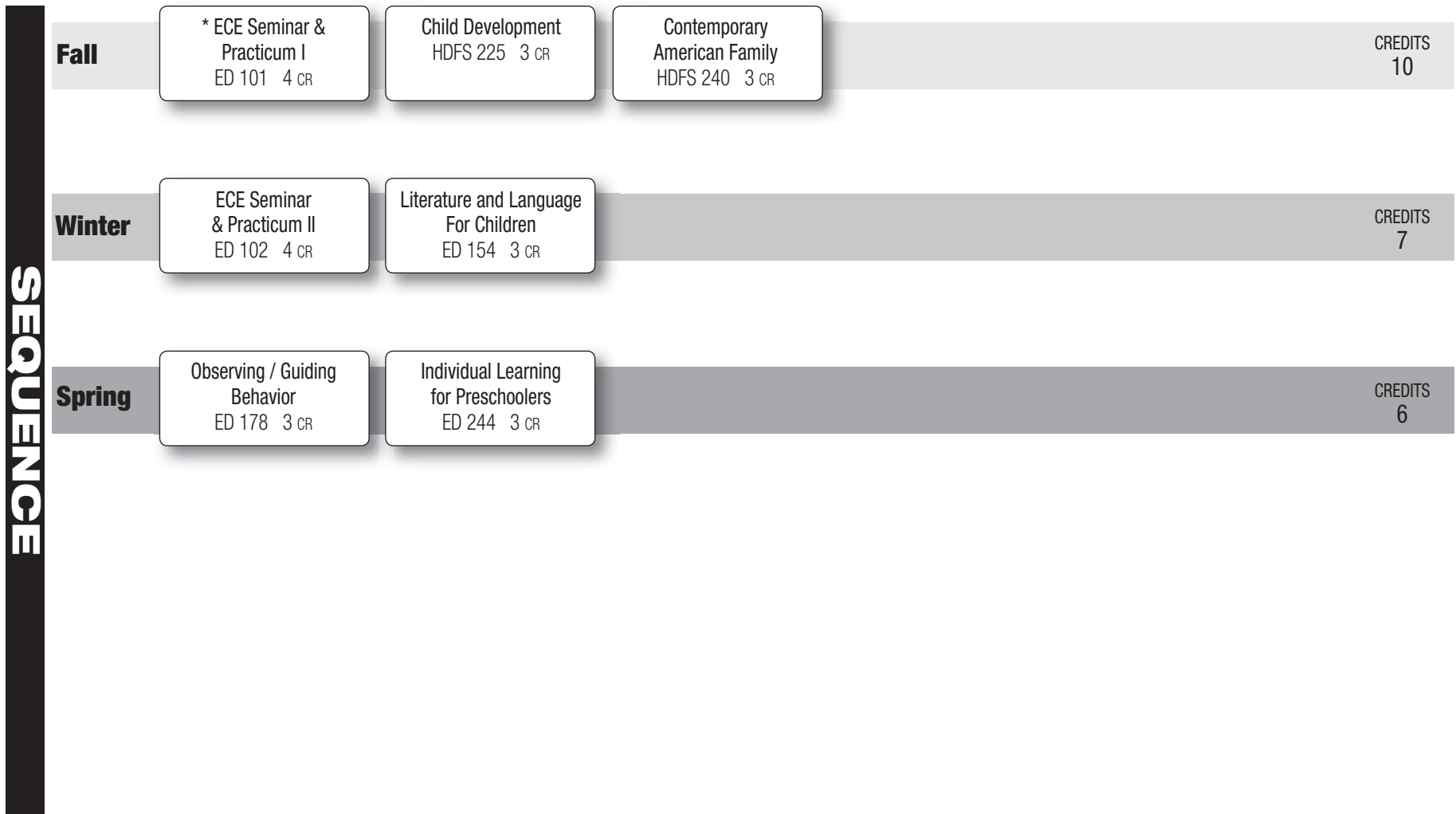
## PROFESSIONAL REQUIREMENTS

Students will be required to enroll in the Oregon Registry Online (ORO) and begin mapping their educational and professional journey by the beginning of ED 102 Early Childhood Education Seminar/Practicum II coursework. Please go to [www.pdx.edu/occd/oregon-registry-2](http://www.pdx.edu/occd/oregon-registry-2) for more information, and check with your instructor for guidance.

Students will be required to document the meeting of ECE program outcomes through the development of an electronic portfolio. Portfolio submissions will begin during ED 101 and continue on to completion of certificates and degrees.

# PATHWAYS CERTIFICATE — Pre-School

23 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for this program.

This will place you at Step 7.5 of the Oregon Registry. The certificate will also assist the student in earning the Child Development Associate Certificate (CDA).

\*Instructor approval required to ensure students have completed the background history check, MMR vaccination verification and a food handler's certificate before coursework can begin.

# EARLY CHILDHOOD EDUCATION

ONE-YEAR CERTIFICATE: EARLY CHILDHOOD EDUCATION – 48 CREDITS

## CAREER DESCRIPTION

This program prepares students to work with preschool age children as teachers or aides. Graduates are trained to work in a variety of educational and child care settings, including nursery schools, preschools, in child care homes and centers, and as a nanny.

Course work and practical work experience emphasize knowledge of normal growth and development of young children, guidance skills, and the planning and directing of activities for children which foster positive intellectual, social, emotional and physical development. Many of the courses are also excellent for parents or others who work with young children.

You will earn a One-Year Early Childhood Education Certificate by successfully completing the required forty-seven (47) credit hours with a grade of C or better in all courses.

## PROGRAM OUTCOMES

This certificate program prepares students to work with preschool age children as teachers or aides. Graduates are trained to work in a variety of educational and child care settings including nursery schools, preschools, as a nanny, and in child care homes and centers.

Students who successfully complete the Early Childhood Education Certificate will:

1. Create healthy, respectful, supportive and challenging learning environments for young children based on knowledge of child development
2. Create respectful, reciprocal relationships that support and empower families and involve all families in their student's development and learning
3. Develop and use effective and responsible assessment including observation, documentation and other appropriate tools in partnership with families and professional colleagues to promote positive outcomes for each child
4. Use a whole array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning
5. Design, implement and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child
6. Demonstrate behavior reflective of ethical guidelines and professional practices associated with early childhood careers

## APPLICATION & ACCEPTANCE

Entrance into UCC's Early Childhood Program only requires regular application procedures for UCC. To enroll in ED 101, the first Seminar/Practicum course, students must receive approval from the instructor to ensure they have completed the background check, MMR vaccination verification and food handler's certificate before coursework can begin. CPR and First Aid certification must be completed before beginning ED 103.

Students will be required to document the meeting of ECE program outcomes through the development of an electronic portfolio. Portfolio submissions will begin during ED 101 and continue on to completion of certificates and degrees.

## PROFESSIONAL REQUIREMENTS

Students will be required to enroll in the Oregon Registry Online (ORO) and begin mapping their educational and professional journey by the beginning of ED 102 Early Childhood Education Seminar/Practicum II coursework. Please go to [www.pdx.edu/occd/oregon-registry-2](http://www.pdx.edu/occd/oregon-registry-2) for more information, and check with your instructor for guidance.

Students will be required to document the meeting of ECE program outcomes through the development of an electronic portfolio. Portfolio submissions will begin during ED 101 and continue on to completion of certificates and degrees.

# ONE-YEAR CERTIFICATE — Early Childhood Education

48 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	* ECE Seminar & Practicum I ED 101 4 CR	Introduction to Early Childhood Education ED 140 2 CR	Child Development HDFS 225 3 CR	The Exceptional Child HDFS 228 3 CR	** Academic Composition WR 121 4 CR	<b>CREDITS 16</b>
	<b>Winter</b>	ECE Seminar & Practicum II ED 102 4 CR	Literature and Language For Children ED 154 3 CR	Understanding Children's Behavior PSY 130 2 CR	Personal Nutrition FN 230 3 CR	Introduction to Algebra MTH 060 (OR HIGHER) 4 CR	<b>CREDITS 16</b>
	<b>Spring</b>	ECE Seminar & Practicum III ED 103 4 CR	Creative Activities for Children ED 150 3 CR	Infant & Toddler Development HDFS 226 3 CR	Contemporary American Family HDFS 240 3 CR	Observing / Guiding Behavior ED 178 3 CR	<b>CREDITS 16</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* Instructor approval required to ensure students have completed the background history check, MMR vaccination verification and a food handler's certificate before coursework can begin.

\*\* A grade of C or better must be attained in these courses.

# EARLY CHILDHOOD EDUCATION

ASSOCIATE OF APPLIED SCIENCE: EARLY CHILDHOOD EDUCATION – 93 CREDITS

## CAREER DESCRIPTION

Graduates are trained to work in a variety of educational and child care settings including nursery school, nanny, preschool, day care centers, private kindergarten and private childcare.

Course work and practical work experience emphasize knowledge of normal growth and development of young children, guidance skills, and the planning and directing of activities for children which foster positive intellectual, social, emotional and physical development. Many of the courses are also excellent for parents or others who work with young children.

## PROGRAM OUTCOMES

The Early Childhood Education associate degree program prepares students to work with preschool and school-aged children in both public and private school settings. This program is designed for persons of all ages and backgrounds, with special attention given to individual student needs and abilities.

Students who successfully complete the Associate of Applied Science in Early Childhood Education will:

1. Create healthy, respectful, supportive and challenging learning environments for young children based on knowledge of child development
2. Create respectful, reciprocal relationships that support and empower families and involve all families in their student's development and learning
3. Develop and use effective and responsible assessment including observation, documentation and other appropriate tools in partnership with families and professional colleagues to promote positive outcomes for each child
4. Use a whole array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning
5. Design, implement and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child
6. Demonstrate behavior reflective of ethical guidelines and professional practices associated with early childhood careers

## APPLICATION & ACCEPTANCE

Entrance into UCC's Early Childhood Program only requires regular application procedures for UCC. To enroll in ED 101, the first Seminar/Practicum course, students must receive approval from the instructor to ensure they have completed the background check, MMR vaccination verification and food handler's certificate before coursework can begin. CPR and First Aid certification must be completed before beginning ED 103.

## PROFESSIONAL REQUIREMENTS

Students will be required to enroll in the Oregon Registry Online (ORO) and begin mapping their educational and professional journey by the beginning of ED 102 Early Childhood Education Seminar/Practicum II coursework. Please go to [www.pdx.edu/occd/oregon-registry-2](http://www.pdx.edu/occd/oregon-registry-2) for more information, and check with your instructor for guidance.

Students will be required to document the meeting of ECE program outcomes through the development of an electronic portfolio. Portfolio submissions will begin during ED 101 and continue on to completion of certificates and degrees.



# ASSOCIATE OF APPLIED SCIENCE — Early Childhood Education

93 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	**** ECE Seminar & Practicum I ED 101 4 CR	Introduction to Early Childhood Education ED 140 2 CR	Child Development HDFS 225 3 CR	*** Academic Composition WR 121 4 CR	Psychology of Human Relations PSY 101 3 CR	CREDITS 16
	<b>Winter</b>	ECE Seminar & Practicum II ED 102 4 CR	Lesson & Curriculum Planning ED 240 3 CR	Literature and Language for Children ED 154 3 CR	Elective: 3 CR	* Understanding Children's Behavior PSY 130 2 CR	CREDITS 15
	<b>Spring</b>	ECE Seminar & Practicum III ED 103 4 CR	Creative Activities for Children ED 150 3 CR	Infant & Toddler Development HDFS 226 3 CR	Observing / Guiding Behavior ED 178 3 CR	Elective 3 CR	CREDITS 16
<b>YEAR TWO</b>	<b>Fall</b>	ECE Seminar & Practicum IV ED 104 4 CR	* Intro to Algebra MTH 060 (OR HIGHER) 4 CR	The Exceptional Child HDFS 228 3 CR	* Institutions and Social Change SOC 205 3 CR	Elective 3 CR	CREDITS 17
	<b>Winter</b>	ECE Seminar & Practicum V ED 105 4 CR	* Personal Nutrition FN 230 3 CR	Administration of Child Care Centers ED 247 3 CR	** Introduction to Music and Its Literature MUS 202 3 CR OR Approved Option		CREDITS 13
	<b>Spring</b>	ECE Seminar & Practicum VI ED 106 4 CR	Individualized Learning for Preschoolers ED 244 3 CR	Contemporary American Family HDFS 240 3 CR	* Wellness and Health Assessment HPE 295 3 CR	Race, Class & Ethnicity SOC 213 3 CR OR Multicultural Education ED 258 3 CR	CREDITS 16

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* Available other terms

\*\* Approved options-MUS 105, 201, 202, 203, 204, 205 may be substituted (may be taken any term).

\*\*\* A grade of C or better must be attained.

\*\*\*\* Instructor approval required to ensure students have completed the background history check, MMR vaccination verification and a food handler's certificate before coursework can begin.

# EMERGENCY MEDICAL SERVICES

PATHWAYS CERTIFICATE: EMERGENCY MEDICAL SERVICES – 13 CREDITS

## CAREER DESCRIPTION

Emergency Medical Technicians (EMT) respond to emergency and non-emergency calls to provide efficient and appropriate care to the sick and injured. EMT's can provide care within their scope of practice under the direction of a medical director. EMT's work on ambulances, fire departments, emergency rooms, urgent cares, and jails.

## PROGRAM OUTCOMES

Students who successfully complete the Emergency Medical Services Pathways Certificate will:

1. Identify roles and responsibilities in performing emergency care and operational aspects of the job
2. Demonstrate skills for basic life saving techniques and other emergency treatment
3. Demonstrate the proper use and care of all required equipment
4. Consistently demonstrate professional behavior characteristics

## APPLICATION & ACCEPTANCE

1. Must be a minimum of 18 years of age
2. Must have a high school diploma or GED by time of certification exam
3. Placement test scores or transcript with course completion
  - Placement into or completion of RD 090 with a grade of C or better
  - Placement into or completion of WR 115 with a grade of C or better
  - Placement into or completion of MTH 020 with a grade of C or better
4. Must have documented results of:
  - TB exam (within 1 year)
  - MMR (measles, mumps, rubella immunity) if born after 12-31-1956
  - Tetanus (within the past 5 years)
  - Hepatitis B immunization series started
  - Varicella
5. Must successfully complete a fit for duty statement, physical agility test, and drug screen
6. Must pass a background check

# PATHWAYS CERTIFICATE — Emergency Medical Services

13 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**SEQUENCE**

**EMT Part 1**  
EMS 151 5 CR

**EMT Part 2**  
EMS 152 5 CR

**Introduction to  
Emergency Medical  
Services**  
EMS 175 3 CR

CREDITS  
13

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# EMERGENCY MEDICAL SERVICES

ASSOCIATE OF APPLIED SCIENCE: PARAMEDICINE – MINIMUM 98 CREDITS

## CAREER DESCRIPTION

The Emergency Medical Services department offers career training for entry-level positions in emergency medical settings. Ambulance companies, fire departments, police departments, and various other industries requiring emergency medical services may employ emergency services personnel. After successful completion of all requirements for EMT, Advanced EMT, EMT Intermediate, or Paramedic training, the student is eligible to apply to take the respective state and national certification exams. The department also offers training for Emergency Medical Responders and EMS continuing education.

The program has been designed to be completed in two years if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. This program has special admission requirements and enrollment limits. Please see the EMS department for admission requirements and to advise your course outline for the program.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Paramedicine will:

1. Demonstrate the knowledge relevant to his or her role as an EMT or Paramedic
2. Demonstrate the psychomotor skills necessary to function in the role of EMT or Paramedic
3. Demonstrate the attitudes and personal behaviors consistent with the profession and necessary to function in the role of an EMT or Paramedic

## PROGRAM ACCREDITATION

The UCC paramedic program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMST).

Commission on Accreditation of Allied Health Education Programs  
1361 Park Street  
Clearwater, FL 33756  
727-210-2350, [www.caahep.org](http://www.caahep.org)

## APPLICATION & ACCEPTANCE

### Program prerequisites and requirements

The EMT certification is offered in a two-term format known as EMT Part 1 and EMT Part 2. An accelerated EMT course is also offered, depending on need. Successful completion of either the two terms or accelerated EMT course qualifies the student to take the national/state certification examination. Admission to the EMT course is open to the general student population. However, the following prerequisites must be turned into the EMS program office prior to registration.

1. Must be a minimum of 18 years of age
2. Must have a high school diploma or GED by time of certification exam
3. Placement test scores or transcript with course completion. Placement into or completion of RD 090 with a grade of C or better. Placement into or completion of WR 115 with a grade of C or better. Placement into or completion of MTH 020 with a grade of C or better
4. Must have documented results of: TB exam (within 1 year), MMR (measles, mumps, rubella immunity) 2 doses, Tetanus (within the past 5 years), Hepatitis B immunization series started, Varicella

5. Must successfully complete a fit for duty statement, physical agility test, and drug screen

6. Must pass a background check

Advanced EMT and EMT Intermediate are offered depending on need. See EMS Program Coordinator for prerequisites and requirements

Admission to the Paramedic program requires the student to make a separate application through the EMS department. The application will be available from the first day of Winter term to the last day of Winter term. Admission to the Paramedic course will be based upon:

1. Applicant must have an accumulative GPA of 2.00 or higher. Applicants must have completed. BI 231, BI 232, BI 233, WR 121, MTH 095, EMS 151, EMS 152, EMS 170, EMS 171, EMS 175, EMS 180, and MED 111 with a grade of C or better prior to start of Paramedic class
2. Must have documented results of: TB exam (within 1 year), MMR (measles, mumps, rubella immunity) 2 doses, Tetanus (within the past 5 years), Hepatitis B immunization series started, Varicella
3. Must successfully complete a fit for duty statement, physical agility test, and drug screen
4. Must pass a background history check
5. Applicants must complete the physical application and successfully pass a written, oral and practical exam in order to be considered for acceptance into the Paramedic Program

Because of limited space in the Paramedic program, applications for admission will be evaluated based on relative ranking of students' prerequisites. The EMS Program Coordinator will have the final decision in acceptance of a candidate. Applications for the EMS Paramedic Associate of Applied Science degree program may be picked up at the EMS Program office in PE 7.

# ASSOCIATE OF APPLIED SCIENCE — Paramedicine

Minimum 98 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**SEQUENCE**

## General Requirements

Human Anatomy & Physiology  
BI 231 4 CR

Human Anatomy & Physiology  
BI 232 4 CR

Human Anatomy & Physiology  
BI 233 4 CR

Intermediate Algebra  
MTH 095 (OR HIGHER) 4 CR

Wellness & Health Assessment  
HPE 295 3 CR

Fundamentals of Public Speaking  
SP 111 (OR HIGHER) 3-4 CR

Psychology of Human Relations  
PSY 101 3 CR

Social Science/Humanities Fine Arts  
3 CR

Academic Composition  
WR 121 4 CR

CREDITS  
32-33

## Technical Courses

EMT Part 1  
EMS 151 5 CR

EMT Part 2  
EMS 152 5 CR

Emergency Communication  
EMS 170 2 CR

Emergency Transport  
EMS 171 2 CR

Principles of Emergency Services  
ES 101 3 CR

Crisis Intervention  
EMS 180 3 CR

Paramedic Part 1  
EMS 251 10 CR

Paramedic Part 2  
EMS 252 8 CR

Paramedic Part 3  
EMS 253 8 CR

Paramedic Part 4  
EMS 254 6 CR

Paramedic Clinical & Field Experience Part 1  
EMS 261 2 CR

Paramedic Clinical & Field Experience Part 2  
EMS 262 2 CR

Paramedic Field Internship  
EMS 263 4 CR

Emergency Medical Services Rescue  
EMS 113 3 CR

Medical Terminology  
MED 111 3 CR

CREDITS  
66

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

Technical Report Writing WR 227 strongly recommended



# ENGINEERING TECHNOLOGY

PATHWAYS CERTIFICATE:  
DRAFTING (12 CREDITS), SURVEYING (19 CREDITS), WATER QUALITY TECHNICIAN (13 CREDITS)  
GEOGRAPHIC INFORMATION SYSTEMS (12 CREDITS)

## CAREER DESCRIPTION

Career Pathway Certificates are short-term educational goals geared towards specific areas in Engineering Technology. These certificates will address the need for a logical pathway of success for students. Students will be able to earn the certificate and then continue on to our existing one-year and two-year programs in a seamless path. These certificates may also lead toward entry-level jobs. Individuals already employed in the profession that want to upgrade their job skills in a specific area may also benefit from these certificates.

## PROGRAM OUTCOMES

### Drafting

Minimum 12 credit hours. The Drafting Certificate is a career pathway certificate. All courses in the certificate are found in the Civil Engineering and Surveying Technology AAS Degree.

Students who successfully complete the Drafting Pathways Certificate will:

1. Be prepared for entry-level jobs in the area drafting
2. Gain new computer applications and skills

### Surveying

Minimum 19 credit hours. The Surveying Certificate is a career pathway certificate. All courses in the certificate are found in the Civil Engineering and Surveying Technology AAS Degree.

Students who successfully complete the Surveying Pathways Certificate will:

1. Be prepared for entry-level jobs on a survey field crew
2. Develop new surveying and drafting skills

### Water Quality Technician

Minimum 13 credit hours. The Water Quality Pathways Certificate is a career pathway certificate. All courses in the certificate are found in the Civil Engineering and Surveying Technology AAS Degree.

Students who successfully complete the Water Quality Pathways Certificate will:

1. Be prepared for entry-level jobs in water quality operations
2. Prepare to take Level I Certification Exams

### Geographic Information Systems

Minimum 12 credit hours. The GIS pathways certificate is to provide students with the technical skills and geospatial content to employ geospatial information system (GIS) in support of their career and education goals in: science, business, engineering, surveying, and resource management, public safety, and urban and regional planning. GIS 203, GIS 234, GIS 235, and SUR 161 transfer to many Oregon four-year colleges and support current graduates and working professionals as they update their technical skills. The core GIS classes are required in the Civil Engineering and Surveying Technology AAS degree and the AS degree with emphasis in Surveying and Geomatics.

Students who successfully complete the Geographic Information Systems Pathways Certificate will:

1. Collect and input data into a GIS system using: GPS Unit, Digitizing, Geocoding
2. Design and generate various cartographic/map products for planning or presentations
3. Create, manage, and update spatial data
4. Manage information in a GIS database
5. Perform routine data analysis-buffer, query, union, intersect

# PATHWAYS CERTIFICATE —

## Drafting, Surveying, Water Quality Technician, Geographic Information Systems

Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Drafting</b>	Computer Aided Drafting I DRF 112 3 CR	Computer Aided Drafting II DRF 113 3 CR	* Approved Drafting Elective 3 CR	Engineering Graphics ENGR 245 3 CR	CREDITS 12	
	<b>Surveying</b>	Surveying I SUR 161 4 CR	Plane Surveying SUR 162 4 CR	Route Surveying SUR 163 4 CR	Land Description & Cadastre SUR 242 3 CR	Elementary Functions MTH 112 4 CR	CREDITS 19
	<b>Water Quality</b>	Water Treatment WQT 260 3 CR	Water Distribution WQT 261 4 CR	Wastewater Treatment WQT 227 3 CR	Wastewater Collection WQT 228 3 CR	CREDITS 13	
	<b>Geographic Information Systems</b>	Digital World and Geospatial Concepts GIS 203 4 CR	GIS I Intro to Geographic Information Systems GIS 234 4 CR	GIS II Analysis and Applications GIS 235 4 CR		CREDITS 12	

### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* Approved Drafting Electives: CIV 214-CAD Civil 3D, CIV 280-CWE, GIS 280-CWE, GIS 234 GIS I Intro to Geographic Information Systems, VC 114 Intro to InDesign or WLD 140 Blueprint Reading and Sketching.

# ENGINEERING TECHNOLOGY

ONE-YEAR CERTIFICATE: ENGINEERING AND DRAFTING TECHNICIAN – 50 CREDITS

## CAREER DESCRIPTION

Engineering and drafting technicians work with and provide technical support to licensed engineers and surveyors. Technicians prepare design drawings and assist with field work.

Technicians utilize knowledge of building materials, engineering practices, and mathematics to complete detailed drawings and to collect or evaluate data in the field. Theory and principles of design and graphics are implemented under the direction of engineering or surveying staff.

The coursework for the one-year certificate includes five computer-aided-drafting courses; beginning GIS course; introductory surveying class; introductory engineering courses; basic spreadsheets for engineering applications; basic writing courses; and math through trigonometry.

## PROGRAM OUTCOMES

Students who successfully complete the Engineering and Drafting Technician One-Year Certificate will:

1. Use AutoCAD, Civil3D, and SolidWorks drafting software, GIS software
2. Interpret and prepare 2D and 3D drafting representations
3. Gain experience of engineering graphics
4. Prepare and plot drawings to scale using drafting standards, templates, and layer management
5. Use Word, Excel, PowerPoint
6. Describe use of surveying equipment to perform basic field survey and data collection
7. Communicate effectively
8. Think critically to solve engineering problems
9. Visualize and interpret real world situations and translate them into drawings and designs
10. Work effectively on a team

# ONE-YEAR CERTIFICATE — Engineering and Drafting Technician

50 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	<b>Computer Aided Drafting I</b> DRF 112 3 CR	<b>Engineering Orientation I</b> ENGR 111 3 CR	<b>The Digital World and Geospatial Concepts</b> GIS 203 4 CR	<b>Academic Composition</b> WR 121 4 CR	<b>CREDITS</b> <b>14</b>	
	<b>Winter</b>	<b>Computer Aided Drafting II</b> DRF 113 3 CR	<b>Problem Solving and Technology</b> ENGR 112 3 CR	<b>College Algebra</b> MTH 111 5 CR	<b>GIS I Intro to Geographic Information Systems</b> GIS 234 4 CR	<b>Human Relations Elective</b> <i>from Approved List, p. 86</i> 3 CR	<b>CREDITS</b> <b>18</b>
	<b>Spring</b>	<b>GIS II Data Analysis and Applications</b> GIS 235 4 CR	<b>Engineering Graphics</b> ENGR 245 3 CR	<b>Elementary Functions</b> MTH 112 4 CR	<b>Computer Aided Drafting – Civil 3D Virtual Design</b> CIV 214 3 CR	<b>Surveying I</b> SUR 161 4 CR	<b>CREDITS</b> <b>18</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

UCC General Education Requirements. A minimum of 50 credit hours must be completed to receive a Completion Certificate at UCC. If student places higher than Math 095, student may need to take additional elective courses to graduate with 45 or more hours. Engineering faculty advisor can provide recommendations on electives. Approved UCC Human Relations electives for a Completion Certificate are listed on p. 86. See UCC Career and Advising Services.

Engineering Program Requirements. Student must complete all required credit hours with a grade of C or better in all courses.

Engineering Program Approved Electives. Students may benefit by taking more credits hours and/or a higher level of mathematics than MTH 112 and basic science courses. See the Engineering faculty advisor.

# ENGINEERING TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE: CIVIL ENGINEERING AND SURVEYING TECHNOLOGY TECHNICIAN  
MINIMUM 98 CREDITS

## CAREER DESCRIPTION

Civil engineering and surveying are some of the broadest fields of engineering, and are part of virtually all construction-related projects. Graduates have local, state-wide, and nation-wide employment opportunities.

The field of civil engineering deals with planning, design, construction, and maintenance of private and public projects. Projects include highways, bridges, dams, subdivisions, water supply and waste systems.

Land Surveyors perform a variety of important tasks such as boundary surveys, topographic mapping and construction staking.

Civil Engineering and Surveying Technology graduates work with or in support of professional engineers and land surveyors.

## PROGRAM OUTCOMES

Students who successfully complete an Associate of Applied Science degree in Civil Engineering and Surveying Technology will:

1. Use AutoCAD, Civil3D, and SolidWorks drafting software, GIS software, and MATLAB software
2. Use Word, Excel, PowerPoint
3. Use surveying equipment to perform basic land and construction surveys
4. Use basic lab equipment to test basic properties of soils, aggregate and concrete
5. Interpret plans and contract documents
6. Complete capstone municipal design project
7. Communicate and write effectively
8. Think critically to solve engineering problems
9. Visualize and interpret real world situations and translate them into drawings and designs
10. Work effectively on a team to complete an engineering project

## CAREER AND EDUCATIONAL PATHWAYS

This program prepares students to be job-ready with the 2-year AAS degree, and also provides students with the option of adding a third year of course work to complete an AS degree and transfer. The two quarters of calculus are necessary to provide the future transfer pathway.

UCC also offers Occupational Skills Training options, which include more on-the-job training and less math. See a UCC Engineering faculty advisor or academic advisor to review.

## ENGINEERING ELECTIVES

Choose from the following (see UCC advisor)

SUR 162	*Plane Surveying II	4
SUR 163	*Route Surveying	4
SUR 242	*Land Descriptions & Cadastre	3
WQT 227	Wastewater Treatment	3
WQT 228	Wastewater Collection	3
WQT 260	Water Treatment	3
WQT 261	Water Distribution	4

\* SUR 162, SUR 163, and SUR 242 transfer to the Geomatics program at OIT.



# ASSOCIATE OF APPLIED SCIENCE — Civil Engineering and Surveying Technology Program

Minimum 98 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Engineering Orientation I ENGR 111 3 CR	Computer Aided Drafting I DRF 112 3 CR	Academic Composition WR 121 4 CR	Digital World and Geospatial Concepts GIS 203 4 CR	CREDITS 14	
	<b>Winter</b>	Problem Solving and Technology ENGR 112 3 CR	College Algebra MTH 111 5 CR	GIS I Intro to Geographic Information Systems GIS 234 4 CR	Computer Aided Drafting II DRF 113 3 CR	Approved Human Relations Elective <i>see pg. 82</i> 3 CR	CREDITS 18
	<b>Spring</b>	Computer Aided Drafting – Civil 3D Virtual Design CIV 214 3 CR	Elementary Functions MTH 112 4 CR	GIS II Data Analysis and Applications GIS 235 4 CR	Surveying I SUR 161 4 CR	Engineering Graphics ENGR 245 3 CR	CREDITS 18
	<b>Summer</b>	Coop. Work Experience CIV 280 3 CR					CREDITS 3
<b>YEAR TWO</b>	<b>Fall</b>	Statics ENGR 211 4 CR	Calculus I MTH 251 5 CR	Technical Report Writing WR 227 4 CR	Approved Engineering Elective <i>see facing page</i> 4 CR	CREDITS 17	
	<b>Winter</b>	Dynamics ENGR 212 4 CR	Calculus II MTH 252 4 CR	CWE Seminar I CWE 161 1 CR	Approved Engineering Elective <i>see facing page</i> 4-6 CR	CREDITS 13-15	
	<b>Spring</b>	Strength of Materials ENGR 213 4 CR	Fundamentals of Public Speaking SP 111 4 CR	Soil Science and Lab SOIL 205/SOIL 206 4 CR	Approved Engineering Elective <i>see facing page</i> 3 CR	CREDITS 15	

## NOTES

UCC General Education Requirements. A minimum of 90 credit hours must be completed to receive an AAS at UCC. If student places higher than Math 111, student may need to take additional elective courses to graduate with 90 or more hours. Engineering faculty advisor can provide recommendations on electives. Approved UCC Human Relations electives for an AAS are listed on p. 86. See UCC Career and Advising Services.

OAR Requirements for FLS and FE Exams. A minimum of 96 credit hours for the AAS are required under OARs to take either the FLS or FE exam in Oregon after working for two years. See the UCC Engineering Faculty Advisor and refer to OAR 800-010-222/226 for educational requirements related to the fundamentals exams.

Engineering Program Approved Electives. Students may benefit by taking more than 96 credits hours and more electives than required for graduation, depending on career and educational goals. WLD 131 Basic Metallurgy or WLD 140 Blue Print Reading and Sketching may be substituted for 3 credits of Cooperative Work Experience, CIV 280.

# ENGINEERING TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE: CIVIL ENGINEERING AND SURVEYING TECHNOLOGY –  
APPLIED SURVEY OPTION – 94 CREDITS

## CAREER DESCRIPTION

Civil engineering and surveying are some of the broadest fields of engineering, and are part of virtually all construction-related projects. Graduates have local, state-wide, and nation-wide employment opportunities.

The field of civil engineering deals with planning, design, construction, and maintenance of private and public projects. Projects include highways, bridges, dams, subdivisions, water supply and waste systems.

Land Surveyors perform a variety of important tasks such as boundary surveys, topographic mapping and construction staking.

Civil Engineering and Surveying Technology graduates work with or in support of professional engineers and land surveyors.

This degree option includes additional occupational skills training to prepare students with more on-the-job work experience. The program includes 24 credit hours of occupational skills training/cooperative work experience. This is the equivalent of approximately 5 months of full-time work experience. UCC Engineering faculty advisors will assist with finding placement for occupational skills training/cooperative work experience.

## PROGRAM OUTCOMES

Students who successfully complete an Associate of Applied Science degree in Civil Engineering and Surveying Technology will:

1. Use AutoCAD, Civil3D, and SolidWorks drafting software, GIS software, and MATLAB software
2. Use Word, Excel, PowerPoint
3. Use surveying equipment to perform basic land and construction surveys
4. Use basic lab equipment to test basic properties of soils, aggregate and concrete
5. Interpret plans and contract documents
6. Complete capstone municipal design project
7. Communicate and write effectively
8. Think critically to solve engineering problems
9. Visualize and interpret real world situations and translate them into drawings and designs
10. Work effectively on a team to complete an engineering project

# ASSOCIATE OF APPLIED SCIENCE — Civil Engineering and Surveying Technology Program – Applied Survey Option

94 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Computer Aided Drafting I DRF 112 3 CR	Engineering Orientation I ENGR 111 3 CR	Digital World and Geospatial Concepts GIS 203 4 CR	Academic Composition WR 121 4 CR	<b>CREDITS 14</b>	
	<b>Winter</b>	Computer Aided Drafting II DRF 113 3 CR	Problem Solving and Technology ENGR 112 3 CR	College Algebra MTH 111 5 CR	GIS I Intro to Geographic Information Systems GIS 234 4 CR	Human Relations Elective <i>from Approved List, p. 86</i> 3 CR	<b>CREDITS 18</b>
	<b>Spring</b>	GIS II Data Analysis and Applications GIS 235 4 CR	Engineering Graphics ENGR 245 3 CR	Elementary Functions MTH 112 4 CR	Surveying I SUR 161 4 CR	Computer Aided Drafting – Civil 3D Virtual Design CIV 214 3 CR	<b>CREDITS 18</b>
<b>YEAR TWO</b>	<b>Fall</b>	Coop. Work Experience – CIV 280 8 CR	Technical Report Writing WR 227 4 CR	Plane Surveying II SUR 162 4 CR		<b>CREDITS 16</b>	
	<b>Winter</b>	Coop. Work Experience – CIV 280 8 CR	CWE Seminar I CWE 161 1 CR	Route Surveying SUR 163 4 CR		<b>CREDITS 13</b>	
	<b>Spring</b>	Coop. Work Experience – CIV 280 8 CR	Land Descriptions & Cadastre SUR 242 3 CR	Fundamentals of Public Speaking SP 111 4 CR		<b>CREDITS 15</b>	

## NOTES

UCC General Education Requirements. A minimum of 90 credit hours must be completed to receive an AAS at UCC. If student places higher than Math 111, student may need to take additional elective courses to graduate with 90 or more hours. Engineering faculty advisor can provide recommendations on electives. Approved UCC Human Relations electives for an AAS are listed on p. 86. See UCC Career and Advising Services.

OAR Requirements for FLS and FE Exams. A minimum of 96 credit hours for the AAS are required under OARs to take either the FLS or FE exam in Oregon after working for two years. See the UCC Engineering Faculty Advisor and refer to OAR 800-010-222/226 for educational requirements related to the fundamentals exams.

Engineering Program Approved Electives. Students may benefit by taking more than 96 credits hours and more electives than required for graduation, depending on career and educational goals.

Engineering Program Requirements. Student must complete all required credit hours with a grade of C or better in all courses. WLD 131 Basic Metallurgy or WLD 140 Blue Print Reading or Sketching may be substituted for 3 credits of Cooperative Work Experience, CIV 280.

# ENGINEERING TECHNOLOGY

## ASSOCIATE OF APPLIED SCIENCE: CIVIL ENGINEERING AND SURVEYING TECHNOLOGY – APPLIED WATER QUALITY OPTION – 96 CREDITS

### CAREER DESCRIPTION

This degree option includes additional occupational skills training to prepare students with more on-the-job work experience. The program includes 24 credit hours of occupational skills training/cooperative work experience. This is the equivalent of approximately 5 months of full-time work experience. UCC Engineering faculty advisors will assist with finding placement for occupational skills training/cooperative work experience.

The field of civil engineering deals with planning, design, construction, and maintenance of private and public projects. Projects include highways, bridges, dams, subdivisions, water supply and waste systems.

Design, operation and maintenance of water and wastewater systems is an essential component of protecting our water resources, providing clean water, and protecting public health. Graduates of this program have multiple career pathways, including work with, or in support of, professional engineers and land surveyors as design technicians or work in operation/maintenance at water quality facilities.

### PROGRAM OUTCOMES

Students who successfully complete an Associate of Applied Science degree in Civil Engineering and Surveying Technology will:

1. Use AutoCAD, Civil3D, and SolidWorks drafting software, GIS software, and MATLAB software
2. Use Word, Excel, PowerPoint
3. Describe water quality operations for wastewater collection and treatment and water distribution and treatment
4. Use surveying equipment to perform basic land and construction surveys
5. Use basic lab equipment to test basic properties of soils, aggregate and concrete
6. Interpret plans and contract documents
7. Complete capstone municipal design project
8. Communicate and write effectively
9. Think critically to solve engineering problems
10. Visualize and interpret real world situations and translate them into drawings and designs
11. Work effectively on a team to complete an engineering project

# ASSOCIATE OF APPLIED SCIENCE — Civil Engineering and Surveying Technology Program – Applied Water Quality Option

96 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Computer Aided Drafting I DRF 112 3 CR	Engineering Orientation I ENGR 111 3 CR	Digital World and Geospatial Concepts GIS 203 4 CR	Academic Composition WR 121 4 CR	<b>CREDITS 14</b>	
	<b>Winter</b>	Computer Aided Drafting II DRF 113 3 CR	Problem Solving and Technology ENGR 112 3 CR	College Algebra MTH 111 5 CR	GIS I Intro to Geographic Information Systems GIS 234 4 CR	Human Relations Elective <i>from Approved List, p. 86</i> 3 CR	<b>CREDITS 18</b>
	<b>Spring</b>	GIS II Data Analysis and Applications GIS 235 4 CR	Engineering Graphics ENGR 245 3 CR	Elementary Functions MTH 112 4 CR	Surveying I SUR 161 4 CR	Computer Aided Drafting – Civil 3D Virtual Design CIV 214 3 CR	<b>CREDITS 18</b>
<b>YEAR TWO</b>	<b>Fall</b>	Water Distribution WQT 261 4 CR	Coop. Work Experience – Water Quality Treatment WQT 280 8 CR	Technical Report Writing WR 227 4 CR	<b>CREDITS 16</b>		
	<b>Winter</b>	Wastewater Treatment WQT 227 3 CR	Wastewater Collection WQT 228 3 CR	Coop. Work Experience – WQT 280 8 CR	CWE Seminar I CWE 161 1 CR	<b>CREDITS 15</b>	
	<b>Spring</b>	Water Treatment WQT 260 3 CR	Coop. Work Experience – WQT 280 8 CR	Fundamentals of Public Speaking SP 111 4 CR	<b>CREDITS 15</b>		

## NOTES

UCC General Education Requirements. A minimum of 90 credit hours must be completed to receive an AAS at UCC. If student places higher than Math 111, student may need to take additional elective courses to graduate with 90 or more hours. Engineering faculty advisor can provide recommendations on electives. Approved UCC Human Relations electives for an AAS are listed on p. 86. See UCC Career and Advising Services.

OAR Requirements for FLS and FE Exams. A minimum of 96 credit hours for the AAS are required under OARs to take either the FLS or FE exam in Oregon after working for two years. See the UCC Engineering Faculty Advisor and refer to OAR 800-010-222/226 for educational requirements related to the fundamentals exams.

Engineering Program Approved Electives. Students may benefit by taking more than 96 credits hours and more electives than required for graduation, depending on career and educational goals.

Engineering Program Requirements. Student must complete all required credit hours with a grade of C or better in all courses.



# FIRE SCIENCE

ASSOCIATE OF APPLIED SCIENCE: FIRE SCIENCE – MINIMUM 96 CREDITS

## CAREER DESCRIPTION

UCC offers an Associate in Fire Science degree which provides two alternatives. First, the degree prepares you to qualify for the specialized demands of a highly diversified and technological society, and thereby gain employment as a firefighter as a result of the training. Second, it provides the first two years of a four-year degree in Fire Science Administration at Eastern Oregon University. For current program requirements, you are strongly urged to consult with the department or an advisor.

To obtain an AAS degree in Fire Science 96 credits are required: 74 credits in Fire Science and 22 credits in General Education. Due to continually changing laws and regulations mandated by Oregon's Occupational Safety and Health Administration (OR-OSHA), DPSST, and the National Fire Protection Association (NFPA), students may be required to add, modify, or delete courses and/or hours to the curriculum to meet current standards. See your advisor for current requirements. All courses require a grade of C or better.

## PROGRAM OUTCOMES

To provide specialized training in Fire Science for students seeking employment as professional structural firefighters. Upon completion, students will have completed the requirements of the National Fire Protection Association Firefighter 1 standards and the requirements of Oregon's Department of Public Safety Standards and Training (DPSST) NFPA 1001-5.1.1 - 6.5.4, NFPA 10 Annex "D", NFPA 1021 2-1.

Students who successfully complete the Associate of Applied Science degree in Fire Science will:

1. Demonstrate a basic knowledge of core content for each course completed and demonstrate practical applications based on the requirements set forth by NFPA 1001 "Standard on Fire Fighter Professional Qualifications"
2. Communicate effectively using appropriate:
  - a. Active Listening Skills
  - b. Speaking Skills
  - c. Writing Skills
3. Demonstrate adequate problem solving and critical thinking skills

## APPLICATION & ACCEPTANCE

Program participants must meet the following criteria:

1. Be a U.S. citizen.
2. Not have been convicted by any state or federal government of a crime, the punishment for which could have been imprisonment in a federal or state prison.
3. Be of good moral character as determined by a thorough background investigation.
4. Be capable of passing a series of basic physical agility tests.
5. Possess a valid Oregon driver's license with an acceptable driving record.
4. Demonstrate appropriate skills in:
  - a. Hydraulics
  - b. Leadership
  - c. Candidate Physical Ability Training
5. Work effectively as a member of a firefighting team and lead in specific fire department related business, operations, and Public Information activities.
6. Demonstrate skills necessary for continued lifelong learning for improving personal and professional skills.
7. Demonstrate the cognitive and psychomotor skills to complete Oregon's Department of Public Safety Standards and Training, Firefighter 1 Task Book and approved Firefighter's 1 Skills Evaluation Sheets in addition to National Fire Protection Association, Standard on Fire Fighter Professional Qualifications

# ASSOCIATE OF APPLIED SCIENCE — Fire Science

Minimum 96 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

## General Education/ Applied Courses

Academic Composition  
WR 121 4 CR

Wellness &  
Health Assessment  
HPE 295 3 CR

Intermediate Algebra  
MTH 095 (OR HIGHER) 4 CR

Fundamentals of  
Public Speaking *OR*  
SP 111 4 CR

Psychology of  
Human Relations  
PSY 101 3 CR

Technical Report Writing  
WR 227 4 CR

CREDITS  
22

EMT Part 1  
EMS 151 5 CR

EMT Part 2  
EMS 152 5 CR

Fire Rescue Practices –  
Rough Terrain  
FRP 201A 1 CR

*AND*

Fire Rescue Practices  
Swift Water  
FRP 201B 1 CR

*AND*

Fire Rescue Practices  
Vehicle Extrication  
FRP 201C 1 CR

*OR*

Emergency Medical Services Rescue  
ES 113 3 CR

Firefighting Tactics  
& Strategy  
FRP 213 3 CR

## Technical Courses Required

Elementary Fire Science  
Part 1  
FRP 121A 4 CR

Elementary Fire Science  
Part 2  
FRP 121B 4 CR

Fire Service  
Hydraulics  
FRP 230 4 CR

Fire Pump Construction  
and Operation  
FRP 132 3 CR

Fundamentals of  
Fire Prevention  
FRP 122 3 CR

Hazardous Materials  
Awareness/Operations  
FRP 123 4 CR

CREDITS  
74

Fire Related Skills  
FRP 280 6 CR

Fire Investigation  
FRP 212 3 CR

Building Construction  
for Fire Suppression  
FRP 111 3 CR

Fire Protection  
Systems  
FRP 202 3 CR

Fire Behavior  
and Combustion  
FRP 159 3 CR

Firefighting Safety  
& Survival  
FRP 101 3 CR

Natural Cover  
Fire Protection  
FRP 133 3 CR

Principles of Emergency Services  
ES 101 3 CR  
*OR* Introduction to Emergency  
Medical Services  
EMS 175 3 CR

Legal Aspects  
of Emergency Services  
ES 107 2 CR

Occupational Safety and Health  
for Emergency Services  
ES 103 2 CR

Principles of Fire and  
Emergency Services Administration  
ES 109 3 CR

Hazardous Materials  
Chemistry  
FRP 135 2 CR

## Recommended Electives

NFPA Fire Instructor II  
FRP 263 2 CR

CPAT  
FRP 151A 3 CR

CPAT  
FRP 151B 3 CR

CPAT  
FRP 151C 3 CR

Swift Water Advance  
FRP 201D 2 CR

Fire Officer I A  
FRP 270 4 CR

Fire Officer I B  
FRP 271 4 CR

Fire Officer II  
FRP 290 4 CR

Fire Officer II  
FRP 291 4 CR

Paramedic Part 1  
EMS 251 10 CR

Paramedic Part 2  
EMS 252 8 CR

Paramedic Part 3  
EMS 253 8 CR

Paramedic Part 4  
EMS 254 6 CR

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# HUMAN SERVICES

## PATHWAYS CERTIFICATE – ADDICTION TREATMENT – 17 CREDITS

### CAREER DESCRIPTION

Students awarded this certificate are trained for employment in the drug-and alcohol-treatment field as entry-level counselors working under supervision in treatment centers. This certificate is designed for individuals currently working in the Alcohol/Drug/Tobacco counseling and/or for individuals who wish to pursue training in the substance abuse and addiction studies area. Upon completion of the coursework required for this certificate in combination with the required 1,000 hours of supervised experience, a student should be sufficiently equipped to take the Oregon Certified Alcohol and Drug Counselor (CADCI) exam.

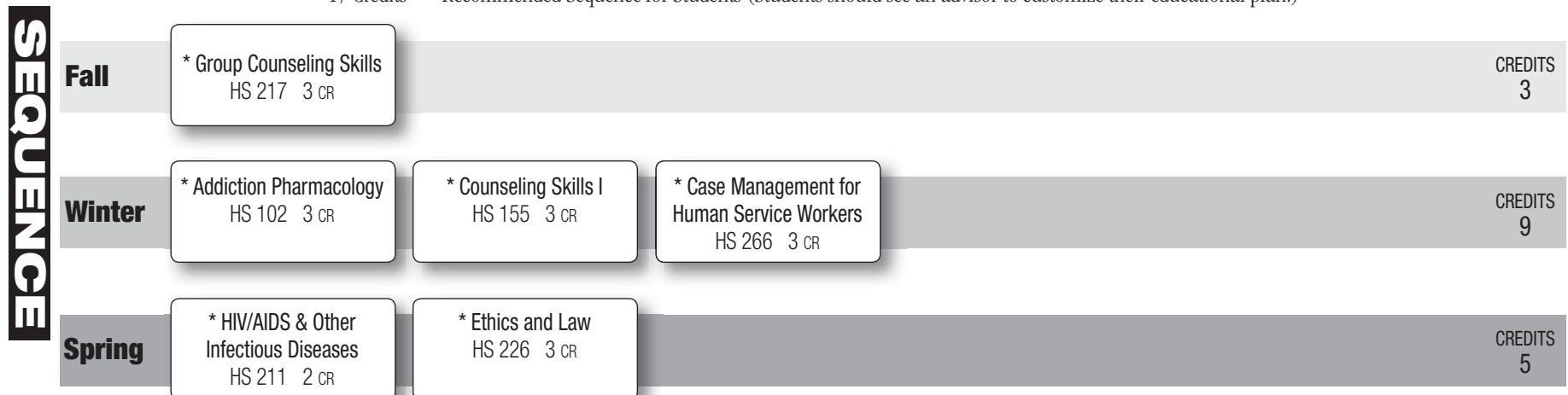
### PROGRAM OUTCOMES

Students who successfully complete the Addiction Treatment Pathways Certificate will:

1. Communicate effectively with others
2. Develop interpersonal skills needed to work with people from diverse backgrounds
3. Assess and address needs of individuals, families and groups
4. Foster commitment to the field of human services based on the belief that all humans are capable of growth and that they have a fundamental right to dignity, respect, and self-determination
5. Expand general knowledge and skills in ways that enrich personal and professional lives
6. Demonstrate an understanding of drug use, misuse and addiction properties
7. Demonstrate knowledge of the ethical and legal standards and regulations that apply to the field of human services and substance abuse treatment
8. Understand the prevention strategies, risk assessment protocols, harm reduction methods and treatment options of infectious diseases in the population served by substance abuse treatment
9. Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them

## PATHWAYS CERTIFICATE — Addiction Treatment

17 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* Class offered only once a year

# HUMAN SERVICES

## PATHWAYS CERTIFICATE – CASE AIDE – 18 CREDITS

### CAREER DESCRIPTION

The Case Aide Certificate is designed to prepare students for entry-level employment opportunities with a wide variety of human service agencies. This certificate is appropriate for students who are already working in the human services field or would like to test their interest in the field before committing to a degree program. The student is given an overview of Sociology, and an Introduction to Human Services, Counseling skills, and Human Services Community Resources.

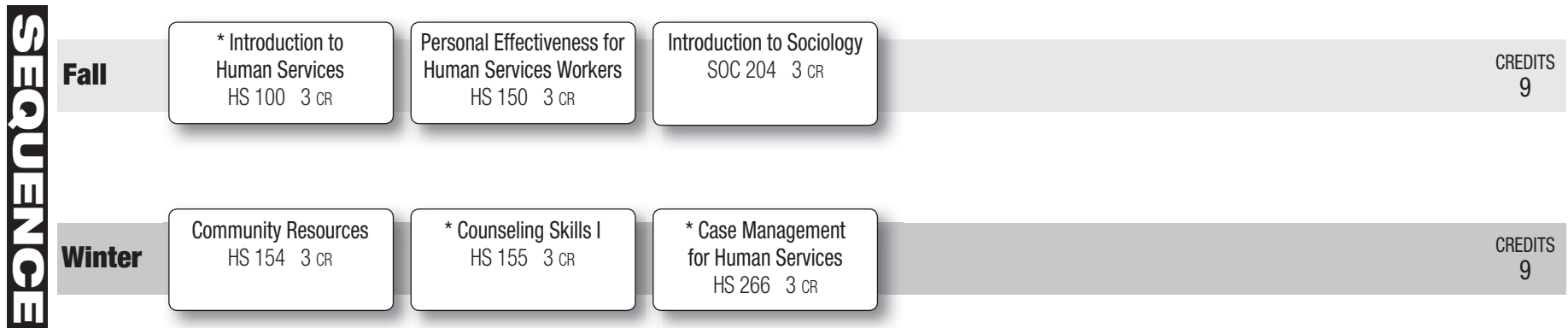
### PROGRAM OUTCOMES

Students who successfully complete the Case Aide Pathways Certificate will:

1. Communicate effectively with others.
2. Be comfortable and effective working with people from diverse backgrounds.
3. Foster commitment to the field of human services based on the belief that all humans are capable of growth, and have a fundamental right to dignity, respect and self-determination.
4. Expand general knowledge and skills in ways that enrich personal and professional lives.
5. Develop the knowledge and skills necessary to improve personal effectiveness through improved communication skills, conflict resolution and problem-solving strategies.
6. Obtain the theoretical knowledge and interview skills required of human service workers in a variety of work settings.
7. Demonstrate an understanding of the concepts, ideas and skills necessary to effectively work as a case manager for any human services delivery program.

## PATHWAYS CERTIFICATE — Case Aide

18 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



### NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* Class offered only once a year

# HUMAN SERVICES

ONE-YEAR CERTIFICATE – ADDICTION STUDIES – 46 CREDITS

## CAREER DESCRIPTION

The Addiction Studies Certificate allows the students opportunity for employment in paraprofessional positions in Human Services. The Addiction Studies Certificate is designed to prepare the student to take the Oregon Certified Alcohol and Drug Counselor exam (CADCI) exam upon completion of coursework and required 1,000 hours of supervised experience. In addition, the Addiction Studies Certificate offers the student a broader base of understanding of the field of Addiction Studies including social aspects of addiction, personal effectiveness in human services, case management and family dynamics. The classes required for this certificate are part of the first-year of study in a two-year AAS degree in Human Services.

## PROGRAM OUTCOMES

Students who successfully complete the Addiction Studies Certificate will:

1. Communicate effectively with others
2. Develop interpersonal skills needed to work with people from diverse backgrounds
3. Assess and address needs of individuals, families and groups
4. Demonstrate professional interviewing skills.
5. Develop a plan of action and link people with community resources
6. Foster commitment to the field of human services based on the belief that all humans are capable of growth and that they have a fundamental right to dignity, respect, and self-determination
7. Expand general knowledge and skills in ways that enrich personal and professional lives
8. Demonstrate writing skills appropriate to clinical documentation
9. Identify drug use, misuse and addiction properties
10. Apply the prevention strategies, risk assessment protocols, harm reduction methods and treatment options of infectious diseases in population served by human service professionals
11. Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them



# CERTIFICATE — Addiction Studies

46 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	* Introduction to Human Services HS 100 3 CR	Personal Effectiveness for Human Services Workers HS 150 3 CR	Introduction to Sociology SOC 204 3 CR	* Group Counseling Skills HS 217 3 CR	* Understanding Dysfunctional Families HS 227 3 CR	<b>CREDITS 15</b>
	<b>Winter</b>	* Addiction Pharmacology HS 102 3 CR	Community Resources HS 154 3 CR	* Counseling Skills I HS 155 3 CR	* Case Management for Human Services HS 266 3 CR	Introduction to Algebra for the Trades MTH 052 (OR HIGHER) 4 CR	<b>CREDITS 16</b>
	<b>Spring</b>	Psychology of Human Relations PSY 101 3 CR <i>OR</i> Interpersonal Communication SP 218 3 CR	* HIV/AIDS & Other Infectious Diseases HS 211 2 CR	* Ethics and Law HS 226 3 CR	* Social Aspects of Addiction SOC 225 3 CR	Academic Composition WR 121 4 CR	<b>CREDITS 15</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* Class offered only once a year

# HUMAN SERVICES

ASSOCIATE OF APPLIED SCIENCE: HUMAN SERVICES – MINIMUM 90 CREDITS

## CAREER DESCRIPTION

The Human Services program offers training for entry-level positions in social service agencies. It is a two-year program which combines academic coursework with supervised field work. Note: Students expecting to continue on to attain a B.A. or B.S. should consider the AA/OT or AS – Human Services Program- see the Transfer section in this catalog for more details.

The AAS program focuses on the general study and provision of human and social services to individuals and communities and prepares individuals to work in public and private human services agencies and organizations. Human Services coursework includes instruction in the social sciences, psychology, principles of social service, social services law and administration, and applications to particular issues, services, localities, and populations.

A typical program plan includes the following required courses and electives.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Human Services will:

1. Communicate effectively with others
2. Develop interpersonal skills needed to work with people from diverse backgrounds
3. Assess and address needs of individuals, families, and groups
4. Develop a plan of action and link people with community resources
5. Foster commitment to the field of human services based on the belief that all humans are capable of growth and have a fundamental right to dignity, respect, and self-determination

6. Expand general knowledge and skills in ways that enrich personal and professional lives
7. Use appropriate library and information resources to research professional issues and support lifelong learning
8. Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them

## APPROVED ELECTIVES

### Fall Term

HS 110	Substance-Related Peer Recovery Mentor	3	3
HS 217	# Group Counseling Skills	3 <sup>5</sup>	3
HS 280	# Cooperative Work Experience: Human Services	4	3-4
HS 298	Independent Studies: Human Services		1-3
ANTH 221	Cultural Anthropology		3
CJ 101	Introduction to Criminology (Online)	2 <sup>5</sup>	3
CJ 243	Narcotics and Dangerous Drugs		3
CJ 261	Introduction to Parole and Probation		3
HDFS 201	Individual and Family Development	5	3
HDFS 240	Contemporary American Family	5	3
SPAN 101/201	Spanish	6	4
SOC 205	Institutions and Social Change	5	3
SOC 206	Social Problems and Issues		3
SOC 213	Race, Class, and Ethnicity	5	3

### Winter Term

HS 102	# Addiction Pharmacology	2	3
HS 144	Creating Effective Programs		1
HS 280	# Cooperative Work Experience: Human Services	4	3-4
HS 298	Independent Studies: Human Services		1-3
ANTH 222	Cultural Anthropology		3
HDFS 201	Individual and Family Development	5	3

PSY 239	Abnormal Psychology		3
SOC 207	Juvenile Delinquency		3
SPAN 102/202	Spanish	6	4

### Spring Term

HS 108	Understanding Behavior and Emotional Issues in Older Populations		3
HS 211	# HIV/AIDS and Other Infectious Diseases		2
HS 280	# Cooperative Work Experience: Human Services	4	3-4
HS 298	Independent Studies: Human Services		1-3
ANTH 223	Cultural Anthropology		3
CJ 101	Introduction to Criminology	5	3
CJ 230	Introduction to Juvenile Justice Systems		3
HDFS 201	Individual and Family Development	5	3
HDFS 240	Contemporary American Family	5	3
PSY 231	Human Sexuality		3
SOC 206	Social Problems and Issues		3
SOC 213	Race, Class, and Ethnicity	5	3
SOC 225	Social Aspects of Addiction		3
SPAN103/203	Spanish	6	

### Summer Term

HS 265	Counseling Skills II	3	3
HS 280	# Cooperative Work Experience: Human Services	4	3-4
HS 298	Independent Studies: Human Services		1-3
CJ 232	Introduction to Corrections Casework	7	3

### NOTES:

# Indicates classes necessary for CADCI Certification

<sup>1</sup> May be taken 1st or 2nd Year

<sup>2</sup> Recommended for 2nd Year

<sup>3</sup> Prerequisite: HS 155 or Instructor Approval

<sup>4</sup> In addition to the 9 credits required, up to 4 credits in HS 280 can be applied to electives.

<sup>5</sup> Available in other terms

<sup>6</sup> Up to 12 credits in Spanish 101 or higher can apply to AAS

<sup>7</sup> Prerequisite: CJ 230 or CJ 261 or Instructor Approval

# ASSOCIATE OF APPLIED SCIENCE — Human Services

Minimum 90 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Introduction to Human Services HS 100 3 CR	Personal Effectiveness for Human Services HS 150 3 CR	* Academic Composition <sup>5</sup> WR 121 4 CR	Approved Elective 3 CR	<b>CREDITS 13</b>	
	<b>Winter</b>	Community Resources <sup>5</sup> HS 154 3 CR	# Counseling Skills I HS 155 3 CR	Interpersonal Communication SP 218 3 CR OR Psychology of Human Relations <sup>5</sup> PSY 101 3 CR	Approved Elective 3 CR	Introduction to Sociology <sup>5</sup> SOC 204 3 CR	<b>CREDITS 15</b>
	<b>Spring</b>	# Ethics and Law HS 226 3 CR	* Cultural Competence in Human Services <sup>5</sup> HS 267 3 CR	Technical Report Writing <sup>5</sup> WR 227 4 CR	Approved Elective 3 CR	Approved Elective 3 CR	<b>CREDITS 16</b>

**Summer Term (Optional)** Approved Elective (see list on facing page)

<b>YEAR TWO</b>	<b>Fall</b>	General Psychology <sup>5</sup> PSY 201 3 CR	* Understanding <sup>5</sup> Dysfunctional Families HS 227 3 CR	# Coop. Work Experience: Human Services HS 280 3 CR	Approved Elective 3 CR	Approved Elective 3 CR	<b>CREDITS 15</b>
	<b>Winter</b>	General Psychology <sup>5</sup> for Human Services PSY 202 3 CR	* Crisis Intervention and Prevention HS 229 3 CR	* Case Management for Human Services HS 266 3 CR	# Coop. Work Experience: Human Services HS 280 3 CR	Introduction to Algebra for the Trades MTH 052 (OR HIGHER) 4 CR	<b>CREDITS 16</b>
	<b>Spring</b>	General Psychology <sup>5</sup> PSY 203 3 CR	# Coop. Work Experience: Human Services HS 280 3 CR	Approved Elective 3 CR	Approved Elective 3 CR	Approved Elective 3 CR	<b>CREDITS 15</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses. Please see an advisor for a degree planning worksheet for this program.

\* A grade of C or better must be attained in these courses. # indicates classes necessary for CADCI Certification.  
+ Any unlisted HS classes may be applied as approved electives. <sup>1</sup> May be taken 1st or 2nd Year. <sup>2</sup> Recommended for 2nd Year.  
<sup>3</sup> Prerequisite: HS 155 or Instructor Approval. <sup>4</sup> In addition to the 9 credits required, up to 4 credits in HS 280 can be applied to electives.  
<sup>5</sup> Available in other terms. <sup>6</sup> Up to 12 credits in Spanish 101 or higher can apply to AAS. <sup>7</sup> Prerequisite: CJ 230 or CJ 261 or Instructor Approval

# OCCUPATIONAL SKILLS TRAINING

ONE-YEAR CERTIFICATE – MINIMUM 45 CREDITS

## PROGRAM DESCRIPTION

The Occupational Skills Training (OST) one-year certificate program provides a combination of academic study and hands-on training. Students earn approximately half of their program credits through training at local business/agency sites.

Almost any occupation can be addressed provided the following conditions are met: 1) There are jobs currently available in the selected field; 2) there is an appropriate training site available in the community; 3) the occupational goal is appropriate to the program length of one year; and 4) there is no overlap with existing UCC programs (trainings may overlap for students in special circumstances as approved by program personnel).

The UCC Career and Advising Center and UCC Faculty Advisors in the areas of interest will assist students in assessing possible occupations. Customized learning goals for hands-on training are developed for each student by advisors and faculty. These goals are chosen with care to ensure students' preparation for entry-level employment in the specific occupation of choice. Student progress is evaluated by UCC faculty with input from training site supervisors. Required academic coursework includes general education courses to increase knowledge of basic skills common to all work environments. Students are also required to take elective coursework related to their chosen occupational goals. Credits earned in this program may be applied to AAS, AS, and AGS degree. The OST program by itself is not financial aid eligible.

## PROGRAM OUTCOMES

Students who successfully complete the Occupational Skills Training Certificate will:

1. Develop work ethic competencies to meet or exceed associated employer standards
2. Demonstrate competitive proficiency in the functional skills of their training occupation
3. Explore applicable licensing or certification required by industry
4. Achieve employment as appropriate in desired occupational field

## PROGRAM REQUIREMENTS

### Work-Based Training

XXX-280 Occupational Skills Training/CWE 20-28 CR  
Occupational related elective courses 7 -15 CR

### General Education Requirements

MTH 052 (or higher) 4-5 CR  
WR 115 (or higher) 4 CR  
Human Relations requirement 3 CR

### Credits Required for Certificate

45-60 CR

Contact Dean of Career/Technical, for more information on developing a career-specific plan.

## GRADUATION REQUIREMENTS

A certificate in Occupational Skills Training will be awarded to students who complete all courses in this program with a grade of C or better.

# ONE-YEAR CERTIFICATE — Occupational Skills Training

Minimum 45 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>General Education Requirements</b>	Introduction to Algebra for the Trades MTH 052 OR HIGHER 4 CR	Intro to Expository Writing WR 115 OR HIGHER 4 CR	Approved Humans Relations Course <i>from Approved List, p. 86</i>	<b>CREDITS</b> 11
	<b>Occupational Related Courses</b>	* Elective Courses Related to Career Direction 100 LEVEL OR ABOVE 7-15 CR	CWE Seminar 1 CWE 161 1 CR	* Occupational Skills Training Related to Career Direction 20-28 CR	<b>CREDITS</b> 28-44

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

All students must see faculty advisor.

\* Total of between 45-60 credits required for one-year certificate. Minimum of 12 credits per quarter to be considered full-time student and maximum limit of 21 credit hours per quarter. Credits earned in this program may be applied to AAS, AS and AGS degree. The OST program by itself is not financial aid eligible.



# OFFICE TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE: EXECUTIVE BUSINESS ASSISTANT – 91 CREDITS

## CAREER DESCRIPTION

This program is designed to prepare individuals for professional office positions. During the first year of preparation, emphasis is placed upon building basic office skills. The second year is primarily devoted to courses in this specialty area. To qualify for the AAS degree, satisfactorily complete all required course work and accumulate a minimum of 91 credit hours.

With careful planning, students may also be able to earn these certificates:

- Office Assistant
- Microsoft Office Technologist
- Financial Services

Visit [www.umpqua.edu/office-assistant](http://www.umpqua.edu/office-assistant) or speak with the faculty advisor for information.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science degree in Executive Business Assistant will:

1. Demonstrate professional skills that will assure workplace success
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Utilize appropriate technology relevant to the profession

## Other Recommended Courses

(Does NOT meet general education requirements)

BA 106 A,B,C	Business Leadership I, II, III	1-3
BA 206	Management Fundamentals	3
WR 227	Technical Report Writing	4

## APPLICATION & ACCEPTANCE

Although there is not a formal application or acceptance process for this program, students should be advised that many businesses do thorough background checks and drug screens prior to employment, including cooperative work experience placements.

If starting the program outside of fall term, students should work closely with the advisor when planning their schedule.

# ASSOCIATE OF APPLIED SCIENCE — Executive Business Assistant

91 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Business Mathematics 1 BA 180 3 CR	Intro to Computer Information Systems CIS 120 4 CR	Administrative Office Professional OA 115 3 CR	Records Management OA 116 2 CR	Ten-Key Calculator OA 131 1 CR	* English Composition: Introduction to Expository Writing WR 115 (OR HIGHER) 4 CR	CREDITS 17
	<b>Winter</b>	Principles of Financial Services BA 116 4 CR	Computer Applications – Spreadsheets CIS 125S 3 CR	Keyboarding Skill Enhancement OA 124A 3 CR	Editing for Business OA 128 3 CR	Formatting OA 123 4 CR		CREDITS 17
	<b>Spring</b>	Introduction to Business BA 101 4 CR	Customer Service BA 165 3 CR	Computer Applications- Word Processing CIS 125W 3 CR	Psychology of Human Relations PSY 101 3 CR OR Listening SP 105 3 CR OR Interpersonal Communication SP 218 3 CR OR Small Group Discussion SP 219 3 CR			CREDITS 13
<b>YEAR TWO</b>	<b>Fall</b>	Practical Accounting I BA 151 4 CR	Computer Applications- Email CIS 125E 2 CR	Computer Applications- Presentation Software CIS 125R 2 CR	CWE Seminar I CWE 161 1 CR	* Business Communications BA 214 3 CR	CWE: Administrative Assistant/Office Assistant OA 280A 3 CR	CREDITS 15
	<b>Winter</b>	Practical Accounting II BA 152 3 CR	Personal Finance BA 218 3 CR	Business Law BA 226 4 CR	* Document Processing OA 225 3 CR	Office Administration OA 245 1 CR		CREDITS 14
	<b>Spring</b>	* Social Media Marketing BA 253 3 CR	Computer Applications- Database CIS 125D 3 CR	* General Office Procedures OA 250 3 CR	* CWE: Administrative Assistant/Office Assistant- OA 280A 3 CR	Principles of Office Management OA 260 3 CR		CREDITS 15

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* A grade of C or better must be attained in the courses indicated.

# OFFICE TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE: MEDICAL OFFICE ADMINISTRATION – MINIMUM 91 CREDITS

## CAREER DESCRIPTION

This program is for those who wish to work in the healthcare field but are not interested in direct patient care. An associate of applied science in Medical Office Administration can prepare you for administrative jobs in physician offices, medical clinics, or medical centers and hospitals. In these positions, you would be responsible for assisting doctors, physicians and surgeons with clerical work. Common duties might include scheduling, answering phones, deciphering insurance regulations, coding, billing, transcribing medical documents, handling payroll, managing patient records, writing reports and preparing professional correspondence.

## PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science degree in Medical Office Administration will:

1. Demonstrate professional skills that will assure workplace success
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Utilize appropriate technology relevant to the profession

## APPLICATION & ACCEPTANCE

Although there is no application process for this program, please be advised that most area medical offices and clinics do thorough background history checks and drug screens prior to employment, including cooperative work experience placement.

## PATHWAY OPPORTUNITIES

When students complete their course of study in Medical Office Administration, they will also have completed the two certificates - Front Office Medical Assistant and Medical Billing and Collections Clerk.

The Medical Office Administration AAS degree program articulates with the Bachelors of Applied Science in Management at Southern Oregon University (SOU). Interested students should make contact with an advisor at SOU as early as possible.

# ASSOCIATE OF APPLIED SCIENCE — Medical Office Administration

Minimum 91 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Customer Service BA 165 3 CR	* Medical Terminology I MED 111 3 CR	* Medical Office Procedures I MED 220 3 CR	Administrative Office Professional OA 115 3 CR	Records Management OA 116 2 CR	Ten-Key Calculator OA 131 1 CR	CREDITS 15
	<b>Winter</b>	Intro to Computer Information Systems CIS 120 4 CR	* Medical Terminology II MED 112 3 CR	* Medical Office Procedures II MED 221 3 CR	Health Insurance Concepts MED 230 3 CR	Keyboarding Skill Enhancement OA 124A 3 CR		CREDITS 16
	<b>Spring</b>	Math for the Medical Assistant MED 060 3 CR <i>OR</i> Business Mathematics I BA 180 3 CR <i>OR</i> Introduction to Algebra MTH 060 4 CR	Psychology of Human Relations PSY 101 3 CR <i>OR</i> Listening SP 105 3 CR <i>OR</i> Interpersonal Communication SP 218 3 CR <i>OR</i> Small Group Discussion SP 219 3 CR	* Elements of Supervision SDP 109 3 CR	CWE Seminar I CWE 161 1 CR	Electronic Health Records MED 140 3 CR	* Introduction to Expository Writing WR 115 (OR HIGHER) 4 CR	CREDITS 17-18
<b>YEAR TWO</b>	<b>Fall</b>	Introduction to Business BA 101 4 CR	Practical Accounting I BA 151 4 CR <i>OR</i> Principles of Accounting I BA 211 3 CR	Business Communications BA 214 3 CR	Office Administration OA 245 1 CR			CREDITS 11-12
	<b>Winter</b>	Practical Accounting II BA 152 3 CR <i>OR</i> Principles of Accounting II BA 212 3 CR	Medical Coding for the Physician's Office MED 114 3 CR	Anatomy & Physiology for Medical Assistants MED 115 3 CR	Formatting OA 123 4 CR	Editing for Business OA 128 3 CR		CREDITS 16
	<b>Spring</b>	Business Law BA 226 4 CR	Health Care Reimbursement and Collections MED 231 3 CR	Medical Document Processing MED 260 3 CR	Principles of Office Management OA 260 3 CR	CWE: Administrative Medical Assistant OA 280C 3 CR		CREDITS 16

## NOTES

Availability of classes cannot be guaranteed, due to enrollment highs and lows. If students choose to vary from this suggested sequence, then prerequisites and term availability must be watched closely. Even then, class time conflicts might arise. Students not knowing how to keyboard should take OA 110 their first quarter

Please see an advisor for a degree planning worksheet for this program.  
\*A grade of C or better must be attained in the courses indicated

# OFFICE TECHNOLOGY

ONE-YEAR CERTIFICATE: FRONT OFFICE MEDICAL ASSISTANT – MINIMUM 48 CREDITS

## CAREER DESCRIPTION

This program is designed primarily for the person with little or no previous experience. The focus is on developing the necessary skills to function as entry-level front office medical assistants or medical office support personnel. Specific duties will often vary from office to office due to office size, location, and specialty, but duties may include answering telephone calls, scheduling appointments, greeting incoming patients, preparing new and established patient records, and possibly posting charges, copays, and patient payments.

## PROGRAM OUTCOMES

Students who successfully complete the Front Office Medical certificate will:

1. Demonstrate professional skills that will assure workplace success
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Utilize appropriate technology relevant to the profession

## APPLICATION & ACCEPTANCE

Although there is no application process for this program, please be advised that most area medical offices and clinics do thorough background history checks and drug screens prior to employment, including cooperative work experience placement.

## PATHWAY OPPORTUNITIES

When finished with the Front Office Medical Assistant certificate, students will also have completed the entire first year of the AAS degree program Medical Office Administration allowing easy transition for those students wanting to further their education.

Visit [www.umpqua.edu/office-assistant](http://www.umpqua.edu/office-assistant) for additional information.

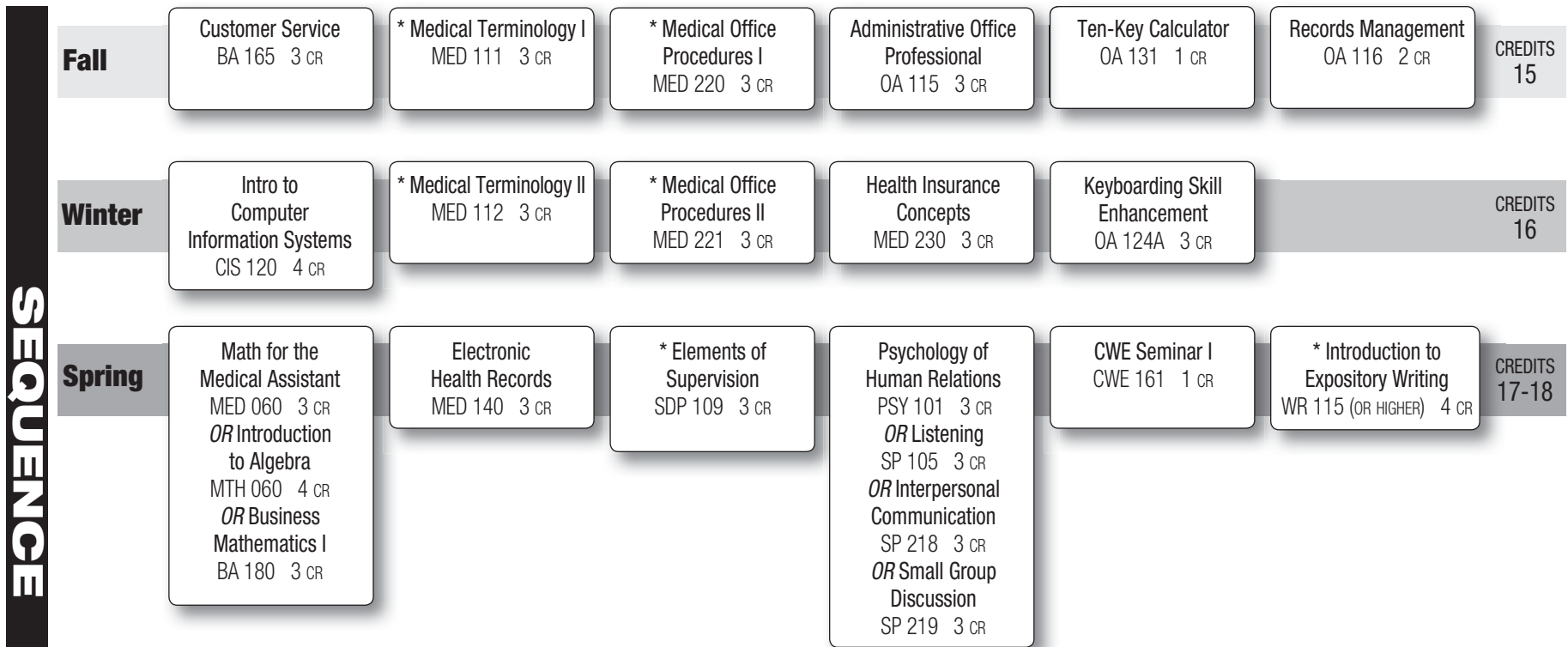
When finished with the Medical Billing and Collections Clerk Certificate, students will have completed a significant portion of the AAS degree in Medical Office Administration. Students wishing to continue their education should have an easy transition to the AAS and beyond.

Visit [www.umpqua.edu/office-assistant](http://www.umpqua.edu/office-assistant) for additional information.



# ONE-YEAR CERTIFICATE — Front Office Medical Assistant

Minimum 48 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Availability of classes cannot be guaranteed, due to enrollment highs and lows. If students choose to vary from this suggested sequence, then prerequisites and term availability must be watched closely. Even then, class time conflicts might arise. Students not knowing how to keyboard should take OA 110 their first quarter.

Please see an advisor for a degree planning worksheet for this program.

\*A grade of C or better must be attained in the courses indicated.

# OFFICE TECHNOLOGY

ONE-YEAR CERTIFICATE: MEDICAL BILLING AND COLLECTIONS CLERK – MINIMUM 51 CREDITS

## CAREER DESCRIPTION

Students gain theoretical knowledge and practical skills that will help them to succeed as entry-level outpatient medical billing and collections clerks. Prerequisite skills: Touch typing skills of at least 20 wpm at 95% accuracy.

## PROGRAM OUTCOMES

Billing and Collections Clerk certificate will:

1. Demonstrate professional skills that will assure workplace success
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Utilize appropriate technology relevant to the profession

## APPLICATION & ACCEPTANCE

Although there is no application process for this program, please be advised that most area medical offices and clinics do thorough background history checks and drug screens prior to employment, including cooperative work experience placement.

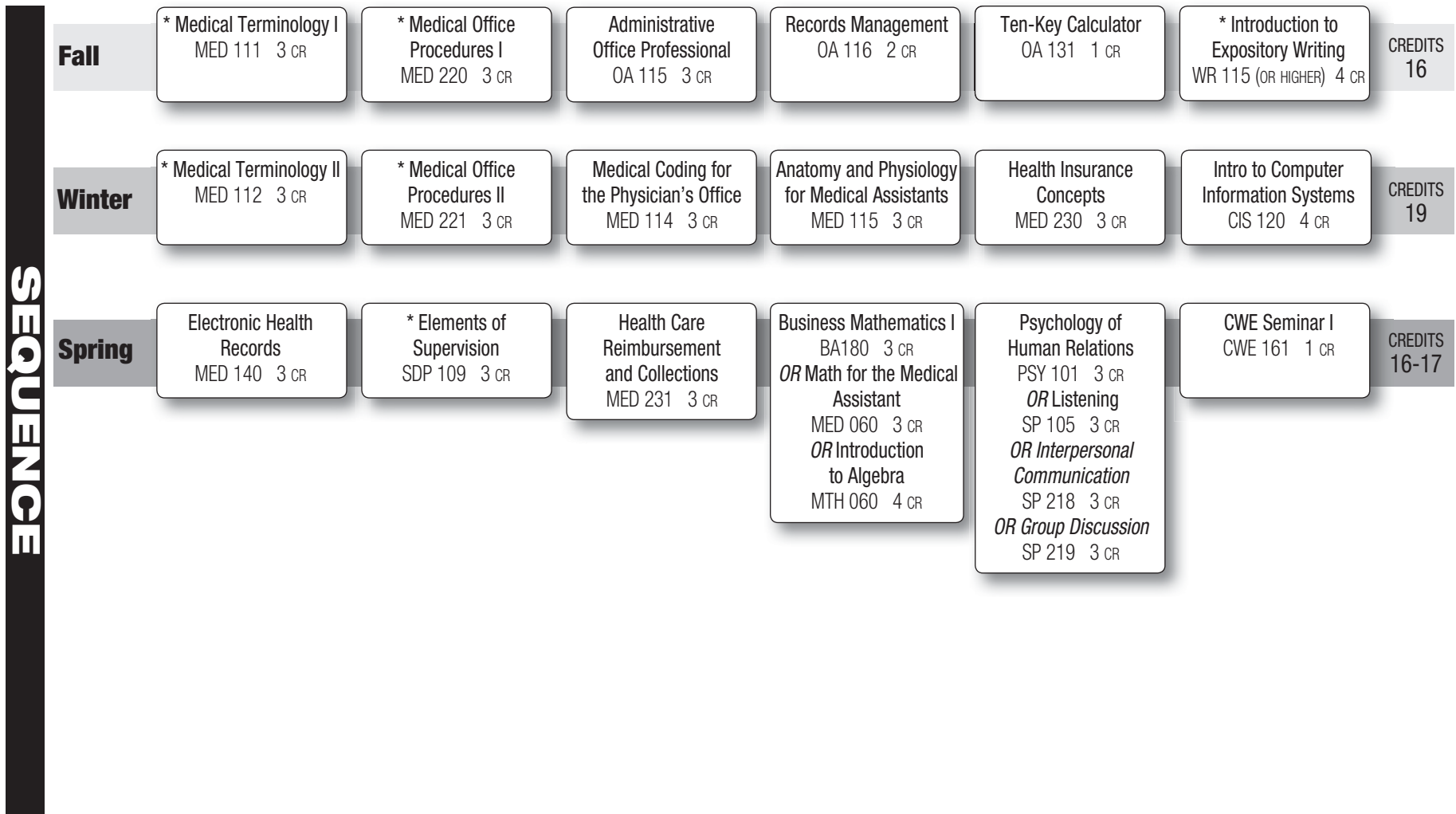
## PATHWAY OPPORTUNITIES

When finished with the Medical Billing and Collections Clerk Certificate, students will have completed a significant portion of the AAS degree in Medical Office Administration. Students wishing to continue their education should have an easy transition to the AAS and beyond.

Visit [www.umpqua.edu/office-assistant](http://www.umpqua.edu/office-assistant) for additional information.

# CERTIFICATE — Medical Billing and Collections Clerk

Minimum 51 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\*A grade of C or better must be attained in the courses indicated.

# OFFICE TECHNOLOGY

PATHWAYS CERTIFICATE: MICROSOFT OFFICE TECHNOLOGIST – 13 CREDITS

## CAREER DESCRIPTION

This certificate program is designed to provide students with advanced skills in Microsoft Office applications such as Access, Excel, Outlook, PowerPoint, and Word. Students completing each course in the series will be better prepared to sit for and pass the Microsoft certification exam applicable to each Office application.

## PROGRAM OUTCOMES

Students who successfully complete the Microsoft Office Technologist Certificate will:

1. Develop advanced skills in applicable Microsoft Office applications
2. Demonstrate the skills to complete the Microsoft Certification Exam for each applicable Microsoft Office application

## PATHWAYS CERTIFICATE — Microsoft Office Technologist

13 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**SEQUENCE**

Computer Applications -  
Database  
CIS 125D 3 CR

Computer Applications -  
Email  
CIS 125E 2 CR

Computer Applications -  
Presentation Software  
CIS 125R 2 CR

Computer Applications -  
Spreadsheets  
CIS 125S 3 CR

Computer Applications -  
Word Processing  
CIS 125W 3 CR

CREDITS  
13

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# OFFICE TECHNOLOGY

ONE-YEAR CERTIFICATE: OFFICE ASSISTANT – 45 CREDITS

## CAREER DESCRIPTION

The Office Assistant certificate program is designed to provide basic training in office skills and business knowledge that is expected in the business world today. The curriculum prepares students for entry-level positions such as clerks, receptionists or office assistants.

Students not knowing how to keyboard, must take OA 110 their first term. If required by placement test results, students will need to take MTH 020, WR 115.

## PROGRAM OUTCOMES

Students who successfully complete the Office Assistant Certificate will:

1. Demonstrate professional skills that will assure workplace success
2. Communicate effectively using oral and written skills
3. Exhibit critical thinking and decision-making skills
4. Utilize appropriate technology relevant to the profession

## APPLICATION & ACCEPTANCE

Although there is no application process for this program, please be advised that many businesses do thorough background history checks and drug screens prior to employment, including cooperative work experience placement.

OA 280A Cooperative Work Experience:  
Administrative Assistant/Office Assistant 1-4

## APPROVED ELECTIVES

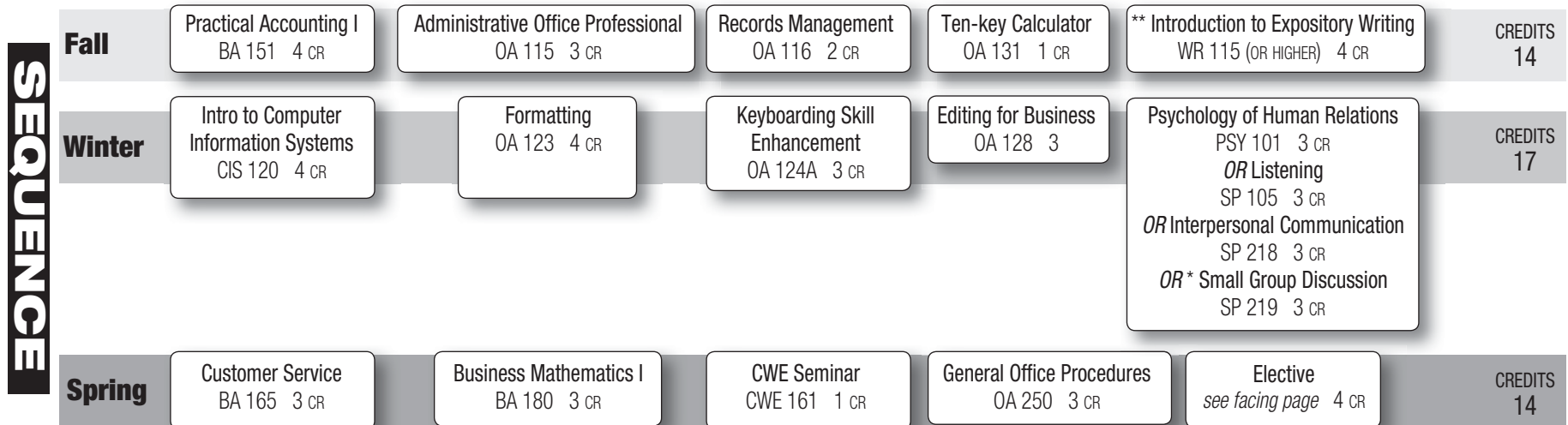
BA 101	Introduction to Business	4
BA 116	Principles of Financial Services	4
BA 214	Business Communications	3
BA 152	Practical Accounting II	3
BA 253	Social Media Marketing	3

## PATHWAY OPPORTUNITIES

When finished with the Office Assistant Certificate, students will have completed a significant portion of the AAS Executive Business Assistant Program. Students wishing to continue their education should have an easy transition to the AAS and beyond. Visit [www.umpqua.edu/office-assistant](http://www.umpqua.edu/office-assistant) for more information.

## ONE-YEAR CERTIFICATE — Office Assistant

45 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* SP 219 is no longer offered Fall Term.

\*\* A grade of C or better must be attained in these classes



# PARALEGAL STUDIES

ONE-YEAR CERTIFICATE: LEGAL ASSISTANT – MINIMUM 45 CREDITS

## CAREER DESCRIPTION

The fully online UCC one-year Legal Assistant Certificate Program\* helps prepare students for entry-level positions. The curriculum is designed to provide the basic competencies and practical skills necessary to succeed as a legal assistant or continue working towards a degree in paralegal studies. Prerequisites: A grade of C or better must be attained in all LA courses or courses must be retaken. Students who cannot accurately keyboard at least 45 wpm should plan to take OA 110 Alphabetic Keyboarding and/or OA 124 Keyboarding Skill Enhancement early in the program.

## PROGRAM OUTCOMES

The Paralegal Program strives to provide quality and comprehensive instruction and direction with the primary goal of enabling students to obtain employment within the areas of law firms, businesses, insurance companies, financial institutions, public agencies, title companies, and government offices. To attain this goal, the program has developed and maintains paralegal specific curriculum that is up to date with current industry standards, technology, and skill requirements.

Students who successfully complete the Legal Assistant Certificate will:

1. Apply professional skills to assure workplace success
  - a. Manage time appropriately and efficiently.
  - b. Know and adhere to workplace ethics and rules of professional conduct
  - c. Serve internal and external customers appropriately and be in compliance of UPL rules
  - d. Understand the importance of accuracy in the law office
2. Communicate effectively by applying appropriate listening, speaking, and writing skills both individually and as a member of a team
  - a. Understand and use legal terminology appropriately
  - b. Apply appropriate grammar and organization to written documents

3. Demonstrate use of current technology and processes relevant to discipline or profession
  - a. Know and practice proper legal procedures
  - b. Draft correspondence and legal forms correctly using MS Word
4. Think critically and creatively to solve problems
  - a. Recognize foundation, uniqueness, and importance of administrative law
  - b. Distinguish the differences and similarities between civil and criminal law

\* with the exception of LA 280:  
Cooperative Work Experience (CWE)

## APPLICATION & ACCEPTANCE

Students with a criminal record are strongly urged to research employability before entering the paralegal program. If students enter the paralegal program with a felony conviction, they should disclose this information to their paralegal advisor and any Cooperative Work Experience (CWE) employer.

## APPROVED ELECTIVES

Choose seven credits from the Approved Electives list on pg. 182.

# ONE-YEAR CERTIFICATE — Legal Assistant

Minimum 45 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**PREREQUISITES:** Keyboarding skills of 45 wpm minimum; and placement into WR 121.  
Additional skill requirements for individual courses are listed in the course description section of this catalog.

<b>SEQUENCE</b>	<b>Fall</b>	* Legal Procedures I LA 100 4 CR	Legal Terminology LA 102 3 CR	Editing for Business OA 128 3 CR	Approved Elective <i>see page 182</i> 4 CR	<b>CREDITS 14</b>	
	<b>Winter</b>	* Introduction to Paralegal Studies LA 101 3 CR	* Legal Procedures II LA 128 4 CR	** Academic Composition: WR 121 4 CR	Business Mathematics BA 180 3 CR <i>OR</i> Elementary Algebra MTH 065 4 CR	Human Relations <i>from Approved List, p. 86</i> 3 CR	<b>CREDITS 17-18</b>
	<b>Spring</b>	* Civil Procedure LA 105 3 CR	* Ethics for Legal Professionals LA 132 3 CR	Approved Elective <i>See Page 182</i> 3 CR	** Cooperative Work Experience: Paralegal LA 280 2 CR	<b>CREDITS 14</b>	

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* See catalog descriptions for prerequisites.

\*\* 2 credits equal 66 working hours. Recommended to take in Year Two if completing AAS in Paralegal Studies

# PARALEGAL STUDIES

ASSOCIATE OF APPLIED SCIENCE: PARALEGAL STUDIES – MINIMUM 90 CREDITS

## CAREER DESCRIPTION

The UCC two-year AAS in Paralegal Studies Degree, which offers classes fully online\*\*, prepares students for highly responsible entry-level positions as paralegals or legal assistants. Students take first year courses that provide them with basic competencies and practical skills. In the second year, students broaden their education by taking classes in specialty areas targeted to achieve the legal skills necessary to assist in the legal activities of law firms, businesses, insurance companies, financial institutions, public agencies, title companies, or government offices. The curriculum is designed to prepare students with both a theoretical understanding of the world of law and the practical skills necessary to succeed. Prerequisites: A grade of C or better must be attained in all LA courses or courses must be retaken. Students who cannot accurately keyboard at least 45 wpm should plan to take OA 110 Alphabetic Keyboarding or OA 124 Keyboarding Skill Enhancement early in the program.

## PROGRAM OUTCOMES

The Paralegal Program strives to provide quality and comprehensive instruction and direction with the primary goal of enabling students to obtain employment within the areas of law firms, businesses, insurance companies, financial institutions, public agencies, title companies, and government offices. To attain this goal, the program has developed and maintains paralegal specific curriculum that is up to date with current industry standards, technology, and skill requirements.

Students who successfully complete the Associate of Applied Science degree in Paralegal Studies will:

1. Manage and document billable time
2. Explain the Code of Professional Responsibility governing lawyers and legal assistance, the rule of Unauthorized Practice of Law (UPL), and the rules of professional conduct
3. Explain and apply legal terminology appropriately
4. Use Microsoft Word to create and edit letters and legal documents which are formatted according to the Oregon Rules of Civil Procedure (ORCP) and Supplemental Local Court Rules (SLR)
5. Analyze legal issues by using LexisNexis to perform research and distinguish between primary and secondary sources of law

## APPLICATION & ACCEPTANCE

Students with a criminal record are strongly urged to research employability before entering the paralegal program. If students enter the paralegal program with a felony conviction, they should disclose this information to their paralegal advisor and any Cooperative Work Experience (CWE) employer.

## APPROVED ELECTIVES

Choose 16 credits from the following:

*BA 165	Customer Service	3
*BA 211	Principles of Accounting I	3
*BA 212	Principles of Accounting II	3
*BA 213	Principles of Accounting III	3
*BA 214	Business Communications	3
*CIS 120	Intro to Computer Information Systems	4
*CIS 125D	Computer Applications -Database	3
*CIS 125S	Computer Applications - Spreadsheets	3
*CIS 125W	Computer Applications-Word Processing	3
*CJ 105	Concepts of Criminal Law	3
CJ 114	Cultural Diversity Issues in Criminal Justice	3
CJ 120	Introduction to the Judicial Process	3
*CWE 161	Cooperative Work Experience Seminar I	1
LA 222	Contract Law	3
LA 280	Cooperative Work Experience: Paralegal	1-6
	<i>up to six additional credits</i>	
*MED 111	Medical Terminology I	3
*OA 110 or	Alphabetic Keyboarding OR	2
*OA 124	Keyboarding Skill Enhancement (if needed to reach 45 wpm)	3
*OA 116	Records Management	2
OA 123	Formatting	4
*PHL 202	Ethics	3
PS 201	US Government	3
PS 202	US Government	3
PS 203	US Government	3
*PSY 101	Psychology of Human Relations	3
*SP 105	Listening	3
*SP 111	Fundamentals of Public Speaking	4
*SP 218	Interpersonal Communication	3
*WR 122	Argument, Research, and Multimodal Composition	4*
*WR 227	Technical Report Writing	4

\* Course is offered online. See schedule for terms offered.

\*\* With the exception of LA 280:  
Cooperative Work Experience (CWE)

# ASSOCIATE OF APPLIED SCIENCE — Paralegal Studies

Minimum 90 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

**PREREQUISITES:** Keyboarding skills of 45 wpm minimum; and placement into WR 121.

Additional skill requirements for individual courses are listed in the course description section of this catalog.

<b>YEAR ONE</b>	<b>Fall</b>	* Legal Procedures I LA 100 4 CR	Legal Terminology LA 102 3 CR	Editing for Business OA 128 3 CR	Approved Elective <i>see facing page</i> 4 CR	<b>CREDITS</b> 14	
	<b>Winter</b>	* Introduction to Paralegal Studies LA 101 3 CR	* Legal Procedures II LA 128 4 CR	Academic Composition WR 121 4 CR	Business Mathematics BA 180 3 CR <i>OR</i> Elementary Algebra MTH 065 4 CR	Approved Elective <i>see facing page</i> 3 CR	<b>CREDITS</b> 17-18
	<b>Spring</b>	* Civil Procedure LA 105 3 CR	* Ethics for Legal Professionals LA 132 3 CR	Approved Elective <i>see facing page</i> 3 CR	** Cooperative Work Experience: Paralegal LA 280 2 CR	Human Relations <i>from Approved List, p. 86</i> 3 CR	<b>CREDITS</b> 14
<b>YEAR TWO</b>	<b>Fall</b>	Introduction to Business BA 101 4 CR	* Legal Research & Writing I LA 204 4 CR	* Family Law LA 208 3 CR	* Wills, Probate and Estates LA 210 3 CR	<b>CREDITS</b> 14	
	<b>Winter</b>	* Business Law BA 226 4 CR	* Legal Research & Writing II LA 205 4 CR	* Torts, Pleading & Practice LA 224 3 CR	Approved Elective <i>see facing page</i> 6 CR	<b>CREDITS</b> 17	
	<b>Spring</b>	* Computers in Business BA 231 4 CR	Real Estate Law LA 217 3 CR	* Criminal Law for Paralegals LA 226 3 CR	** Cooperative Work Experience: Paralegal LA 280 4 CR	<b>CREDITS</b> 14	

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program. Students who wish to start other than Fall term should contact the program advisor, Crystal Sullivan, at [crystal.sullivan@umpqua.edu](mailto:crystal.sullivan@umpqua.edu)

\* See catalog descriptions for prerequisites  
\*\* 2 credits equal 66 working hours. Recommended to take Year Two if completing AAS in Paralegal Studies

# PRACTICAL NURSING

CERTIFICATE: PRACTICAL NURSING – MINIMUM 47 CREDITS

## CAREER DESCRIPTION

The Practical Nursing program prepares the graduate to care for a diversified group of patients in various settings including long term care, hospitals, outpatient clinics, correctional facilities, and home healthcare. Upon completion of the program, the graduate is granted a certificate in Practical Nursing and will be qualified to take the NCSBN Examination for licensure as a Practical Nurse.

## PROGRAM OUTCOMES

This program curriculum will prepare students for the ever-changing field of practical nursing within a variety of health care settings. The program focuses on the practical nursing role of providing care under the supervision of a Registered Nurse, physician, or dentist in acute, long term care and clinic health care settings. Students who successfully complete the Practical Nursing Certificate will:

1. Demonstrate a personal commitment to service and the profession of nursing
2. Demonstrate ethical and legal behavior in nursing practice
3. Apply logic and problem solving skills when implementing the plan of care
4. Provide culturally sensitive care across the lifespan to individuals within a diverse society
5. Apply established principles of health promotion and preventive health care
6. Use communication and information technology
7. Provide clinically competent care through use of established standards and practice guidelines
8. Use clear and effective therapeutic communication with clients, families, members of the health care team, and others
9. Function as a member of the health care team

## ENTRY REQUIREMENTS

Program admission occurs once a year in fall term. The application process begins in January of each calendar year with the deadline for submission of applications around Feb. 15. Students are eligible to be considered for admission to the nursing program after completing Required Prerequisite Courses listed below.

**NOTE: All Required Prerequisite courses must be completed with a C or better, and a minimum prerequisite GPA of 3.00 is required to apply.**

BI 231	*Human Anatomy & Physiology I	4 cr
BI 232	*Human Anatomy & Physiology II	4 cr
BI 233	*Human Anatomy & Physiology III	4 cr
MTH 095	Intermediate Algebra or higher	4 cr
WR 121	Academic Composition	4 cr

\* Human Anatomy & Physiology must be completed within last five (5) years

In addition to coursework, students are required to hold a current Oregon Nursing Certificate (CNA I) or have completed the Nursing Assistant course within the last three years. See specific application.

### Drug Screening:

All nursing students must successfully pass a drug screening test at the time of admission into the Practical Nursing program and are subject to random drug screening throughout the program. Failure to submit to a random drug screen or having a positive drug screen will result in sanctions per the UCC Student Code of Conduct (721.3) The cost is covered by student fees.

### Background Check:

All accepted nursing students will be required to undergo a background check prior to entering the program. Individuals with a criminal record may not be allowed into a healthcare facility as a student. Information pertaining to background checks and disqualifying crimes can be found

at the Oregon State Board of Nursing (OSBN) website: <http://tinyurl.com/mspo898> or Department of Human Services (DHS) website <http://www.oregon.gov/dhs/business-services/chc/Pages/index.aspx> Because it is not possible to meet the objectives of the program without having clinical experience, anyone with a positive criminal or abuse history may not be eligible for acceptance into the nursing program. The program is required to deny admission or continuation in the nursing program to any nursing student whose background poses a threat to an individual, the college, the nursing profession or the community.

### Immunization Status and Completion of Health History:

All accepted students will be required to provide evidence of their current immunization status and a completed health history and physical exam, including specific lab tests and a hearing screening evaluation.

### CPR-BLS:

Show proof of a current healthcare provider CPR card that includes adult, child and infant CPR & AED.

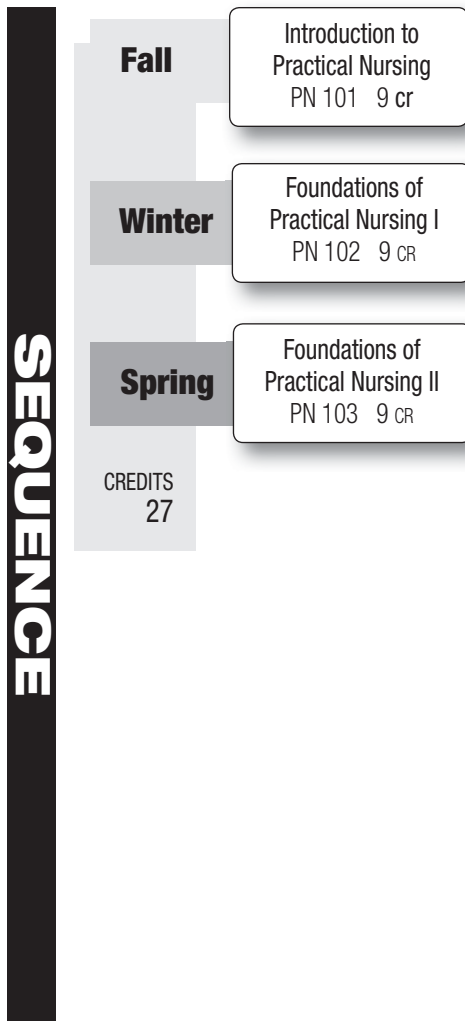
## GRADUATION REQUIREMENTS

These requirements apply only to nursing students admitted to the program during the current academic year. Students must complete all courses on this advising guide with a grade of C or better to continue in and complete the program, receive their certificate, and meet the educational requirements to apply to take the national licensure exam (NCLEX-PN). The OSBN screens all applicants for licensure and may deny licensure to or place on probation applicants with convictions for certain crimes. Licensure applicants with a history of chemical dependence will be required to have a drug and alcohol counselor assessment. Contact the OSBN with any questions.



# CERTIFICATE — Practical Nursing

Minimum 47 Credits — Required Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Selective admissions process applies.  
Please see an advisor for a degree planning worksheet for this program.  
All courses require grade of C or better.

\* Human Anatomy & Physiology must be completed within last five (5) years

# REGISTERED NURSING

ASSOCIATE OF APPLIED SCIENCE: REGISTERED NURSING – MINIMUM 107 CREDITS

## CAREER DESCRIPTION

Nursing offers the satisfaction of making immediate differences in other people's lives. It is a dynamic, humanistic, and scientific discipline which diagnoses and treats actual or potential health problems. Nursing is a rigorous, intellectual discipline requiring people with critical and decision-making skills. A successful candidate for the nursing profession should have a genuine desire to help people, a strong commitment to career development, the ability to use scientific information and be a team player.

## PROGRAM OUTCOMES

Nursing care competencies recognize that a competent nurse provides safe care across the lifespan directed toward the goals of helping clients (individuals, families or communities), promote health, recover from acute illness and/or manage a chronic illness and support a peaceful and comfortable death. As a member of the Oregon Consortium for Nursing Education, UCC Nursing curriculum supports the following nursing competencies. A competent nurse will:

1. Base personal and professional actions on a set of shared core nursing values
2. Develop insight through reflection, self-analysis, and self-care
3. Engage in intentional learning
4. Demonstrate leadership in nursing and healthcare
5. Collaborate as part of a health care team
6. Practice within, utilize, and contribute to the broader healthcare system
7. Practice relationship-centered care
8. Communicate effectively
9. Make sound critical judgements using the best evidence available

## ENTRY REQUIREMENTS

The application process begins in January of each calendar year with the deadline for submission of applications around February 15.

Students are eligible to be considered for admission to the nursing program after completing 30 credit hours of courses from the Required Prerequisite Courses listed below. The 30 credits must include BI 231 Anatomy and Physiology I and either MTH 095 (or higher) or placement into MTH 105 (or higher) by the application deadline.

**NOTE:** All Required Prerequisite courses must be completed with a C or better and a minimum prerequisite GPA of 3.00 is required to apply.

### Required Prerequisite Courses

MTH 095	Intermediate Algebra (or above)	4
BI 231	Human Anatomy & Physiology <sup>5</sup>	4
BI 232	Human Anatomy & Physiology <sup>5</sup>	4
BI 233	Human Anatomy & Physiology <sup>5</sup>	4
WR 121	Academic Composition	4
WR 122	Argument, Research, and Multimodal Composition <i>OR</i>	4
WR 227	Technical Report Writing	4
HDFS 201	Individual and Family Development	3
FN 225	Human Nutrition	4
BI 234	Microbiology	4
BI 222	Intro to Genetics	3

College level courses (numbered 100 and above) to include one Psychology and two Socials Sciences *AND/OR* Arts & Letters electives 9

All Required Prerequisite Courses credits must be completed before starting the Nursing (NRS) courses Total Credits 47

### Drug Screening:

All nursing students must successfully pass a drug screening test at the time of admission into the Nursing Program and are subject to random drug screening throughout the program. Failure to submit to a random drug screen or having a positive drug screen will result in sanctions per the UCC Student Code of Conduct (721.3). The cost is covered by the student fees.

### Background Check:

All accepted nursing students will be required to undergo a background check prior to entering the program. Individuals with a criminal record may not be allowed into a healthcare facility as a student. Information pertaining to background checks and disqualifying crimes can be found at the OSBN web link: <http://tinyurl.com/mspo898> or Department of Human Services (DHS) website <https://tinyurl.com/oaybrsn>

Because it is not possible to meet the objectives of the program without having clinical experience, anyone with a positive criminal or abuse history may not be eligible for acceptance into the Nursing program. The program is required to deny admission or continuation in the nursing program to any nursing student whose background poses a threat to an individual, the college, the nursing profession or the community.

### OHSU Connection:

Students should understand that although co-admitted to the Oregon Health Sciences University School of Nursing, those who choose to transition from the UCC Nursing Program to OHSU will have to undergo a background check for OHSU at the time of transition and ability to enroll in OHSU courses may be negatively impacted by any background history in their background.

### Immunization Status and Completion of Health History:

All accepted students will be required to provide evidence of their current immunization status and a completed health history and physical exam, including specific lab tests and a hearing screening evaluation.

### CPR-BLS:

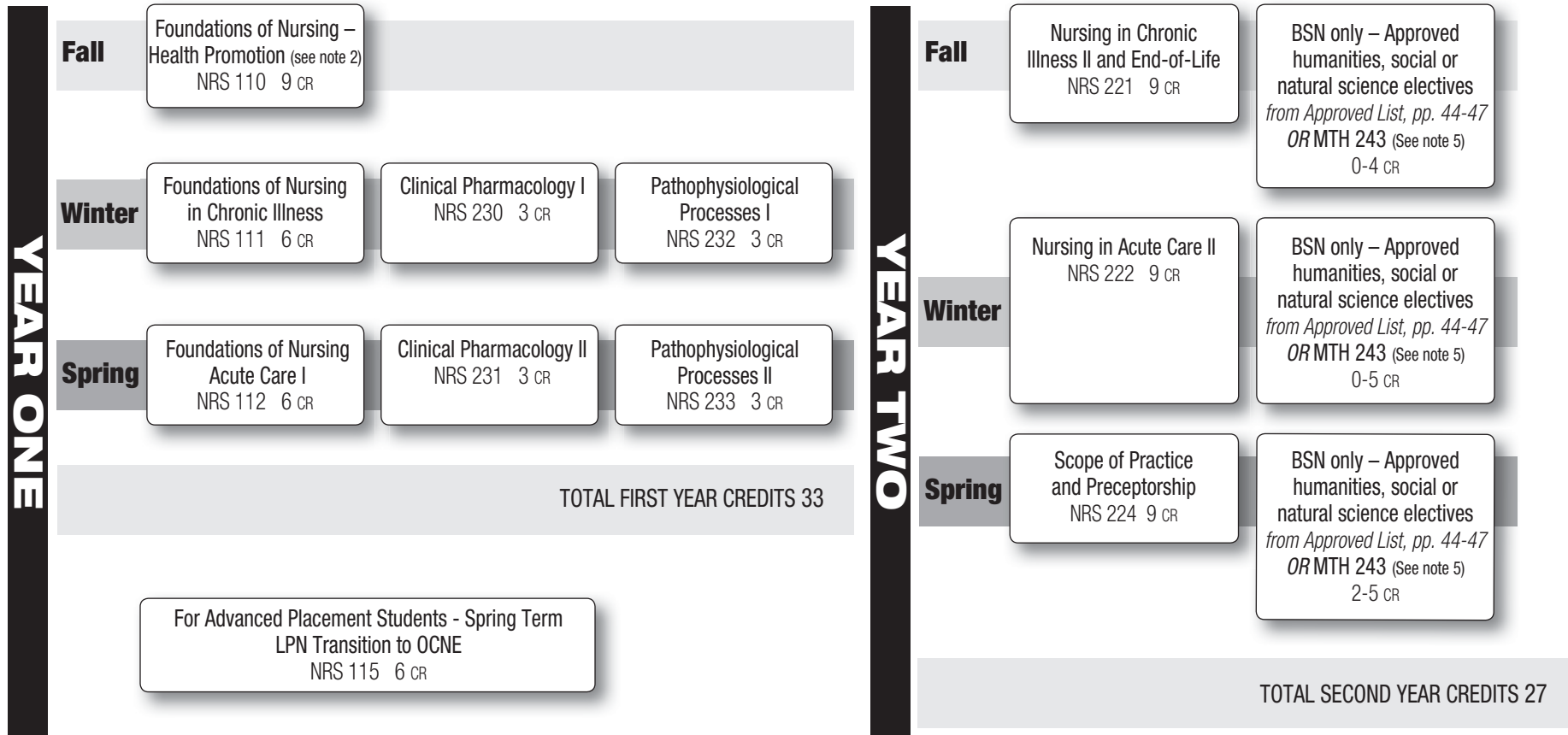
Show proof of a current healthcare provider CPR card that includes adult, child and infant CPR & AED

## GRADUATION REQUIREMENTS

These requirements apply only to nursing students admitted to the program during the current academic year. Students must complete all courses on this advising guide with a grade of C or better to continue in and complete the program, receive their degrees, and meet the educational requirements to apply to take the national licensure exam (NCLEX-RN). The OSBN screens all applicants for licensure and may deny licensure to or place on probation applicants with convictions for certain crimes. Licensure applicants with a history of chemical dependence will be required to have a drug and alcohol counselor assessment. Contact the OSBN with any questions.

# ASSOCIATE OF APPLIED SCIENCE — Registered Nursing

Minimum 107 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

- MTH 095 or higher level math or placement into MTH 105 (or higher) and BI 231 must be part of the 30 credits completed to be eligible to apply.
- To be admitted into NRS 110, students must complete all required prerequisite and preparatory course and be accepted into the Nursing program.
- Students who plan to continue through to OHSU must be aware that to earn the bachelor's degree, they must have

- two years of the same high school-level World Language, or two terms of the same college-level language, or a language proficiency examination. College-level World Language (including American sign language) credits count toward degree requirement.
- Students planning to earn a bachelor's degree are encouraged to continue on to MTH 243 Probability & Statistics soon after their prerequisite math course.

For more information regarding the program, selection process, and points contact the Nursing program: 541 440-4614.

- Human Anatomy & Physiology must be completed within last five (5) years.
- Chemistry required prior to taking Human Anatomy & Physiology

# TRUCKING AND TRANSPORTATION LOGISTICS

CERTIFICATE: PROFESSIONAL TRUCK DRIVER CERTIFICATION – MINIMUM 17 CREDITS

## CAREER DESCRIPTION

Courses as part of a statewide Professional Truck Driver Certificate program will prepare the student to take the Oregon State Commercial Drivers License test and meet the requirements of industry as well as a state-wide community college certificate. The program utilizes a career-pathway model which allows for immediate employment after two classes and with additional course work the opportunity to complete an industry endorsed career-technical certificate of completion.

The UCC Professional Truck Driver certificate includes classroom training covering: log books, trip planning, and hours of service. This is followed by road/yard training covering: behind-the wheel driving, entry-level driver training, backing, chaining up, and completion of the CDL drive test. In order to obtain the Certificate students also take the Transportation Customer Service course and complete a minimum of 100 hours of Cooperative Work Experience which includes a sixteen hour seminar.

## PROGRAM OUTCOMES

Students who successfully complete the Professional Truck Driving Certificate will:

1. Demonstrate characteristics of a professional commercial truck driver
2. Perform tractor-trailer driving techniques
3. Demonstrate the basic techniques for coupling/uncoupling
4. Use visual search, speed and space management, and proper procedures for operating at night and driving in extreme weather
5. Inspect and maintain tractor and trailers
6. Demonstrate proper communication and reporting techniques
7. Apply knowledge of cargo documentation, hours of service regulations, accident reporting, trip planning, driver wellness, and safety documentation
8. Demonstrate technical skills necessary to pass the Commercial Drivers License (CDL) skills test and enter the Trucking Industry as an entry-level tractor-trailer driver

## APPLICATION & ACCEPTANCE

Applicants for the Truck Driver Training program must:

- Be 21 years of age unless employed or pre-approved by a trucking company;
- Have a clear driving record for the past 5 years;
- Complete an application packet;
- Complete and pass a DOT physical and Drug Screen.

Students will be issued a certificate of completion when they have successfully completed all program requirements. Pre-registration is required.

Contact 541-440-7691 for further information.

# CERTIFICATE — Professional Truck Driving

Minimum 17 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

\* Introduction to Professional  
Truck Driving and Logistics  
TTL 101 4 CR

\* Practical Applications in Professional  
Truck Driving and Logistics  
TTL 121 6 CR

\*\* Transportation and Logistics  
Customer Service Skills  
TTL 141 1-3 CR

\*\* Cooperative Work Experience  
Transportation  
TTL 281 6 CR

CREDITS  
17-19

**SEQUENCE**

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

\* (Required for Oregon CDL and Certificate)

\*\* (Required for Certificate)

Students should contact Community and Workforce Training department for information (541-440-4668).



# VITICULTURE AND ENOLOGY

PATHWAY CERTIFICATE: WINE MARKETING ASSISTANT – 20 CREDITS

## CAREER DESCRIPTION

The Wine Marketing Assistant Pathway Certificate includes parts of both the full Viticulture and Enology two-year degree and one-year certificate. It prepares students for entry-level positions in wine sales and distribution. Students can continue with either the Viticulture/Enology program or augment business skills. Students completing the marketing pathway certificate will be able to demonstrate understanding of the role and function of marketing in the wine industry, familiarity with the basic chemistry of winemaking, the ability to conduct sensory evaluations of wine, and knowledge of worldwide wine varieties, regions, and markets. Job opportunities range from an average of \$31,200 for entry-level tasting room positions to \$66,660 for sales representatives according to 2015 industry surveys. Students must be over 18 years of age to participate in wine tasting.

## PROGRAM OUTCOMES

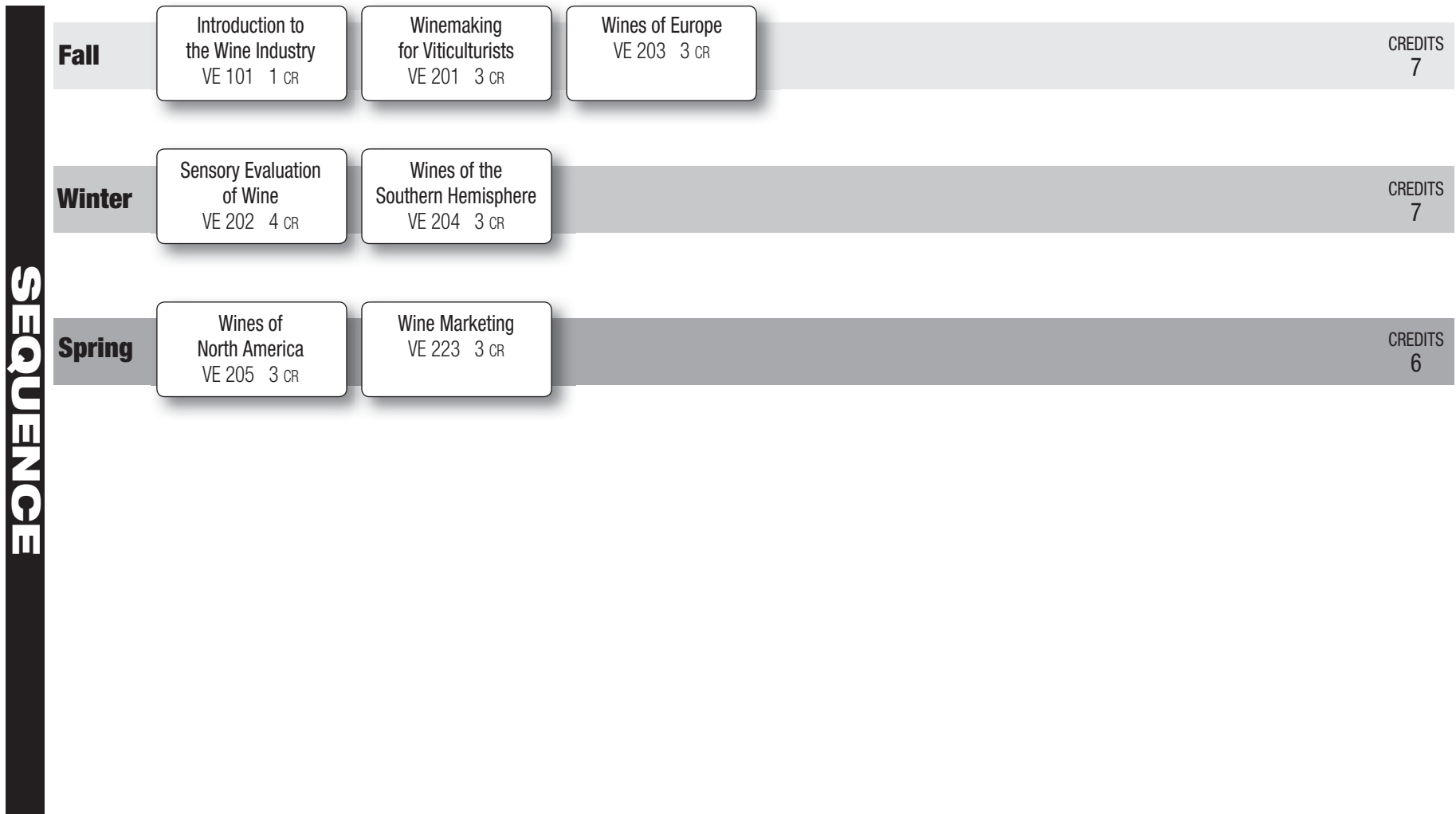
Upon completion, students can continue with either the Viticulture/Enology program or augment business skills.

Students who successfully complete the Wine Marketing Assistant Certificate will:

1. Demonstrate knowledge of the role and function of marketing in the wine industry
2. Explain the basic chemistry of wine-making
3. Conduct sensory evaluations of wine
4. Demonstrate knowledge of worldwide varieties, regions, and markets

# PATHWAY CERTIFICATE — Wine Marketing Assistant

20 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# VITICULTURE AND ENOLOGY

ONE-YEAR CERTIFICATE: VITICULTURE – MINIMUM 47 CREDITS

## CAREER DESCRIPTION

The one-year certificate program in Viticulture and Enology prepares students for entry into the industry and is the first year of the two-year AAS degree. The certificate program includes an introduction to grape growing, basic principles of soil science, vineyard practices throughout all four seasons, and supervised practical work experience. The second year curriculum emphasizes enology (wine making). Job opportunities range from an average of \$38,625 for entry-level positions to \$80,947 for vineyard management positions, according to 2015 industry surveys. Students must be at least 18 years of age.

## PROGRAM OUTCOMES

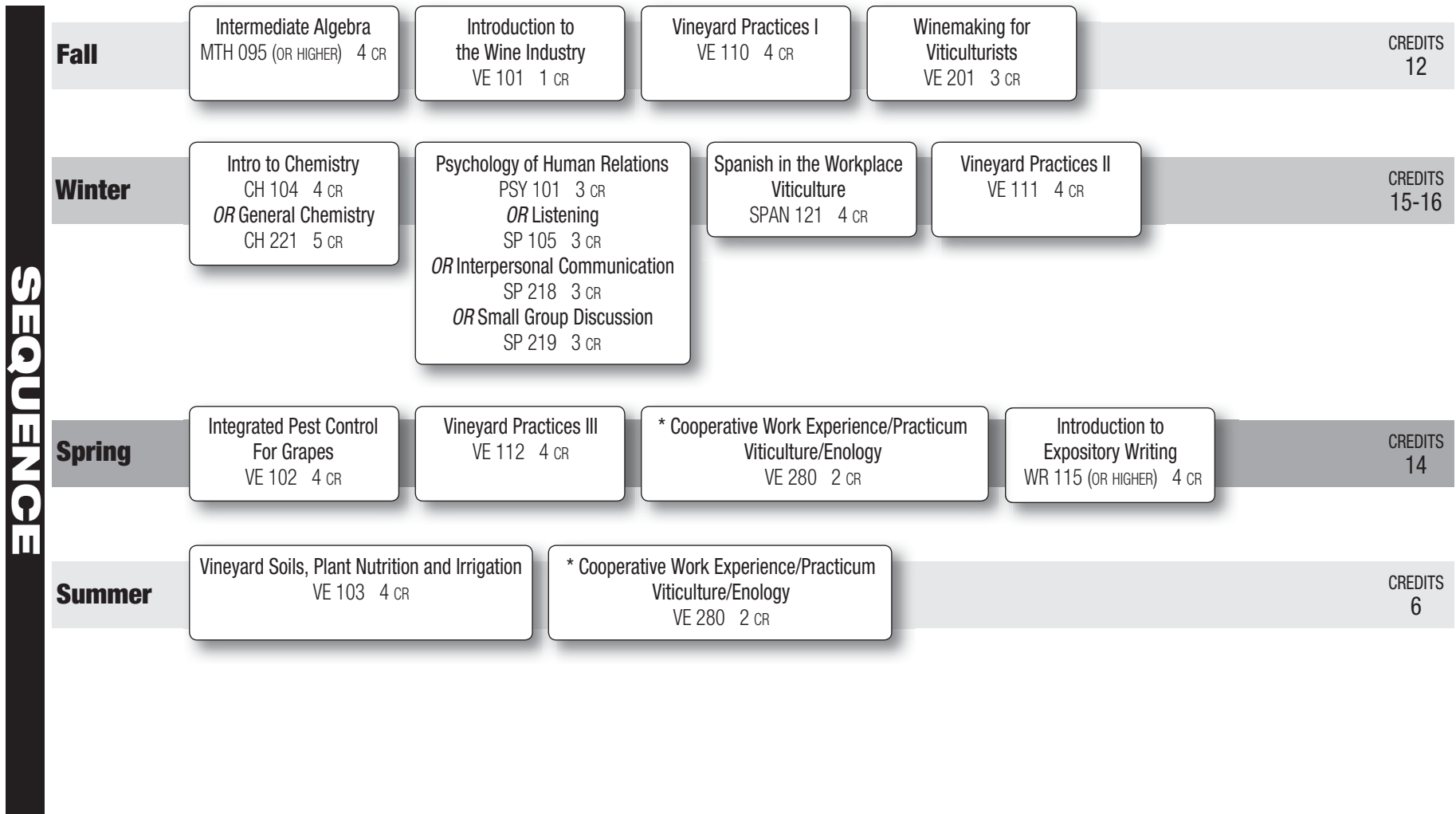
The one-year certificate program in Viticulture prepares students for entry into the industry and is the first year of the two-year AAS degree. The certificate program includes an introduction to grape growing, basic principles of soil science, vineyard practices throughout all four seasons, and supervised practical work experience. Students with prior college experience may not have to take any or all general classes required.

Students who successfully complete the Viticulture and Enology Certificate will:

1. Recognize the basic properties of soils and manage organic matter in soils
2. Identify and treat soil problems-toxicities and deficiencies
3. Conduct soil, water, and plant tissue in laboratory analyses
4. Manage mineral nutrition of grapevines
5. Identify effects of fertilizer applications
6. Demonstrate knowledge of water relations in plants and soils
7. Control erosion and implement effective irrigation practices
8. Plan and complete a fruit sampling program to include laboratory evaluation of fruit and measurement of fruit maturity for different vineyard blocks
9. Evaluate the ripening patterns of different grape patterns of different grape varieties and variation due to vineyard site differences
10. Recognize vine plant diseases and insects
11. Demonstrate the ability to prune grape vines
12. Create and institute a plan to prepare the vineyard for each season

# ONE-YEAR CERTIFICATE — Viticulture

Minimum 47 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)



## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* CWE can be taken in 1-4 credit increments.  
33 hrs = 1 credit

# VITICULTURE AND ENOLOGY

ASSOCIATE OF APPLIED SCIENCE: VITICULTURE AND ENOLOGY – MINIMUM 96 CREDITS

## CAREER DESCRIPTION

The Viticulture and Enology program prepares students for entry into the industry as production winemaking technicians, vineyard and winery owners, vintners, and or sales and marketing coordinators. The Enology AAS degree program includes an introduction to grape growing, basic principles of soil science, vineyard and winery practices throughout all four seasons, chemistry of the winemaking process, principles of wine production, and supervised practical work experience. The curriculum builds upon the one-year certificate program in Viticulture and students receive the AAS degree as well as the viticulture and wine marketing assistant certificates. Job opportunities within the industry are very diverse with average earnings according to 2015 industry surveys ranging from \$33,488 for entry level tasting room positions, \$37,395 for entry-level cellar works, \$38,625 for entry-level vineyard positions, \$62,401 for cellar masters, \$66,660 for sales representatives, \$66,955 for assistant winemakers, and \$80,947 for vineyard management. Efforts are underway to articulate the degree for transfer to other colleges and universities, including Oregon State University, which has both undergraduate and graduate programs in the field. Students with prior college experience may not have to take any or all general classes required. Students must be over 18 years of age to participate in wine tasting.

## PROGRAM OUTCOMES

The second year curriculum emphasizes enology (winemaking) and prepares students for entry into the industry in production and sales as winemaking technicians, vineyard and winery owners, and vintners. Job opportunities exist throughout the Pacific Northwest and northern California and employment trends indicate that wine industry salaries continue to increase.

In addition to achieving the outcomes of the Viticulture Certificate Program students who successfully complete the Associate of Applied Science in Viticulture and Enology will:

1. Apply basic principles and techniques of wine sensory evaluation
2. Conduct statistical analyses of sensory evaluation trials and preference test trials
3. Select and train wine judges and administer sensory evaluation and preference tests
4. Identify and compare wine traits, types, and styles
5. Read and interpret results of analyses performed by commercial laboratories
6. Perform basic chemical analyses and calculations for testing wine during all stages of production, and take appropriate steps to mitigate defects
7. Operate and maintain winery equipment
8. Demonstrate knowledge of marketing and distribution principles for wine cluster industries

# ASSOCIATE OF APPLIED SCIENCE — Viticulture and Enology

Minimum 96 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>YEAR ONE</b>	<b>Fall</b>	Introduction to the Wine Industry VE 101 1 CR	Vineyard Practices I VE 110 4 CR	Winemaking for Viticulturists VE 201 3 CR	Intermediate Algebra MTH 095 (OR HIGHER) 4 CR	CREDITS 12	
	<b>Winter</b>	Spanish in the Workplace: Viticulture SPAN 121 4 CR	Vineyard Practices II VE 111 4 CR	Psychology of Human Relations PSY 101 3 CR OR Listening SP 105 3 CR OR Interpersonal Communication SP 218 3 CR OR Small Group Discussion SP 219 3 CR	* Cooperative Work Experience/ Practicum: Viticulture/Enology VE 280 2 CR	CREDITS 13	
	<b>Spring</b>	Integrated Pest Control for Grapes VE 102 4 CR	Vineyard Practices III VE 112 4 CR	Introduction to : Expository Writing WR 115 4 CR	* Cooperative Work Experience/ Practicum: Viticulture/Enology VE 280 2 CR	CREDITS 14	
	<b>Summer</b>	Soils, Plant Nutrition, and Irrigation VE 103 4 CR	* Cooperative Work Experience/Practicum: Viticulture/Enology VE 280 2 CR		CREDITS 6		
<b>YEAR TWO</b>	<b>Fall</b>	Wines of Europe VE 203 3 CR	Laboratory Analysis of Musts and Wines VE 209 4 CR	Science of Winemaking I VE 210 5 CR	* Cooperative Work Experience/ Practicum: Viticulture/Enology VE 280 2 CR	Introductory Chemistry CH 104 4 CR OR General Chemistry CH 221 5 CR	CREDITS 18-19
	<b>Winter</b>	Wines of the Southern Hemisphere VE 204 3 CR	Sensory Evaluation of Wine VE 202 4 CR	Science of Winemaking II VE 211 5 CR	Introduction to Chemistry CH 105 4 CR OR General Chemistry CH 222 5 CR	CREDITS 16-17	
	<b>Spring</b>	Wines of North America VE 205 3 CR	Wine Marketing VE 223 3 CR	Science of Winemaking III VE 212 5 CR	* Cooperative Work Experience/ Practicum: Viticulture/Enology VE 280 2 CR	Introduction to Chemistry CH 106 4 CR OR General Chemistry CH 223 5 CR	CREDITS 17-18

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

\* CWE can be taken in 1-10 credit increments.  
33 hrs = 1 credit



# WELDING

## PATHWAYS CERTIFICATE: ALUMINUM ONLY WELDING – 23 CREDITS

### CAREER DESCRIPTION

Aluminum is the metal of the future. It is 1/3 the weight of steel, has an excellent strength to weight ratio, is virtually corrosion resistant, and is 100% recyclable. These material properties and many more are making Aluminum the choice metal for future engineering applications around the world. This material is not difficult to weld, it's just different, and should not be treated like steel. In this series of courses, the student will learn the differences in metallurgy, filler metal selection, process applications, fabrication techniques, and weld procedure development. Graduates will have the knowledge and skills that are required to achieve entry-level positions as aluminum welders and fabricators. Basic tools and PPE for fabrication and welding are required; a list of tools are available from the welding instructors. The Welding Department seeks to maximize the ability of its graduates to compete in the job market by offering relevant and up-to-date course in welding technology.

### PROGRAM OUTCOMES

Students who successfully complete the Welding Certificate will:

1. Apply fundamentals of welding, including the basics of common joining processes, cutting and gouging, measurement, fabrication, repair, material identification, and visual acceptance criteria
2. Interpret and apply basic elements of blueprints such as line type identification, symbols, notes, 2D and 3D interpretation, dimensioning and measurement
3. Exhibit “soft skills” such as: timeframe awareness, follow-through and completion of work, positive interactions with fellow classmates, good communication, positive attitude, and good work ethics
4. Demonstrate a knowledge and understanding of safe working conditions, as well as, safety in handling materials, equipment, and personal protective equipment
5. Identify basic components of welding systems and welding processes, proper machine setup, and demonstrate troubleshooting when visual acceptance criteria of a weldment has not been met
6. Apply knowledge of Weld Procedure Specifications or WPS's as they relate to material identification, thermal and electrical properties, applications, as well as, understanding which materials will need special procedures for preheat and post heating, filler metal selection, process selection, and other essential variables involved in the fabrication of a weldment
7. Apply knowledge of national standards and guidelines set forth by AWS, ASME, API, OSHA, and other governing organizations that will affect their work

# ONE-YEAR CERTIFICATE — ALUMINUM ONLY Welding

23 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	Welding Processes & Applications WLD 101 4 CR	Aluminum Arc Welding & Fabrication I WLD 160 3 CR	CREDITS 7	
	<b>Winter</b>	Introduction to Algebra for the Trades MTH 052 4 CR	Aluminum Arc Welding & Fabrication II WLD 261 3 CR	Blueprint Reading and Sketching WLD 140 3 CR	CREDITS 10
	<b>Spring</b>	GTAW I – Gas Tungsten Arc Welding I WLD 150 3 CR	Aluminum Arc Welding & Fabrication III WLD 262 3 CR	CREDITS 6	

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# WELDING

## ONE-YEAR CERTIFICATE: WELDING – 51 CREDITS

### CAREER DESCRIPTION

The welding program focuses on skills sets required to meet or exceed industry standards and the American Welding Society (AWS). Graduates will have basic knowledge and skills that are required to achieve entry-level positions as welders, welder operators, and fabricators. Basic tools and PPE for fabrication and welding are required, a list of tools are available from the welding instructors. The Welding Department seeks to maximize the ability of its students to compete in the job market by offering relevant and up to date courses in welding technology.

To achieve this goal, the department emphasizes current technology trends in both the welding shop and classroom environment. Welding courses are offered during the day and in the evening. In addition, courses are adapted to meet the diverse needs of the student, potential employers, and respond to changes and advancements in the welding industry.

The UCC Welding program is an Educational Institutional Member of the American Welding Society, and offers AWS - SENSE curriculum and certificates.

### PROGRAM OUTCOMES

Students who successfully complete the Welding Certificate will:

1. Apply fundamentals of welding, including the basics of common joining processes, cutting and gouging, measurement, fabrication, repair, material identification, and visual acceptance criteria
2. Interpret and apply basic elements of blueprints such as line type identification, symbols, notes, 2D and 3D interpretation, dimensioning and measurement
3. Exhibit “soft skills” such as: timeframe awareness, follow-through and completion of work, positive interactions with fellow classmates, good communication, positive attitude, and good work ethics
4. Demonstrate a knowledge and understanding of safe working conditions, as well as, safety in handling materials, equipment, and personal protective equipment
5. Identify basic components of welding systems and welding processes, proper machine setup, and demonstrate troubleshooting when visual acceptance criteria of a weldment has not been met
6. Apply knowledge of Weld Procedure Specifications or WPS's as they relate to material identification, thermal and electrical properties, applications, as well as, understanding which materials will need special procedures for preheat and post heating, filler metal selection, process selection, and other essential variables involved in the fabrication of a weldment.
7. Apply knowledge of national standards and guidelines set forth by AWS, ASME, API, OSHA, and other governing organizations that will affect their work.

# ONE-YEAR CERTIFICATE — Welding

51 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan.)

<b>SEQUENCE</b>	<b>Fall</b>	Welding Processes & Applications WLD 101 4 CR	Shielded Arc Metal Welding WLD 111 4 CR	Basic Metallurgy WLD 131 3 CR	Introduction to Algebra for the Trades MTH 052 (OR HIGHER) 4 CR	Starrett: PMI - Precision Measurement Instruments MFG 108 2 CR	<b>CREDITS 17</b>
	<b>Winter</b>	Blueprint Reading and Sketching WLD 140 3 CR	Shielded Arc Metal Welding: Mild Steel I WLD 112 3 CR	Shielded Arc Metal Welding: Mild Steel II WLD 113 3 CR	Shielded Arc Metal Welding: Mild Steel III WLD 114 3 CR	Introduction to Expository Writing WR 115 4 CR	<b>CREDITS 16</b>
	<b>Spring</b>	Gas Metal Arc Welding WLD 121 3 CR	Gas Metal Arc Welding – Pulse WLD 122 3 CR	Flux-Cored Arc Welding I (Gas Shielded) WLD 141 3 CR	Flux-Cored Arc Welding II (Self Shielded) WLD 142 3 CR	GTAW I - Gas Tungsten Arc Welding WLD 150 3 CR	Listening SP 105 3 CR <b>CREDITS 18</b>

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.

# WELDING

## ASSOCIATE OF APPLIED SCIENCE: WELDING – 97 CREDITS

### CAREER DESCRIPTION

The second year AAS degree in welding focuses on advanced skills sets required for pressure piping and boiler fabrication. Industry standards set forth by AWS (American Welding Society), API (American Petroleum Institute), and ASME-Section IX (American Society of Mechanical Engineers) will be covered. Graduates will have knowledge and skills that are required to achieve entry-level positions as pipe fitters, pipe welders, and fabricators. Basic tools and PPE for fabrication and welding are required, a list of tools are available from the welding instructors. The Welding Department seeks to maximize the ability of its students to compete in the job market by offering relevant and up to date courses in welding technology.

To achieve this goal, the department emphasizes current technology trends in both the welding shop and classroom environment. Welding courses are offered during the day and in the evening. In addition, courses are adapted to meet the diverse needs of the student, potential employers, and respond to changes and advancements in the welding industry.

The UCC Welding program is an Educational Institutional Member of the American Welding Society, and offers AWS - SENSE curriculum and certificates.

### PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Welding will:

1. Apply fundamentals of welding, including the basics of common joining processes, cutting and gouging, measurement, fabrication, repair, material identification, and visual acceptance criteria
2. Interpret and apply basic elements of blueprints such as line type identification, symbols, notes, 2D and 3D interpretation, dimensioning and measurement
3. Exhibit “soft skills” such as: timeframe awareness, follow-through and completion of work, positive interactions with fellow classmates, good communication, positive attitude, and good work ethics
4. Demonstrate a knowledge and understanding of safe working conditions, as well as, safety in handling materials, equipment, and personal protective equipment
5. Identify basic components of welding systems and welding processes, proper machine setup, and demonstrate troubleshooting when visual acceptance criteria of a weldment has not been met
6. Apply knowledge of Weld Procedure Specifications or WPS’s as they relate to material identification, thermal and electrical properties, applications, as well as, understanding which materials will need special procedures for preheat and post heating, filler metal selection, process selection, and other essential variables in the fabrication of a weldment
7. Apply knowledge of national standards and guidelines set forth by AWS, ASME, API, OSHA, and other governing organizations that will affect their work

### PROGRAM OPTIONS

#### CWE:

This program option presents CWE or Cooperative Work Experience for the second year welding student. This traditional program option would allow the welding student to do on the job training with a local welding manufacturing facility. Qualified students will work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Prerequisite: Instructor approval and Satisfactory completion of first year welding certificate program 1 credit = 33 hours of lab.

### ALUMINUM

This program option was designed to develop a student’s knowledge and manipulative skills in the use of Aluminum and Aluminum alloys. Course work related to this program option will focus on materials and processes related to aluminum and aluminum manufacturing industries. Students interested in this program option will concentrate on the understanding of traditional, nontraditional, and advanced welding and fabrication methods for aluminum only.

### ENGINEERING

This program option will present an opportunity for welding students that may have the desire and skills to do more project planning and design related to the welding and manufacturing industries. Course work for to this program option will contain more Auto CAD courses in engineering such as; Structural and Civil 3D Auto CAD. This option will allow the welding students to take CAD courses in the place of some of their CWE credits.

### PROGRAM OPTIONS

#### Suggested Schedule for Year Two

#### CWE:

Fall	WLD 280	CWE: Welding	3 CR
Winter	WLD 280	CWE: Welding	3 CR
Spring	WLD 280	CWE: Welding	3 CR

#### Aluminum Emphasis:

Fall	WLD 160	Aluminum Arc Welding I	3 CR
Winter	WLD 261	Aluminum Arc Welding II	3 CR
Spring	WLD 262	Aluminum Arc Welding III	3 CR

#### Engineering Emphasis:

Fall	WLD 280	CWE: Welding	3 CR
Winter	CIV 214	Computer Aided Drafting - Civil3D and Virtual Design	3 CRS
Spring	DRF 116	Computer Aided Drafting - Design	3 CR

# ASSOCIATE OF APPLIED SCIENCE — Welding

97 Credits — Recommended Sequence for Students (Students should see an advisor to customize their educational plan)

<b>YEAR ONE</b>	<b>Fall</b>	Welding Processes and Applications WLD 101 4 CR	Shielded Metal Arc Welding WLD 111 4 CR	Basic Metallurgy WLD 131 3 CR	Introduction to Algebra for the Trades MTH 052 4 CR	Starrett: PMI - Precision Measurement Instruments MFG 108 2 CR	<b>CREDITS 17</b>
	<b>Winter</b>	Shielded Metal Arc Welding I: Mild Steel I WLD 112 3 CR	Shielded Metal Arc Welding I: Mild Steel II WLD 113 3 CR	Shielded Metal Arc Welding I: Mild Steel III WLD 114 3 CR	Blueprint Reading and Sketching WLD 140 3 CR	Introduction to Expository Writing (OR HIGHER) WR 115 4 CR	<b>CREDITS 16</b>
	<b>Spring</b>	Gas Metal Arc Welding WLD 121 3 CR	Gas Metal Arc Welding – Pulse WLD 122 3 CR	Flux-Cored Arc Welding I (Gas Shielded) WLD 141 3 CR	Flux-Cored Arc Welding II (Self Shielded) WLD 142 3 CR	Gas Tungsten Arc Welding I WLD 150 3 CR	Listening SP 105 3 CR <b>CREDITS 18</b>
<b>YEAR TWO</b>	<b>Fall</b>	Advanced Welding III WLD 123 3 CR	Computed Aided Drafting I DRF 112 3 CR	Gas Tungsten Arc Welding, GTAW II WLD 251 3 CR	Program Option 3 CR MIN <i>see facing page</i>	<b>CREDITS 15</b>	
	<b>Winter</b>	Advanced Welding IV WLD 124 3 CR	Gas Tungsten Arc Welding, GTAW III WLD 252 3 CR	Pipe Welding and Fitting I WLD 222 3 CR	Machine Shop Practices I MFG 111 3 CR	Program Option 3 CR MIN <i>see facing page</i> Computer Aided Drafting II DRF 113 3 CR <b>CREDITS 18</b>	
	<b>Spring</b>	Welding Problems WLD 161 4 CR	Pipe Welding and Fitting II WLD 223 3 CR	Blueprint Reading II WLD 240 3 CR	Machine Shop Practices II MFG 112 3 CR	Program Option 3 CR MIN <i>see facing page</i> <b>CREDITS 16</b>	

## NOTES

Scheduling requirements may prevent all courses from being offered every term. Consultation with an advisor is critical to student's selection of courses.

Please see an advisor for a degree planning worksheet for this program.



# COURSE DESCRIPTIONS



## COURSE NUMBERING

Courses numbered 100 or higher are taught at the college undergraduate level. Numbers 100-199 are considered freshman level, while 200-299 are at the sophomore level. Courses numbered 199 or 299 are generally experimental to evaluate student response. Courses numbered below 100 generally do not carry transfer credit.

Courses numbered 198 or 298 are independent study. Independent study is used for individualized advanced studies on a particular topic, studies in areas not considered in other courses to meet special interests, or to meet program requirements.

Independent study affords an opportunity for students with previous study in a subject area to pursue further investigations for credit. Prerequisite: Instructor, Department Chair, and Dean approval of study plan. 12 credits maximum total credit.

## AEC – APPLIED ECONOMICS

### AEC 121: Discovering Agriculture and Resource Economics (1)

Explore issues, opportunities, and challenges in the dynamic and diverse employment field of agricultural and resource economics. 1 lecture hrs/wk. F

### AEC 211: Management in Agriculture (4)

Economic and business principles applied to the management of agribusiness firms, including farms and ranches; goal-setting and management information; planning and decision-making tools; acquiring, organizing, and managing land, labor, and capital resources. Registration-Enforced Prerequisite: ECON 201. 4 lecture hrs/wk. F,

### AEC 221: Marketing in Agriculture (3)

Organization and functions of domestic and international markets; market channels for various agricultural commodities; role of agribusiness, cooperatives, and government in marketing decisions. Registration-Enforced Prerequisite: ECON 201.3 lecture hrs/wk. W

## AG – AGRIBUSINESS

### AG 111: Computer Applications in Agriculture (3)

Computer use in agriculture and agribusiness; practical experience with computer programs applicable to all agricultural disciplines. 3 lecture hrs/wk. W

### AG 120: Intro to Agribusiness (3)

An introduction to agricultural business methods, basic approaches to management, finance, agricultural law and economics and the marketing and selling of agricultural products. 3 lecture hrs/wk. S

## ANTH – ANTHROPOLOGY

### ANTH 150: Introduction to Archaeology (3)

This course offers an introduction to the archaeology and prehistory of the world and archaeological method and theory. We will review the basic field and lab techniques that archaeologists use to investigate the past, the theoretical paradigms that guide the archaeological process, and the

origins of human behavior from the earliest fossils and artifacts to the ancient civilizations of the Old and New Worlds. Registration-Enforced Prerequisite: WR 121 with a grade of C or better. 3 lecture hrs/wk. S

### ANTH 165: Anthropology of Sex (3)

This course introduces students to sexuality and gender in anthropology, including current issues in America and cultures throughout the world. In this course we investigate the cultural dimensions of sex and institutionalized gender roles, including sex, gender, marriage and reproduction, cultural expectations about the behavior of men and women in social and professional situations, relationships and roles, sex and gender in the media, lesbian, gay, bisexual, transgender and other genders, gender discrimination in social position, power and economic opportunities, sex in the workplace, sex trafficking, infanticide, childbirth and childcare, domestic violence, AIDS/HIV and STDs, genital mutilation practices, the politics of sex, gender and identity, sex and gender in government institutions and the military, and sex and gender issues in the law. From an anthropological perspective, these issues are inextricable and linked to a variety of cultural institutions and practices. Registration Enforced Prerequisite: WR 121. 3 lecture hrs/wk. F. (not currently offered).

### ANTH 221: Cultural Anthropology (3)

Preliterate and modern societies are studied, compared, and contrasted to discover common human themes. Both evolutionary and institutional approaches are used; that is, we look at hunters and gatherers, bands, tribes, and state societies as well as institutions such as the family, political organization, economics, technology, and religion. This is the first term of a three-term sequence. 3 lecture hrs/wk. Prerequisite: Writing 121. F

### ANTH 222: Cultural Anthropology (3)

A continuation of the major themes explored in ANTH 221/223, including social organization, cultural adaptation and change, the family, values, economics, politics, and religion. May be taken independently of ANTH 221/223. 3 lecture/hrs/wk. Prerequisite: WR 121. W

### ANTH 223: Cultural Anthropology (3)

A continuation of the major themes explored in ANTH 221/222. Ancient traditions and modern adaptations and

problems are considered. May be taken independently of ANTH 221/222. 3 lecture hrs/wk. Prerequisite: Writing 121. S (not currently offered).

## APR – APPRENTICESHIP

### APR 101: Intro to Trades & Technology (4)

This course provides an introduction to the necessary skills required for working in the trades. Students explore current trends in apprenticeship and basic requirements to enter individual programs. Students will become familiar with licensing and certification in a chosen trade. General topics include: industry opportunities and basic concepts in safety, trade vocabulary, trade calculations, hand and power tools, blueprint reading, and basic rigging. 3 lecture, 3 lab hr/wk.

### APR 111: Machine Shop Practices 1 (3)

Introduces the student to semi-precision and precision measuring and layout procedures, the use of bench tools, saws, drill presses and their accessories. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 6 lecture/lab hrs/wk.

### APR 112: Machine Shop Practices II (3)

The student learns the operation of turning lathe including setup, turning tapers, threads (National, Acme, Square) and forms. Use of accessories is stressed such as chucks, steady rests, follower rests and grinders. Registration-Enforced Prerequisite: APR 111. 6 lecture/lab hrs/wk.

### APR 113: Machine Shop Practices III (3)

The student learns the operation of horizontal and vertical milling machines, their setup, basic operation and use of accessories such as digital readouts, rotary table, dividing head, gear and cam millings and the use of indicators, wigglers and edge finders. Registration-Enforced Prerequisite: APR 112. 6 lecture/lab hrs/wk.

### APR 115: Computer Aided Drafting 1 (3)

This is a beginning course, which introduced computer aided drafting (CAD). The AutoCAD 2011 software is used to set up drawings and perform basic drawing and editing commands. Emphasis is on two-dimensional drawings, and engineering architectural aspects of computer drafting. This is an online enhanced course, meaning you are required to use online resources to pass this class. 2 lecture, 2 lecture lab hrs/wk/. F

### **APR 120: Industrial Safety (3)**

This course will present training in OR-OSHA standards and related general safety and health provisions. Oregon Safety Law and subjects listed in OAR 437, Division 3 and OAR 437, Division 2 training and accident prevention measures are included, as well as safety committee procedures. 3 lecture hrs/wk.

### **APR 121 – Hydraulics 1 (3)**

An introductory course covering the basic principles of hydraulics for the future industrial hydraulics technician. Included in the class are pressure, force and area relationships, fundamentals of reservoir design, fluids and fluid flows, and the fundamentals of hydraulic pumps. Common industrial circuits are developed and studied with the use of lab trainers. Students will disassemble, inspect and reassemble both components and circuits in structured lab sessions. Registration-Enforced Prerequisite: MTH 052 or MTH 60. 3 lecture hrs/wk.

### **APR 122 – Hydraulics II (3)**

This is the second in a series for the industrial apprentice and is continuation of Hydraulics 1. The focus is on pressure relief valves, hydraulic activators and flow controls. Each component is studied in structured classroom sessions, while lab activities are directed at disassembly, inspection and circuitry involving the specific component. Student will be using lab trainers to examine the operation of circuits using these components. Registration-Enforced Prerequisite: APR 121, 3 lecture hrs/wk.

### **APR 123 – Hydraulics III (3)**

This is the third course in a series for the industrial apprentice and is a continuation of Hydraulics 2. Each student will study contamination control, hydraulic actuators, flow controls and hydraulic accessories. Circuits using those components are fabricated, discussed and studied during structured lab sessions. Registration-Enforced Prerequisite: APR 122, 3 lecture hrs/wk.

### **APR 130: Mechanical Principles and Drive Designs (3)**

This course will familiarize the student with the proper identification, interchanging, application, failure analysis, and selection of all types of bearings. Drive designs will also be taught in relation to belts and roller chain. 3 lecture hrs/wk.

### **APR 131: Basic Metallurgy (3)**

Covers the principles related to metals, their structure and physical properties. The testing of various metals, their uses and the results of heat treating are explored. Laboratory time is provided for experiments and demonstrations to correlate with classroom activities. 2 lecture/3 lab hours. F

### **APR 140: Beginning Welding for Apprentices (1)**

This course covers welding processes, safety, equipment, and essential variables of operation. This is an outcome-based course utilizing a lab format in which students successfully demonstrate their skill level. 3 lab hrs/wk. W, S

### **APR 141: Intermediate Welding for Apprentices (1)**

This course will build upon skills learned in APR 140, with a continuing emphasis on the fundamentals and mechanics, welding processes, safety, equipment, and essential variables of operation. This is an outcome-based course utilizing a lab in which students demonstrate and build their skill level. Registration-Enforced Prerequisite: APR 140. 3 lab hrs/wk. W, S

### **APR 142: Advanced Welding for Apprentices (1)**

This course will build upon the skills learned in APR 140 and APR 141, with a continuing emphasis on the fundamentals and mechanics, welding processes, safety, equipment, and essential variables of operation. This is an outcome based course utilizing a lab in which students demonstrate and build their skill level. Registration-Enforced Prerequisite: APR 141. 3 lab hrs/wk. W, S

### **APR 143: Pipe Welding (1)**

This course covers multiple welding processes for pipe welding applications. Safety, equipment, and essential variables of operation will be emphasized, as well as the fundamentals and mechanics of pipe welding. This is an outcome based course utilizing a lab in which students demonstrate and build their skill level. Registration-Enforced Prerequisite: APR 142. 3 lab hrs/wk. W, S

### **APR 145: Blueprint Reading and Sketching (1)**

A basic course in sketching and reading of shop drawings. A study is made of three-view drawings, pictorial drawings, dimensioning, tolerancing, lines, notes and symbol interpretation. 3 lecture hrs/wk. W

### **APR 151: Basic Electronics and Electricity (4)**

This course covers information on basic DC and AC electrical theory, definitions, basic component identification and analysis of series, parallel and combination circuits. Emphasis is placed on practical application, troubleshooting and problem solving. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 3 lecture, 2 lecture/lab hrs/wk.

### **APR 153: Electrical Applications and Techniques (3)**

This course covers basic application techniques and components generally found in the industrial and commercial environments. Focus is on electrical safety and related industry safety standards. The National Electrical Code Book is utilized where applicable to reinforce code rules and proper application of associated articles. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 3 lecture hrs/wk.

### **APR 155: Electrical Best Practices (2)**

The course includes techniques in conduit bending and installation, conductor installation, cable installation and conductor termination, including hands-on instruction. It covers tools available for installation, fasteners and panelboard mounting. The material presented will stress workmanship and professionalism, and will include a review of NEIS publications. 2 lecture hrs/wk.

### **APR 157: Introduction to the National Electrical Code (2)**

This course is an introduction to the National Electrical Code and examines the structure, language and basic content of the Code. It will examine the basic wiring methods outlined in chapters 1, 2 and 3 of the National Electrical Code and evaluate methods and techniques necessary for a safe and reliable installation. 2 lecture hrs/wk.

### **APR 159: Electrical Blueprint Reading (2)**

This course will provide the apprentice with the knowledge and understanding of how to read, draw, and interpret electrical drawings, symbols, schematics, prints, and schedules. One-line drawings, controller operational sequencing/troubleshooting, and applicable sections of the National Electrical Code are included. 2 lecture hrs/wk.

## **APR 160: Residential Wiring (3)**

This course is an introduction to basic residential wiring and calculations. Topics include circuit layout, wiring design, wiring installation, service installation, and service and branch circuit calculations. Design techniques are reinforced through the use of testing equipment and installation practice. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 3 lecture hrs/wk.

## **APR 163: Commercial Wiring (3)**

This course is an introduction to basic commercial wiring and calculations. It will give the student background in all aspects of commercial work, including services. Design techniques are reinforced through the use of testing equipment and installation practice. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 3 lecture hrs/wk.

## **APR 165: AC Electronics and Electricity (4)**

This course covers the theory and application of magnetism, electromagnetism, the generation of electromotive force, AC and DC motor principles, transformer theory, types and applications. Focus is on alternating current principles and the theories involving the proper wiring of AC circuits. The student will be introduced to electrical control circuits and the operation of a transistor. Registration-Enforced Prerequisite: APR 151. 3 lecture, 2 lecture/lab hrs/wk.

## **APR 167: Electric Motors and Transformers (3)**

This course investigates the electric motors and transformers, and helps the student differentiate between winding styles, frame sizes, NEMA motor type designations, and other criteria. Motor sizing and starting characteristics and methods are discussed. Troubleshooting and maintenance are covered. NEC requirements for motor and transformer installation are included. Registration-Enforced Prerequisite: APR 153. 3 lecture hrs/wk.

## **APR 169: Electrical Code Study II (2)**

This course is an in-depth study of grounding, over-current and electrical safety as found in Articles 240 and 250, along with safety-oriented excerpts found elsewhere in the National Electrical Code. 2 lecture hrs/wk.

## **APR 228: Rigging Fundamentals (3)**

This course introduces the uses of slings and common rigging hardware along with basic inspection techniques, hitch configurations, and load-handling safety practices. Components of wire rope, wire rope inspection, proper installation of wire rope, maintenance guidelines, and end terminations and preparations will also be taught. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 2 lecture, 2 lecture/lab hrs/wk.

## **APR 229: Basic Pneumatics (3)**

This course will help students understand fundamental concepts of a pneumatic system. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 3 lecture hrs/wk.

## **APR 251: Electrical Sensors and Control (3)**

This course covers the basic concepts of open and closed loop control systems common to motion and process control. Process controls including pressure, temperature, flow, and levels of gases, liquids, and solids are studied. Various measurement methods are covered, and the operation of mechanical and electronic measurement sensors are explained. Introduction to AC and DC variable speed drives, as well as the fundamental operation of programmable logic controllers, PLC programming, basic numbering systems, and application examples are covered. Registration-Enforced Prerequisite: APR 167. 3 lecture hrs/wk.

## **APR 253: Electrical Code Study III (2)**

This course is an in-depth overview of Chapter 3 in the National Electrical Code. It includes the study of general rules for wiring and calculating ampacity, as well as specific wiring methods and the codes involved in their installation. 2 lecture hrs/wk.

## **APR 255: Motor Controls I (2)**

This course will teach basic electromechanical motor control theory, including input devices, logic, and pertinent sections of the National Electrical Code. The course will teach various common motor control circuits and will include hands-on training. Registration-Enforced Prerequisite: APR 151. 1 lecture, 2 lecture/lab hrs/wk.

## **APR 257: High Voltage Applications (2)**

This course will outline hazards associated with high voltage work, along with applicable safety codes and practices. NFPA 70E will be discussed. Methods for routing, handling and terminating high voltage cable will be reviewed, along with applicable references from the NEC. Registration-Enforced Prerequisite: APR 153. 2 lecture hrs/wk.

## **APR 259: Solid State and Digital Applications (4)**

This course covers information on thyristors, digital and analog IC's, sensors and transducers. Digital circuit fundamentals are studied with an emphasis on troubleshooting and problem solving. Students will use test equipment to analyze digital integrated circuits. An overview of computer interfacing will be presented. Registration-Enforced Prerequisite: APR 165. 3 lecture, 2 lecture/lab hrs/wk.

## **APR 261: Electrical Code Study IV (2)**

This course includes instruction on calculations required for wiring to Code, i.e., conduit and box fill, ampacity, motor and transformer calculations, service size, voltage drop and available short-circuit current. 2 lecture hrs/wk.

## **APR 263: Communications, Alarms and Controls (2)**

This course will examine NEC requirements for low voltage installations, and will also cover the theory of operation of communications circuits, control and communications cable types, and termination and splicing techniques for various systems. Registration-Enforced Prerequisite: APR 151. 2 lecture hrs/wk.

## **APR 265: Motor Controls II (2)**

This course will teach basic motor speed control theory, including input devices, logic, and motion control device theory. It will introduce variable frequency drives and PLC's as well as other speed control methods. The course will include hands-on training. Registration-Enforced Prerequisite: APR 255. 1 lecture, 2 lecture/lab hrs/wk.

## **APR 267: Advanced Code Study (3)**

This course is an examination of the contents of Chapters 5, 6 and 7 of the National Electrical Code covering special occupancies and special equipment. It also examines the Oregon Specialty Codes as well as federal codes such as OSHA, UL, IEEE, UBC and others. Registration-Enforced Prerequisite: APR 157 or APR 169 or APR 253 or 261. 3 lecture hrs/wk.



### **APR 269: Journeyman Exam Preparation (3)**

This course is refresher instruction with regular drills designed to improve the student's ability to find and interpret National Electrical Code references. Registration-Enforced Prerequisite: APR 157 or APR 169 or APR 253 or 261. 3 lecture hrs/wk.

## **ART – ART**

### **ART 101: Introduction to the Visual Arts (4)**

Study of the visual elements and principles of art, their nature, function and relationship in painting, sculpture, architecture and graphics. Emphasis on basic approaches to understanding works of art and the development of personal interpretations. The purpose of this course is to provide each student with an understanding of the diverse ways in which different cultures construct and represent their realities. Through thematic examination of both historical and contemporary art the student will acquire a vocabulary to describe formal properties of art, techniques of art making, and social, psychological, spiritual and physical uses of art. 4 lecture hrs/wk. F

### **ART 115: Art and Design Foundations 1:2D (4)**

Introduction to working with the elements of two-dimensional art and design, organizational principles, concept, and process. Principles and elements of design will be explored through traditional and contemporary media. Course includes lectures, readings, demonstrations, and hands-on projects to help students identify, practice, and gain proficiency in 2D design (including color). Students will also be introduced to the work of contemporary artists, techniques that focus on idea generation and problem solving, and (studio) critique. This is an essential course for majors in Art, Art Education, Pre-Architecture, Graphic Design, and Product Design. No prerequisites. Open to non-majors. 2 lecture, 4 lecture/lab hrs/wk. W

### **ART 117: Art and Design Foundations in 3D (4)**

Introduction to working with the elements of three-dimensional art and design, organizational principles, concept, and process. Principles and elements of design will be explored through traditional and contemporary media. Course includes lectures, readings, demonstrations, and hands-on projects to help students identify, practice, and gain proficiency in 3D design (including color). Students will also be introduced to the work of contemporary artists,

techniques that focus on idea generation and problem solving, and (studio) critique. This is an essential course for majors in Art, Art Education, Pre-Architecture, Graphic Design, and Product Design. No prerequisites. Open to non-majors. 2 lecture, 4 lecture/lab hrs/wk. S

### **ART 120: Artists' Books (3)**

In this course, students will learn to construct a variety of basic folded and stitched book structures and pop-up techniques. Curriculum will focus on design process development, conceptual development and typographic layout. Students will learn the history of the book form throughout the world, the history of movable books, and the history of artists' books and fine press books. Contents and expected learning proficiencies of this course vary from term to term. 2 lecture, 3 lab hrs/wk. S

### **ART 131: Intro to Drawing I: Line and Gesture (3)**

This course serves as an introduction to visual language through a variety of modes of drawing and the manipulation of tools and materials in the drawing medium. The concepts of basic composition are explored including placement and scale of subject matter, pictorial balance, volume and spatial depth. Different modes of drawing include the exploration of gesture, contour, cross contour, and negative space. Critical thinking skills are exercised in individual and group critiques addressing the integration of form with content. Discussions and presentations of drawing ideology expand the student's perception of themselves as artists within a historical and contemporary context. This course is for those interested in Art and non majors seeking elective credit. 2 lecture, 3 studio (lab) hrs/wk. F

### **ART 132: Intro to Drawing II: Form and Space (3)**

This course is the second drawing course where the study of visual language is explored through the manipulation of a wider variety of drawing tools and surfaces. A more in-depth study of drawing modes introduced in ART 131 continues in this course, with the addition of advanced concepts of perspective, shading, and conceptual development. Critical thinking skills are exercised in individual and group critiques addressing the integration of form with content. Discussions and presentations of drawing ideology expand the student's perception of

themselves as artists within a historical and contemporary context. 2 lecture, 3 studio (lab) hrs/wk. W

### **ART 134: Illustrating Nature (3)**

This course serves as a bridge between art and science. Historically, science and art have been intricately intertwined. Scientists of centuries past needed to develop their artistic skills in order to document and understand the natural world. The keen observation needed for patient and thorough scientific study mirrors that practiced by artists to interpret their world. The similarities between art and science are often overlooked in the modern era, but many modern scientists are also artists and use their artistic skills to help them better understand the intricate details of their study subjects. And artists can enhance and improve their skills by drawing and painting from life. This course is designed to introduce basic art techniques to those wishing to learn how to illustrate what they see in the natural world. Students will learn about sketching basics, simple color techniques, and basic photography. Most lectures, demonstrations and lab work will be done in the field, illustrating from life. Drawing, painting, and photography invite careful observation which is a useful skill for those studying the sciences. Various illustrations supplementing field notes enhance understanding of any scientific topic. Nature illustration is also an aesthetic expression on its own terms, and one that students may continue to enjoy beyond practical, classroom applications. 2 lecture, 3 lab hrs/wk. S (alternating years)

### **ART 197: Artist's Survival/Practical Issues (3)**

This class is designed for students in the Fine Arts, Art Education, Pre-Architecture, Desktop Marketing and Graphic Design. Through lectures, demonstrations and discussions, participants will learn and apply professional practices relevant to emerging artists' careers. Students will learn to write artist's statements and resumes, portfolio preparation, networking strategies, gaining exposure and representation for art work, creating publicity, basic marketing and exhibition strategies, presenting and installing art work, business concerns, art market dynamics, and about art collecting. Field trips to galleries and/or guest lectures will supplement classroom activities. Students may have opportunities to gain practical experience in the UCC gallery, through internships and/or through Service Learning Projects. 3 lecture hrs/wk. S

## **ART 204: History of Western Art I: the Ancient World (4)**

A history of the visual arts covering selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them.

This course explores the history of art and architecture in the ancient Mediterranean and Near East from the origins of art in the Paleolithic Era, through its expressions in the cultures of Egypt and Mesopotamia, to the art and architecture of Greece and Rome, and the Late Antique period- the transition between the ancient and medieval worlds. Emphasis is placed on the ways in which ancient cultures represented the human form, and examines the role of art within emerging cultures and civilizations, the relationship of art to social, political and philosophical contexts, and connections of past art and culture to the present.

Recommended prerequisite: WR 095 with a grade of C or better or appropriate test scores and RD 090 with a grade of C or better or appropriate test scores. 4 lecture hrs/wk. F

## **ART 205: History of Western Art II: Medieval through Baroque (4)**

Historical survey of the visual arts. Selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them.

This course focuses on the major monuments, artists and artistic developments in Western Europe during the medieval and renaissance periods. Spanning the years from 400 AD to 1550 AD, the course begins with Rome's fall, and goes on to consider Rome's legacy, the rise of the Byzantine Empire, and the spread of Christianity and Islam. It continues with the development of Carolingian, Ottonian, Romanesque and Gothic cultures in Western Europe. The term finishes with a treatment of the Renaissance, culminating in the works of Leonardo, Raphael, Michelangelo, Holbein and Durer.

Covering painting, sculpture, architecture, manuscript illumination and the decorative arts, the course aims to define elements of artistic style and to track the evolution of individual, regional and period styles. Students will examine artworks and artistic movements in the context of political, economic, religious, intellectual and social history, in an attempt to better understand the creation, function and reception of art.

Recommended prerequisite: WR 095 with a grade of C or better or appropriate test scores and RD 090 with a grade of C or better or appropriate test scores. 4 lecture hrs/wk. W

## **ART 206: History of Western Art III: Baroque to Modern (4)**

History survey of the visual arts. Selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them.

This class will focus primarily on major artists and developments in western European painting, sculpture, and architecture from the Renaissance to the twentieth century. In addition to the nature and development of individual, regional and period styles, we will consider shifting relationships between the arts and political, religious, social, and economic developments.

Covering painting, sculpture, and architecture, the course aims to define elements of artistic style and to track the evolution of individual, regional and period styles. Students will examine artworks and artistic movements in the context of political, economic, religious, intellectual and social history, in an attempt to better understand the creation, function and reception of art.

Recommended prerequisite: WR 095 with a grade of C or better or appropriate test scores and RD 090 with a grade of C or better or appropriate test scores. 4 lecture hrs/wk. W

## **ART 210: Women in Art (4)**

This course is a survey of women artists from the medieval period to the present. The course will attempt to view these artists in their historical/sociological contexts and will consider not only traditional "high art" media but women working in the craft traditions as well. The works of the most important women artists from each period will be studied in relation to the changing roles of women in society and to the art produced contemporaneously by men. Registration-Enforced Prerequisites: WR 121 and RD 115 or equivalent placement test scores. 4 lecture hrs/wk. (Not offered every year)

## **ART 216: Photography: History, Technology, Culture, and Art (3)**

Introduction to the history of photography through aesthetic, cultural and technical contexts. This course covers the history of photography and its technologies, photography in art, an overview of important photographers and their photographs, and the purposes of photography. Photography's importance as a primary vehicle for communication make this an essential course for students wanting to think critically about photography and its impact on our culture. 3 lecture hrs/wk. S

## **ART 217: Comics in American Culture (4)**

A historical survey of American comic art and artists from the 1950s to the Present. The course is primarily concerned with how comics has developed and matured as a distinctively American art form, reflecting and commenting on post-W.W. II American society in a variety of narrative forms: comic strips, comic books, and graphic novels. But not simply reflecting American culture, comics themselves have often been at the center of debates about the influence of media in shaping the national character. Equally important to the course are issues of content versus social regulation (which structured the discourse of the Congressional debates concerning juvenile delinquency during the 1950s) and issues involving the Comics Code Authority, which still governs the content of mainstream comics today. Countercultural comics of the 1960s and 1970s as well as alternative comics of the 1980s and 1990s round out our investigation of comics in American culture by helping us to understand comics as a system of cultural representations. Registration-Enforced Prerequisites: WR 121 and RD 090 or equivalent placement test scores. 4 lecture hrs/wk. (Not offered every year)

## **ART 234: Figure Drawing (3)**

An introduction to drawing the human figure. Measurement, shading, and interpretation with various media are presented. 2 lecture, 3 studio (lab) hrs/wk. S

## **ART 250: Ceramics (3)**

Clay forming methods and techniques with emphasis on wheel throwing. Glazing and firing ceramics. History and evolution of ceramics. Raku firing included. 2 lecture, 3 studio (lab) hrs/wk. F, Su

## **ART 251: Ceramics (3)**

Review of clay forming methods for beginners. Wheel throwing and formulation of glazes. Surface treatment, decoration and glaze application. Raku firing included. 2 lecture, 3 studio (lab) hrs/wk. W

## **ART 252: Ceramics (3)**

Continuation of the review of clay forming methods and glazes for nonprofessionals. Advanced glaze and clay formulation, kiln design and firing procedures, and advanced wheel throwing. 2 lecture, 3 studio (lab) hrs/wk. S



**ART 253: Intro to Ceramic Handbuilding (3)**

This course introduces students to handbuilding techniques in clay. The class will explore all the basic ways of forming art objects in clay without the use of the potter's wheel. This will include coil construction, soft-slab construction, hard-slab construction, pinching, tile and mold making. Students will learn to use the various tools involved in these techniques such as the slab roller and extruder. Following lectures and demonstrations, students will experiment with these processes and fabricate ceramic art objects using them. Students will also learn glazing and other surface decoration methods for finishing. 2 lecture, 3 lab hrs/wk. S

**ART 254: Ceramic Handbuilding II (3)**

This course is the second in a series of three classes on the art of ceramic handbuilding. The course will continue to explore the various ways to form art objects in clay without the use of the potters' wheel. The emphasis in this class will be on slab construction with an increased consideration of content in the ceramic projects. Glaze formulation and testing will also be emphasized. 2 lecture, 3 lab hrs/wk. W

**ART 255: Ceramic Handbuilding III (3)**

This course is the third in a series of three classes on the art of ceramic handbuilding. The course will continue to explore the various ways to form art objects in clay without the use of the potters' wheel. The emphasis in this third class will be on advanced construction techniques. Content and form will be explored in all assignments. This course will also cover mold making for ceramics and non-high fire surface decoration techniques. 2 lecture, 3 lab hrs/wk. S

**ART 261: Black and White Photography (3)**

This is a studio course in black and white photography with an emphasis on proper exposure, composition, and content. Students will learn to control their camera settings and digital and chemical darkroom workflow. Students must have the use of a film or digital single lens reflex camera. 2 lecture, 3 studio (lab) hrs/wk. F

**ART 262: Photography (3)**

Advanced photography techniques, including alternative processes. This is a digital and chemical darkroom photography class. Students must provide a fully adjustable Single Lens Reflex (SLR) film OR digital camera. 2 lecture, 3 studio (lab) hours/week. S

**ART 263: Color Photography (3)**

This is a studio course in color photography with an emphasis on proper exposure, composition, and content. Students will learn to control their camera settings and digital workflow. Students must have the use of a digital single lens reflex camera. 2 lecture, 3 studio (lab) hrs/wk. W

**ART 270: Introduction to Printmaking (3)**

Students will learn the basics of relief printing on wood and linoleum. Course covers single- and multiple-color reduction cuts and multiple block techniques. Color registration and stencil use will also be covered. All printing will be done by hands on Japanese paper using water-soluble inks. 2 lecture, 3 studio (lab) hrs/wk. F (not offered every year)

**ART 272: Printmaking II (3)**

Printmaking techniques allow an artist to produce multiple copies of the same image. This studio course offers instruction in the fundamentals of: collograph or monotype, single-color relief or intaglio printing using solar prints, and silkscreen techniques. 2 lecture, 3 studio (lab) hrs/wk. W (Not offered every year.)

**ART 280: Cooperative Work Experience: Art (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

**ART 281: Painting (3)**

Introductory course for beginning students, employing acrylic media. Emphasis on basic technical skills of painting, physical properties and manipulation of materials, painting concepts and art historical context. Develops understanding of composition and color necessary for intermediate-level painting courses. Students complete several painting compositions. 2 lecture, 3 studio (lab) hrs/wk. F, W - varies, not offered every year.

**ART 282: Painting (3)**

Continuation of experiences begun in ART 281, emphasizing personal interpretations and varied experiences with the painting medium. 2 lecture, 3 studio (lab) hrs/wk. F, W - varies, not offered every year

**ART 291: Sculpture (3)**

History and techniques of sculptural form. Modeling, carving and construction in clay and plaster, human and organic figure study. 2 lecture, 3 studio (lab) hrs/wk. F

**ART 292: Sculpture (3)**

Sculptural techniques in wood and stone. Introduction to welding and brazing techniques. Mold making, wax sculpture, and casting bronze. 2 lecture, 3 studio (lab) hrs/wk. W

**ART 293: Sculpture (3)**

Sculptural techniques cast in bronze. Jewelry and sculpture casting. Study of traditional and contemporary form and technique. 2 lecture, 3 studio (lab) hrs/wk. S

**ART 294: Watercolor (3)**

Students will explore the use of various water media, with particular emphasis on transparent watercolor. This class introduces the basic technical skills of painting with water media, the physical properties and manipulation of the materials, visual theory of composition and color knowledge. Students complete a number of painting assignments. In-class instruction and demonstrations will be supplemented with work on location. Prior experience with drawing and/or Basic Design is helpful. 2 lecture, 3 studio (lab) hrs/wk. S

**ART 299: Special Studies in Art (1-2)**

Offers private, one-on-one studio instruction in a specific medium. This course provides an opportunity for the student to acquire additional depth and personal achievement in any area of art beyond what is supplied by usual course. 3-6 lab hrs/wk.

**ATS - ATMOSPHERIC SCIENCE**

**ATS 201: Climate Science (4)**

Earth's climate is influenced by the interactions of physical, chemical, and biological processes on land and in the atmosphere, ocean, and cryosphere. This introductory course surveys aspects of the Earth's energy budget, the greenhouse effect, characteristics and budgets of important greenhouse gases, as well as the influence of various other physical, chemical, and biological (including human) processes. Past, present, and potential future climate changes are assessed

and compared using a variety of observations and climate models. Future climate impacts projected to result from the human influence on Earth's climate will be explored along with technical and policy alternatives for mitigation and adaptation. The certainty (or uncertainty) of each aspect will be considered. Registration-Enforced Prerequisite: MTH 095. 3 lecture/3 lab hrs/wk.

## AUT - AUTOMOTIVE

### **AUT 100: Orientation to Automotive Technology (1)**

Orientation to Automotive Technology is required for all students entering the Automotive Program. Students will be accepted into the program based on successful completion of the application process. User name and passwords will be issued for automotive classes. Shop and environmental safety course will be assigned to be completed before students are able to work in the auto shop lab. 11 lecture hrs. (3-day class) F, Su

### **AUT 101: Basic Automotive Skills I (3)**

First of a three-part series; a basic automotive series of classes designed to ready students for a college level Automotive Program. This class focuses on using proper tools and equipment as well as the operating concepts of a few of the major systems used in an automobile. 6 lecture/lab hrs/wk. Su

### **AUT 102: Basic Automotive Skills II (3)**

Second of a three-part series; a basic automotive series of classes designed to ready students for a college level Automotive Program. This class continues its focus on the operating concepts of the majority of the major systems used in an automobile not covered in the first class of the series. 6 lecture/lab hrs/wk. Su

### **AUT 103: Basic Automotive Skills III (5)**

Third of a three-part series; a basic automotive series of classes designed to ready students for a college level Automotive Program. This class adds electronics and diagnostics to the previous two classes in the series. (This complies with Job Corps TARS). Soft skills necessary for employment are taught and reinforced such as use of a time clock, completing repair orders (including concern, cause, and correction), and completing parts order slips. 10 lecture/lab hrs/wk. Su

### **AUT 151: Internal Combustion Engines (6)**

The operating principles and function of each of the major parts of the reciprocating piston internal combustion engine are presented and discussed. Service, overhaul, and troubleshooting techniques as they relate to each component are also covered. Instructor-Enforced Prerequisite: AUT 170. 7.5 lecture, 15 lab hrs/wk. (5-week course) S

### **AUT 155: Automotive Brakes (6)**

A course designed to teach students the principles of automotive brakes. Basic concepts and terminology, fundamental principles, diagnosis and overhaul techniques are an integral part of this course. Special emphasis is placed on the study, diagnosis and repair of braking systems found on late-model domestic and import vehicles. The student should acquire knowledge of brake systems and troubleshooting procedures for both disc and drum brakes. Students will be taught to properly use industry-standard equipment to service disc and drum brake components and systems to manufacturer standards. Computer-controlled systems integrated into the automotive brake system will be studied. Instructor-Enforced Prerequisite: AUT 170. 7.5 lecture, 15 lab hrs/wk. (5-week course) W

### **AUT 161: Power Trains (5)**

Power Trains details the theory, operation, diagnosis and service of modern drive train components. This includes information on the latest clutches, manual transmissions and transaxles, solid and independent rear axle assemblies, drive shafts, drive axles, U-joints and CV joints. Basic drive train components such as gears, bearings, and seals are identified and explained. This course also includes detailed explanations of the operation of electronically controlled systems. Scan tool use and code retrieval to aid in diagnosis are also covered. Instructor-Enforced Prerequisite: AUT 170. 6.5 lecture, 13.5 lab hrs/wk. (5-week course) S

### **AUT 168: Automotive Electricity I (5)**

This is the first of three courses focusing on electrical and electronic systems for automotive students. Electrical theory, circuits, and devices such as batteries, starters, alternators and test meters will be covered. All concepts discussed in the classroom will be reinforced in lab. The integration of applied mathematics, chemistry, physics, and other scientific concepts is a large portion of this course. Practical skills established include: component identification, wiring techniques, test

equipment usage, safety practices, and appropriate work habits. Instructor- Enforced Prerequisite: AUT 100. 7.5 lecture, 15 lab hrs/wk. (5-week course) F

### **AUT 169: Automotive Electricity II (5)**

In part one of this sequence the topic of study was centered on basic electrical principles. The identification of different types of circuits and how they work, including the application of Ohm's law to demonstrate the relationship between current, voltage and resistance was also covered. A continuance of the battery and starting systems will carry over briefly as a review and will be discussed when the topics apply to the concepts at hand. In this course, we will take those concepts one step further and apply them directly to the work that you'll do anytime you diagnose an electrical problem. Drawing from your prior learning in part one of this sequence, you will apply that knowledge in detail toward the diagnosis of electrical systems utilizing all resources available. Instructor-Enforced Prerequisite: AUT 168. 7.5 lecture, 15 lab hrs/wk. (5-week course) F

### **AUT 170: Automotive Electricity III (5)**

This is the final course covering the basics concepts, components and diagnosis of automotive electrical circuits. In the previous course the use of Electrical Wiring Diagrams (EWD's), component location, vehicle testing and the six step diagnostic process were covered. Building upon the previous topics this course presents the construction, operation, diagnosis & service of advanced electronic circuits, control units, and network communication protocols. Features of the Electronic Control Unit (ECU) to be covered include: memory, customization, initialization, and their effect on circuit diagnosis. This section also introduces the fundamentals of multiplexing, computer signals, waveforms, oscilloscopes, and advanced DVOM usage. Communication protocols that will be covered include: BEAN, LIN, CAN, and AVC-LAN as well as the diagnostic processes for locating shorts or opens in various multiplexed circuits. Instructor--Enforced Prerequisite: AUT 169. 7.5 lecture, 15 lab hrs/wk. (4-week course) W

### **AUT 250: Suspension and Alignment (5)**

A study of automotive suspension systems including history and development. Fundamentals of front and rear suspension, steering geometry, diagnosing suspension and steering problems, and overhaul techniques are covered in this course. Rebuilding and repair of the different types of front and rear suspensions including strut types are practiced. This course provides a detailed study of wheel balancing including radial

## AUT – AUTOMOTIVE, continued

force variation, computer controls for steering and suspension systems including inputs, logic, and actuators, and four wheel alignment. Wheel alignment factors and procedures, Steering and Handling concerns and diagnostics are also covered in detail. Instructor-Enforced Prerequisite: AUT 170. 6.5 lecture, 13.5 lab hrs/wk. (5-week course) S

### **AUT 259: Electronic Engine Controls I (5)**

Electronic Engine Controls I is the first course of a three-part engine performance series. The series is designed to provide the training to meet the requirements of NATEF for ASE certification area A8. Toyota curriculum is infused to meet the requirements of T-TEN course 852. The course will consist of three instructional units: Engine operation and control fundamentals, input sensors, and Electronic ignition systems. Approximately one fourth of the class will be classroom and three-fourths will consist of lecture/lab activities. Instructor-Enforced Prerequisite: AUT 151, AUT 170. 6.5 lecture, 13.5 lab hrs (5-week course) F

### **AUT 260: Electronic Engine Controls II (5)**

Electronic Engine Controls II is the second course of a three-part engine performance series. The series is designed to provide the training to meet the requirements of NATEF for ASE certification area A8. Toyota curriculum is infused heavily throughout the course. The course will consist of four instructional units: Fuel Systems, Other ECU Outputs, No Start Diagnosis, and OBD II Systems and Misfire. Approximately one-fourth of the class will be classroom and three-fourths will consist of lecture/lab activities. Instructor-Enforced Prerequisite: AUT 259. 3 lecture, 6 lab hrs/wk. (5-week course) F

### **AUT 263: Automatic Transmissions (6)**

Instruction in automatic transmissions, including principles of operation, troubleshooting and overhaul procedures. Instruction includes hydraulically operated transmissions, torque converters and transaxles common to the automotive field. Instructor-Enforced Prerequisite: AUT 289. 7.5 lecture, 15 lab hrs/wk. (5-week course) W

### **AUT 280: Cooperative Work Experience: Automotive (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may

take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

### **AUT 286: Climate Control Systems (5)**

This course covers the automotive heating, ventilation, and air conditioning systems and the engine cooling system. Lecture sessions are devoted to the purpose, operational theory, and diagnostic processes common to each of the above areas. Lab sessions are provided to develop student skills in servicing, trouble-shooting, and repairing each component within the specific system. Students will work on both components and live vehicles as part of the learning process. Instructor-Enforced Prerequisite: AUT 289. 6.5 lecture, 13.5 lab hrs/wk. (5-week course) S

### **AUT 289: Electronic Engine Controls III (5)**

Electronic Engine Controls III is the third course of a three-part engine performance series. The series is designed to provide the training to meet the requirements of NATEF for ASE certification area A8. The course will consist of one Snap-on level two certification and three instructional units. Fuel Injection System Diagnosis, EVAP Emission Systems, and Other Emission Systems. Approximately one-fourth of the class will be classroom and three-fourths will consist of lecture/lab activities. Instructor-Enforced Prerequisite: AUT 260. 7.5 lecture, 15 lab hrs/wk. (4-week course) W

## **BA – BUSINESS ADMINISTRATION**

### **BA 101: Introduction to Business (4)**

A one-term survey of modern business concepts including: entrepreneurship, marketing, management, human relations, accounting/finance, and investment. 4 lecture hrs/wk. F, S, Su

### **BA 106A: Business Leadership I (1)**

This is one in a series of three courses designed to introduce students to leadership. Within the scope of topics, students will examine traits and characteristics of business leaders. Behavior, influence, conflict, resolution, and team leadership will also be examined. 1 lecture hr/wk. F

### **BA 106B: Business Leadership II (1)**

This is one in a series of three courses designed to introduce students to leadership. Within the scope of topics, students will examine traits and characteristics of business leaders.

Optimism, ethics, motivation, praise, networking, and negotiating will also be examined. 1 lecture hr/wk. W

### **BA 106C: Business Leadership III (1)**

This is one in a series of three courses designed to introduce students to leadership. Within the scope of topics, students will examine traits and characteristics of business leaders. Goals, vision, communication, change, coaching, team leadership, leader/follower relations, and delegation will also be discussed. 1 lecture hr/wk. S

### **BA 116: Principles of Financial Services (4)**

This is a one-term course which is designed for students interested in a financial services career. Students gain knowledge of the financial services field and are provided with a basic understanding of products, services, regulations, accounts, cash and checks, and the lending function for banks and credit unions. The course is also relevant for students seeking careers in areas which deal with or interact with financial services companies. 4 lecture hrs/wk. W

### **BA 128: Accounting Applications I (2)**

Accounting Applications I is the first course of a three-term sequence designed to introduce the student to computerized accounting applications and provide extensive hands-on experience in the application of accounting practice and methodology using Microsoft Excel. The course will focus on providing experience with the basic operation of the personal computer in a Windows environment and helping the student gain proficiency in the utilization of spreadsheets and accounting software for solving a variety of financial problems and exercises. Registration-Enforced Corequisite: BA 211 or instructor permission. 1 lecture, 2 lecture/lab hrs/wk. F

### **BA 129: Accounting Applications II (2)**

The second course of a three-term sequence designed to introduce the student to computerized accounting applications and provide extensive hands-on experience in the application of accounting practice and methodology. This course will focus on gaining proficiency in the utilization of spreadsheets and accounting software for solving a variety of accounting problems and exercises. Registration-Enforced Prerequisite: BA 128 with a grade of C or better. Registration-Enforced Corequisite: BA 212 or instructor permission. 1 lecture, 2 lecture/lab hrs/wk. W

## **BA 130: Accounting Applications III (2)**

Accounting Applications III is the third in a three-term sequence designed to provide the student with extensive hands-on experience in the application of accounting practice and methodology with an emphasis on internal accounting. Students will complete numerous accounting applications involving progressively more complex and difficult material in a computerized managerial accounting environment. The course will focus on gaining an understanding of and proficiency in the use of spreadsheets and software for solving a variety of accounting problems and exercises. Registration-Enforced Prerequisite: BA 129 with a grade of C or better. Registration Enforced Corequisite: BA 213 or instructor permission. 1 lecture, 2 lecture/lab hrs/wk. S

## **BA 150: Developing a Small Business (4)**

Developing a Small Business is an introductory course designed to introduce students to the important elements and steps involved in starting a small business. Topics discussed are concepts and concerns including entrepreneurship, risks involved with small business, entrepreneurial myths, the feasibility of the small business idea, developing a business plan, marketing strategies, financial projections, human resource considerations, and building a company image. Registration-Enforced Prerequisite: BA 101. 4 lecture hrs/wk. W

## **BA 151: Practical Accounting I (4)**

The first course of a two-term sequence designed to introduce the student to the full cycle of accounting and bookkeeping functions and provide students with a sound basic knowledge of accounting terms, concepts, and procedures. Practical applications of bookkeeping and accounting will be emphasized through various assignments and exercises. 4 lecture hrs/wk. F

## **BA 152: Practical Accounting II (3)**

The second course of a two-term sequence designed to introduce the student to the full cycle of accounting and bookkeeping functions. This course builds on the concepts presented in the first term, providing expanded coverage of operating activities, financial reporting, and accounting for selected balance sheet and income statement items. Accounting concepts are applied using accounting software. Registration-Enforced Prerequisite: BA 151 with a grade of C or better or instructor permission. 2 lecture, 2 lecture/lab hrs/wk. W

## **BA 165: Customer Service (3)**

Provides students with the basic concepts and current trends in the customer service industry. Special areas of emphasis include problem solving, development of a customer service strategy, creating customer service systems, coping with challenging customers, customer retention, and measuring satisfaction. 3 lecture hrs/wk. F, S, Su

## **BA 177: Payroll Accounting (4)**

This course introduces the student to the accounting processes and federal and state laws associated with payroll operations. Using the information learned, the student will calculate payroll transactions and complete the required forms meeting state and federal regulations. A payroll project will introduce the computer as a tool to eliminate many of the repetitive operations that are common to payroll accounting. Registration-Enforced Prerequisite: BA 211 or BA 151 or instructor approval. Minimum grade of C for Accounting Technology majors. 3 lecture, 2 lecture/lab hrs/wk. F

## **BA 180: Business Mathematics I (3)**

Business Mathematics I introduces the student to the mathematics of buying and selling, simple interest, payroll, and banking records. The course will review decimals, fractions, and percents. Registration-Enforced Prerequisite: MTH 020 with a grade of C or better or placement test score. 3 lecture hrs/wk. F, W, S

## **BA 181: Business Mathematics II (3)**

Business Math II is the second course in the Business Math series. In this course, students will learn to calculate present and future value of money, compounding interest amounts, payments, and annual percentage rates. They will also have the opportunity to analyze stock and bond tables, compute depreciation, prepare basic financial reports, and explore business statistics concepts. Students will be required to use a business financial calculator as part of this course. Registration-Enforced Prerequisite: BA 180 with a grade of C or better. 3 lecture hrs/wk. S

## **BA 206: Management Fundamentals (3)**

This is a basic course in management with emphasis on the application of sound managerial practices and techniques. Managerial functions including planning, organizing, leading, and controlling are studied in the framework of this course. Registration Enforced Prerequisite: BA 101 with a grade of C or better. 3 lecture hrs/wk. F

## **BA 207: Introduction to E-Commerce (3)**

This course provides students with a firm grounding in the technologies, strategies and impact of e-commerce. Broadly defined, e-commerce refers to the use of information technologies, in particular the Internet, in providing support to all types of activities that take place both within and between organizations. Registration-Enforced Prerequisite: BA 101, CIS 120. 3 lecture hrs/wk. S

## **BA 211: Principles of Accounting I (3)**

Principles of Accounting I, the first of a three-term accounting sequence, serves as an introduction to the accounting environment and accounting cycle. Topics covered include transaction analysis, journalizing, posting, adjusting, closing, and financial statement preparation. The course also covers accounting for certain balance sheet items including cash, inventory, accounts, and notes receivable. Prerequisite: Second-year standing for students planning to transfer to a 4-year university and earn their bachelor's degree in business administration. Accounting Technology (A.A.S. degree) majors should enroll in their first year and be concurrently enrolled in Accounting Applications I (BA 128). 3 lecture hrs/wk. F, W

## **BA 212: Principles of Accounting II (3)**

Principles of Accounting II is the second of a three-term accounting sequence and serves as a continuation of BA 211. Topics covered include accounting for fixed assets, introduction to payroll accounting, debt and equity financing, and the statement of cash flows. The course concludes with an introduction to financial statement analysis. Registration-Enforced Prerequisite: BA 211 with a grade of C or better or instructor permission. Accounting Technology and Entry Management majors need to be concurrently enrolled in Accounting Applications II (BA 129). 3 lecture hrs/wk. W, S

## **BA 213: Principles of Accounting III (3)**

Principles of Accounting III is the third course in a three-term accounting sequence. The course builds on concepts presented in BA 211 and BA 212, focusing on the role of providing accounting information to managers for use in the internal decision-making process. Topics covered include costing goods and services, analysis of variable costs vs. fixed costs, cost-volume-profit relationships, and standard costs and variances. Registration-Enforced Prerequisite: BA 212 with a grade of C or better or instructor permission. Accounting Technology majors need to be concurrently enrolled in



## BA – BUSINESS ADMINISTRATION, continued

Accounting Applications III (BA 130). Registration-Enforced Prerequisite: BA 212 with a grade of C or better or instructor permission Accounting Technology majors need to be concurrently enrolled in Accounting Applications III (BA 130). 3 lecture hrs/wk. S

### **BA 214: Business Communications (3)**

This course covers strategies of effective business communication. Students will learn and practice a variety of types of business communication. Registration-Enforced Prerequisite: WR 115 or above. 3 lecture hrs/wk. F, W, Su

### **BA 215: Cost Accounting (4)**

This course provides a thorough understanding of cost concepts, cost behavior, and cost accounting techniques as they are applied to various cost systems and as they are used to provide cost information for management use in decision making, planning, controlling, and performance evaluation. Topics covered include cost concepts and behavior, budgeting, flexible budgets and performance analysis, standard costing, performance measurement, differential cost analysis, capital budgeting, financial statement analysis, and profitability analysis. Registration-Enforced Prerequisite: BA 213 with a grade of C or better or instructor permission. 3 lecture, 3 lab hrs/wk. F

### **BA 218: Personal Finance (3)**

Personal Finance will introduce students to concepts related to personal financial planning. Topics covered will include budgeting, evaluating loans, determining property insurance needs, planning for retirement, making personal investment decisions, and completing time value of money calculations. Students will be required to use a business financial calculator in this course. 3 lecture hrs/wk. W

### **BA 222: Financial Management (3)**

This is a first course in corporate finance covering a wide range of topics and issues. Theory will be introduced and practical application will be demonstrated in support of learner outcomes surrounding the financial decision-making process. Registration-Enforced Prerequisite: BA 211 and BA 212. Minimum of C grade for Accounting Technology majors. 3 lecture hrs/wk. S

### **BA 223: Principles of Marketing (3)**

This course is an introduction to marketing as it relates to contemporary living and society's changing needs. The

basic components of marketing such as consumer behavior, marketing research, distribution, promotion, customer relationships, social responsibility, and price planning and their inter-relationships are discussed. Course topics include retail, international, service, and non-profit marketing. Case studies, videos, projects, field trips, and guest speakers are used to enhance student learning. Registration-Enforced Prerequisite: BA 101 with a grade of C or better or instructor permission. 3 lecture hrs/wk. S

### **BA 226: Business Law (4)**

Business Law will introduce students to basic law concepts. Students will learn to identify sources of law in the United States, explore the differences between civil and criminal law, recognize the components of legally enforceable contracts, review the Uniform Commercial Code, explore agency relationships, and compare and contrast different business formats. Prerequisite: BA 101 or instructor approval. 4 lecture hrs/wk. W, S

### **BA 228: Computerized Accounting Systems I (2)**

Computerized Accounting Systems I is the first in a three-term sequence designed to introduce second-year accounting students to computer based accounting systems. In this course, computers are used to apply the basic principles and procedures of accrual accounting. Computer accounting applications include general ledger, accounts receivable, accounts payable, invoicing, payroll, inventory, and job costs. Prerequisite: Second year standing in A.A.S. accounting program or instructor approval. Registration-Enforced Corequisite: BA 235. 1 lecture, 2 lecture/lab hrs/wk. F

### **BA 229: Computerized Accounting Systems II (2)**

Computerized Accounting Systems II is the second in a three-term sequence designed to introduce second-year accounting students to computer based accounting systems. The emphasis of this course is on the conversion of manual accounting systems to computerized accounting systems. The course utilizes an extended practice set that requires students to maintain a manual accounting system, convert the manual system to a computerized system, maintain the computerized system, and prepare year-end reports using the computerized system. Students become familiar with the special complexities and decisions required during the conversion process and how these decisions affect subsequent procedures. Registration-Enforced Prerequisite: BA 228 with a

grade of C or better. Registration-Enforced Corequisite: BA 236. 1 lecture, 2 lecture/lab hrs/wk. W

### **BA 230: Computerized Accounting Systems III (2)**

Computerized Accounting Systems III is the third in a three-term sequence. The focus of this class is on the special requirements of a computerized accounting system used by a non-profit/governmental entity. Students will work through a comprehensive accounting practice set for a fictitious city using commercially available software. Additionally, students will prepare a governmental-style Comprehensive Annual Financial Report using a computerized spreadsheet. Registration-Enforced Prerequisite: BA 229 with a grade of C or better. Registration-Enforced Corequisite: BA 237. 1 lecture, 2 lecture/lab hrs/wk. S

### **BA 231: Computers in Business (4)**

Computers in Business is designed for business students as a second course in using computers. Assignments will build on what was learned in previous computer and business classes. Students will produce professional-style documents using a popular suite of software applications. A final integrative project will be prepared and presented as a group project. Must be a 2nd year major in one of the following AAS programs: Accounting, Entry Management, Marketing, or Paralegal; or instructor approval. 4 lecture hrs/wk. F, S

### **BA 232: Introduction to Business Statistics (3)**

This course is a balance between descriptive statistics (tables, charts, frequency distribution, etc.) and inferential statistics, primary tools in business decision making. It is mostly a "how to do it" and "what does it mean" approach of problem solving with little emphasis on the actual theory of statistics. This course will begin with an overview of statistics and foundational concepts. The remainder of the course will include such topics as organization of data, probability, probability of various distributions, sampling distributions and estimations, large sample estimation, and ending on an overview of linear regression analysis. Registration-Enforced Prerequisite: BA 181 or MTH 065 or equivalent. 3 lecture hrs/wk. S

### **BA 233: Accounting for Managers (4)**

This course is designed to provide the non-financial manager with an understanding of accounting and the manner in which it can be used to make financial decisions. Topics

covered include: basic business math skills in calculating interest and payroll as well as the mathematics of buying and selling, measuring and reporting of accounting data, analyzing and interpreting accounting information, understanding financial systems and controls, using computer applications of accounting, and performing cost analysis. 4 lecture hrs/wk. W, Su

### **BA 235: Intermediate Accounting I (3)**

Intermediate Accounting I is the first of a three-term sequence designed to introduce second-year accounting students to more complex accounting and reporting issues than those seen in the Accounting Principles courses. The first two terms of Intermediate Accounting focus on accounting for profit oriented business entities, while the third term is exclusively oriented toward accounting and reporting for governmental and not-for-profit entities. Registration-Enforced Prerequisite: BA 213 with a grade of C or better. Registration-Enforced Corequisite: BA 228. 3 lecture hrs/wk. F

### **BA 236: Intermediate Accounting II (3)**

Intermediate Accounting II is the second of a three-term sequence designed to introduce second-year accounting students to more complex accounting and reporting issues related to accounting for profit oriented business entities. Topics covered include inventory management and valuation, fixed asset management, depreciation, and current and long-term liabilities. Registration-Enforced Prerequisite: BA 235 with a grade of C or better. Registration-Enforced Corequisite: BA 229. 3 lecture hrs/wk. W

### **BA 237: Intermediate Accounting III (3)**

Intermediate Accounting III is the third of a three-term sequence. The focus of this class is on the specialized accounting requirements of Governmental and Not-For-Profit entities. This course explores the peculiarities of fund accounting, the measurement focus of governmental versus private enterprise accounting, and reporting requirements of governmental and other not-for-profit entities. Registration-Enforced Prerequisite: BA 236 with a grade of C or better. Registration-Enforced Corequisite: BA 230. 3 lecture hrs/wk. S

### **BA 238: Professional Selling (3)**

Professional Selling is a basic course dealing with the fundamentals of trust-based selling. Areas specifically

studied include understanding the sales industry and selling occupations; promoting self-leadership, building trust, and conducting sales dialogue; prospecting, qualifying, communicating, and relationship building; buyer motivation; creating value; handling resistance; earning commitment; customer concerns; and sales management. 3 lecture hrs/wk. F

### **BA 239: Advertising (3)**

This course is an introduction to effective advertising procedures in today's business world. The course emphasizes the importance of modern, persuasive techniques advertisers use to move goods and services to the consumer. The course explores the historical development of advertising, the importance of consumer research, and the various constraints on advertising. Advertising preparation and the total campaign are studied from the standpoint of copy, layout, various media, budgets and finally buyer motivation. 3 lecture hrs/wk. S

### **BA 240: Introduction to Auditing (3)**

Introduction to Auditing is an introductory course in auditing procedures and practices. It includes the audit process and environment, the audit profession, professional standards, financial statement examination, substantive testing procedures, and work-paper preparation. Registration-Enforced Prerequisite: BA 235 or instructor permission. 3 lecture hrs/wk. W

### **BA 249: Retailing (3)**

Designed to acquaint students with the nature and scope of retailing. Topics studied include: history of retailing, managing retail operations, including financial planning, merchandise buying and handling, store location, design and layout. Retailing is examined as a major economic force in this country and as a significant area for career opportunities. 3 lecture hrs/wk. W

### **BA 250: Managing the Small Business (3)**

An introductory course in the fundamental elements of managing a small business. 3 lecture hrs/wk. S

### **BA 253: Social Media Marketing (3)**

Social Media Marketing covers the basics of social media marketing, creating online conversations through social media outlets, social media strategy, branding through social media

sites, value in the organization's content, and aligning offline marketing strategies with social media. Instructor-Enforced Prerequisite: BA101, BA231, BA223 or instructor approval. 3 lecture hrs/wk. S

### **BA 256: Tax Accounting I (3)**

Tax Accounting I is the first of a two-term sequence and introduces federal income taxation of individuals. Students will study issues affecting preparation of the individual return leading to the completion of the 1040EZ, 1040A, 1040 (long form), and supporting schedules. In addition, Turbo Tax software will be used to prepare tax returns. Registration-Enforced Prerequisite: BA 213 with a grade of C or better or instructor permission. 3 lecture hrs/wk. W

### **BA 257: Tax Accounting II (3)**

Tax Accounting II is a continuation of Tax Accounting I. This course continues coverage of federal income taxation of individuals and provides an introduction to tax laws affecting individuals involved with partnerships and corporations. Students will complete a variety of practical applications both manually and using computerized tax return preparation software. Registration-Enforced Prerequisite: BA 256 with a grade of C or better or instructor permission. 3 lecture hrs/wk. S

### **BA 280: Cooperative Work Experience: Business (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

### **BA 280A: Cooperative Work Experience: Accounting (1-13)**

### **BA 280B: Cooperative Work Experience: Marketing (1-13)**

### **BA 280C: Cooperative Work Experience: Management (1-13)**



## BI – BIOLOGY

### BI 101,102,103: General Biology (4,4,4)

A non-majors course designed to provide students with the scientific principles that describe and explain life processes and living systems. Laboratory experiences reinforce principles and concepts covered in class. Note that the order of topic presentation in this sequence may not match the order at other institutions. Please see an advisor.

**BI 101:** (The biology sequence changed FA03. See an Advisor.) principles of evolution, natural selection and speciation, origin of life, diversity of life, classification and diversity of groups of organisms including viruses, bacteria, protists, fungi, plants and animals; principles of ecology, including populations, communities, ecosystems, and the biosphere, and animal behavior. F

**BI 102:** Plant structure and function, with emphasis on flowering plants; animal structure and function, with emphasis on human biology. W

**BI 103:** Chemistry of life; cell structure, function, metabolism, division; heredity and molecular genetics. S

*Courses need not be taken in sequence. 3 lecture, 3 lab hrs/wk.*

### BI 101A: Evolution, Diversity and Ecology of the Baja Peninsula (4)

This is a hybrid course taught partly online during Winter term, and partly during a 9-day bus tour of the Baja Peninsula during spring break immediately following the regular term. This course meets the same learning objectives as our traditional BI 101 class but with a focus on the evolution, diversity and ecology of the Baja Peninsula. Resources for learning the principles of evolution, natural selection and speciation; the origin of life; diversity and classification of organisms including viruses, bacteria, protists, fungi, plants and animals; principles of ecology, including populations, communities, ecosystems, and the biosphere; and animal behavior will be delivered online. The tour will provide hands-on lab and field experiences, and will likely include a visit to the San Diego Bay National Wildlife Refuge; documenting diversity at the fish market in Ensenada; exploring the ancient rock art and high desert ecology at Cataviña; whale watching and estuary studies in Laguna Ojo de Liebre; experiencing the historic mission, plant diversity and fresh water ecology at San Ignacio;

kayaking and snorkeling in the Parque Nacional Bahia de Loreto; and discovering the unique relationships among the plants and animals in the Sierra La Giganta. Students should be reasonably fit and prepared to hike several miles over the course of the tour on easy to moderately difficult trails. A fee is required to cover transportation, food and camping. A valid passport is required. Note: This is an extended course, and final grades will be awarded during the following term. 33 lecture hrs. online, 33 lecture/lab hrs on the tour. (May not be taught every year.) W

### BI 110: Wildlife Biology on Safari (4)

An introductory non-majors course covering Oregon's wildlife, wildlife biology and conservation. Students will learn wildlife conservation history and wildlife ecological and sociological relationships. Students will develop basic knowledge of Oregon wildlife and captive wildlife, along with identification, tracking, habitat relationships, ecology, and anatomy. Oregon's mammals, birds, reptiles, amphibians, fishes, and their anatomy, physiology, ecology, and taxonomy will be covered. This course includes many Friday field trips to outdoor locations, so students must be able to attend off-campus field labs, be able to travel by walking, and be prepared for poor weather conditions. Visits to the Douglas County Museum will provide an overview of Oregon's wildlife, and visits to Wildlife Safari will provide insight into captive animal management and conservation issues in their native countries. Indoor laboratory sessions will include many skulls, specimens, animal tracks and signs, how wildlife are surveyed and inventoried, slide programs, and instructional handouts. 3 lecture, 3 lab hrs/wk. W, S

### BI 211, 212, 213: Principles of Biology (5,5,5)

Designed for science and pre-professional medical majors.

**BI 211:** Chemistry of life; origins of life; population genetics and natural selection; diversity of prokaryotes and eukaryotes; ecology of biomes, communities and populations; conservation biology. Registration-Enforced Prerequisite/Corequisite: CH 104, CH 112 or CH 221. F

**BI 212:** Cell structure and function; cellular metabolism; cell division; heredity; molecular genetics and biotechnology; molecular evolution. Registration-Enforced Prerequisite: either BI 211, FOR 111 or NR 201; AND either CH 104, CH 112 or CH 221; all with a grade of C or better, or instructor approval. W

**BI 213:** Plant structure and function: animal structure, function and behavior. Registration-Enforced Prerequisite: BI 212. S

*Courses must be taken in sequence. Except Forestry students who may take BI 212 separately. 4 lecture, 3 lab hrs/wk.*

### BI 222: Introduction to Genetics (3)

Focusing primarily on human genetics, this course includes cell division and gamete formation; patterns of inheritance and gene expression; DNA replication, gene transcription, and translation; mutations and their consequences; population genetics and human evolution; the genetics of immunity and cancer; biotechnology and gene therapy; and reproductive technologies and genomics. Registration-Enforced Prerequisite: CH 104, CH 112, or CH 221; previous biology course recommended. 3 lecture hrs/wk. W, F, S

### BI 231, 232, 233: Human Anatomy & Physiology (4,4,4)

An introductory course on the structure and function of the various systems in the human body. Designed to meet the needs of nursing students and students in other allied health programs. This course will cover the organization of the body, homeostasis, cell biology tissues, integument, the skeletal system and the muscular system. BI 231, 232, 233 must be taken in sequence or with consent of instructor.

**BI 231:** Organization of the body, homeostasis, cell biology, tissues, integument, the skeletal system, the muscular system. Registration-Enforced Prerequisite: CH 104 or CH 112. F, W

**BI 232:** Nervous system, special senses, endocrine system, blood and cardiovascular system. Registration-Enforced Prerequisite: BI 231. W, S

**BI 233:** Lymphatic system, immune system, respiratory system, digestive system, nutrition, metabolism, urinary system, reproductive systems, genetics. Registration-Enforced Prerequisite: BI 232. S, Su  
*3 lecture, 3 lab hrs/wk.*

### BI 234: Microbiology (4)

Structure, physiology, metabolism, genetics, growth and control of prokaryotes, eukaryotes, and viruses; human disease, immunity and disease agents; the role of micro-organisms in nature. Laboratories emphasize aseptic techniques, microscopic observation, metabolic differentiation and

identification of bacteria. Registration-Enforced Prerequisite: CH 104, CH 112 or CH 221, previous course in biology recommended. 3 lecture, 3 lab hrs/wk. F, W, S

### **BI 280: Cooperative Work Experience: Biology (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **BOT – BOTANY**

### **BOT 203: General Field Botany (4)**

This course provides an overview of plant systematics with emphasis on identification of southwestern Oregon native trees, shrubs and herbs. Additional topics will include discussions of local plant evolution, plant communities, fire ecology, and pollination ecology. Field trips are offered. 3 lecture, 3 lab hrs/wk. S

### **BOT 204: Flowering Plants of Southwestern Oregon and Northern California (4)**

This is a hybrid course taught partly online and partly during a six-day field tour of Southwestern Oregon and Northern California. Resources for learning botanical terminology, plant evolution, diversity and classification, common plant family characteristics, and regional plant communities will be delivered online. The use of cameras and field notebooks for documenting plant identification, location and habitat will be emphasized. The field tour will highlight the use of botanical keys to identify native flowering trees, shrubs, and wildflowers while touring through regional plant communities. The tour will leave from the UCC campus, and will likely include stops in the Siskiyou Mountains, Smith River, Redwood State and National Parks, Trinidad State Beach, the Trinity River, the Mt. Hood/McCloud River area, McArthur-Burney Falls State Park, Lava Beds National Monument, Crater Lake National Park, the North Umpqua River, and other sites of botanical interest before returning to UCC. Students should be reasonably fit and prepared to hike several miles over the course of the tour on easy to moderately difficult trails, and to camp at improved

campsites each night. This is an extended spring term course and grades will be awarded after the tour during the following summer term. A fee is required to cover transportation, food and camping. 33 lecture hrs.online, 33 lab hrs. on the tour. S

## **CA – CULINARY ARTS**

### **CA 105: Foundations of Culinary Arts and Restaurant Management I (3)**

This course is designed to prepare the student for entry level positions in a restaurant or food service operation. Topics include: food safety, workplace safety, communication in the workplace, basic cooking skills, customer service, management essentials, and career building skills. 2 lecture, 2 lecture/lab hrs/wk.

### **CA 106: Foundations of Culinary Arts and Restaurant Management (3)**

This course is designed to prepare the student for entry-level positions in a restaurant or food service operation. Topics include: Food safety essentials, workplace safety, and communication in the workplace. Sustainability, cost control, and marketing in a food service environment. Basic and advanced cooking skills, including plating, nutrition, and recipe development. 2 lecture, 2 lecture/lab hrs/wk.

### **CA 160: Introduction to the Culinary Arts (3)**

This course begins with a thorough study of the basic safety and sanitation standards in a food service operation. Then the student will be presented with the basic skills, principles, and techniques used in the preparation of foods in volume feeding situations, such as restaurants and institutional food service operations. Emphasis will be placed on the vocabulary of cooking, menu terms, food quality standards, proper equipment use, and application of basic math skills to recipe conversions. Methods of instruction will include lecture, demonstration, individual and group projects. 1 lecture/ 4 lab hrs/wk. W, Su

### **CA 173: Fundamentals of the Professional Production Kitchen (1)**

This is a lecture based class designed to introduce the student to the fundamentals of the production kitchen. The importance of food production to multiple food outlets will

be discussed. Emphasis will be placed on understanding the nature of ingredients commonly found in the kitchen. Included is meat, poultry, seafood, vegetables, starches, dairy and egg products, fruits, herbs and spices. The student will then explore the functions of these ingredients to different applications including: soups, stocks, sauces, variety of salads, garde mange, and entrees. Registration-Enforced Prerequisite: CA 160. 1 lecture hr/wk. F, W, S

### **CA 174: The Professional Production Kitchen (8)**

This is a production driven course designed to create authentic working conditions of a food service operation. It covers multiple food preparation techniques for an a la carte restaurant, a catering operation, and cafeteria service. The student learns the procedures for scratch cookery through small batch assignments prepared for daily restaurant menu and caterings: including soups, stocks, sauces, protein cookery, starch cookery. Emphasis will be placed on proper ordering, receiving, identification and handling of: seasonal fruits and vegetables, legumes, common starches, various types of meat and poultry and their fabricated cuts, various fish and shellfish, cheeses, dairy products, salad greens, fresh and dried herbs, spices, variety of grains, oils and vinegars. Registration-Enforced Prerequisite: CA 160. 16 lecture/lab hrs/wk. F, W, S

### **CA 175: Food Service Safety and Sanitation (2)**

This course presents the basics of food service and hospitality sanitation and safety. The text examines a systematic approach to sanitation management by the use of control points and effective use of basic resources. The National Restaurant Association (NRA) certificate examination will be issued upon completion of this course. 2 lecture hrs/wk. F

### **CA 176: Fundamentals of Menu Planning (2)**

Fundamentals of Menu Planning offers a complete overview of menu planning, including designing, writing, costing, marketing, and merchandising a menu. This course reflects the latest trends in the restaurant industry along with updated nutrition information. Emphasis will be placed on understanding the need for standardized recipes, product costs, pricing, menu design and product placement, inventory, and control of production in order to minimize product loss. 2 lecture hrs/wk. W

**CA 185: A La Carte Kitchen and Dining Room (8)**

This is a production driven course designed to create authentic working conditions of a food service operation. It offers students learning experiences involving food preparation skill development, food theory, management and personnel responsibilities, and a progressive attitude toward food preparation and service. Emphasis will be placed on the management of a food service operation including ordering, inventory control, staffing, product requisition, safety and sanitation procedures and inspections. Students will identify various regional American and international cuisines and be able to effectively serve them in a buffet and a la carte setting. Registration-Enforced Prerequisite: CA 160. 16 lecture/lab hrs/wk. F, W, S

**CA 186: Fundamentals of the A La Carte Kitchen and Dining Room (1)**

This is a lecture based class designed to introduce the student to the fundamentals of a la carte service. The dynamics of front and back of the house operations will be explored. Emphasis will be placed on understanding the customer and methods for delivering quality customer service. The student will explore different styles of dining room service including beverage service and beverage management. Registration-Enforced Prerequisite: CA 160. 1 lecture hr/wk. F, W, S

**CA 191: The Professional Pastry and Bake Shop (8)**

This is a production driven course designed to create authentic working conditions of a bakery operation. Emphasis is placed on understanding the basic principles of baking and the necessary tools and equipment for the practice and development of techniques and skills expected of the working chef in the industry. Under the direction of the instructor, students will produce different types of yeast doughs, quick breads, leavened cakes, pies, tarts, cookies, various pastry doughs, meringues, syrups, sauces, assorted custards, mousses, souffles, and frozen desserts. This course will also cover the fundamentals of chocolate, dessert presentation and decorative work including marzipan, pastillage, and sugar work. The emphasis is on baking science, terminology, nutrition, equipment, techniques, ingredients, weights and measures, formula conversions, sanitation, safety, and storage of baked goods. Registration-Enforced Prerequisite: CA 160. 16 lecture/ lab hrs/wk. F, W, S

**CA 192: Fundamentals of the Professional Pastry and Bake Shop (1)**

This is a lecture based course designed to introduce the student to the fundamentals of the bake shop exploring baking science, terminology, nutrition, equipment, techniques, ingredients, weights and measures, formula conversion, and storage of baked goods. The importance of proper mise en place to the bake shop will be discussed. Emphasis will be placed on understanding the principals of the bake shop including identifying common equipment and ingredients and their proper uses. A variety of different products will be explored including quick breads, yeast doughs, pies, tarts, pastries, cookies, custards, creams, and various frozen desserts. The student will also explore the fundamentals of chocolate, dessert presentation and decorative work including marzipan, pastillage and sugar work. Registration-Enforced Prerequisite: CA 160. 1 lecture hr/wk. F, W, S

**CA 204: Winter Capstone: Restaurant Operation (2)**

This course is designed to give the student firsthand experience of operating a restaurant. The student will learn the dynamics of working in a group in order to successfully plan, advertise and execute two weeks of menus to be served in a restaurant setting. Emphasis will be placed on menu and recipe writing, product ordering and receiving, operating within a budget including the management of food costs and portion controls, scheduling, and effective dining room service. Registration-Enforced Prerequisite: CA 160 4 lecture/lab hrs/wk. W

**CA 205: Spring Capstone: Catering Operation (2)**

This course is designed to give the student firsthand experience of a catering operation. The student will learn the dynamics of working in a group in order to successfully plan, advertise and execute a series of prix fixe dinners. Emphasis will be placed on menu and recipe writing, product ordering and receiving, operating within a budget including the management of food costs and portion controls, scheduling, and effective dining room service. Registration-Enforced Prerequisite: CA 160. 4 lecture/lab hrs/wk. S

**CA 280: Cooperative Work Experience: Culinary Arts Internship (1-13)**

Qualified students work as interns in variety of training sites that provide experience related to the food service industry. These sites include hospitals, restaurants, casino

resorts, motels, assisted-care facilities, and cruise ships. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

**CH – CHEMISTRY**

**CH 104, 105, 106: Introductory Chemistry (4,4,4)**

Introductory Chemistry Sequence. Serves as preparation for CH 221-223 for those lacking high-school chemistry or preparation beyond MTH 095. Sequence required for some bachelor's degrees granted at other institutions (i.e. Dental Hygiene at O.I.T.) Some AAS degree programs require only CH 104 — see specific programs for details. Students must be proficient in elementary algebra.

**CH 104:** measurement and dimensional analysis, properties of matter, elements and compounds, nomenclature, periodic table and trends, chemical equations, stoichiometry, atomic structure. Registration-Enforced Prerequisite: MTH 065 or higher. F

**CH 105:** bonding, gas laws, liquids, solutions, acids, bases, ionization, neutralization, chemical equilibrium, nuclear chemistry, oxidation-reduction. Registration-Enforced Prerequisite: CH 104. W

**CH 106:** organic and biochemistry. Registration-Enforced Prerequisite: CH 105. S

*Courses must be taken in sequence. 3 lecture, 3 lab hrs/wk.*

**CH 112: Fundamentals of Chemistry (5)**

This is a one-term entry-level chemistry course designed for individuals not previously exposed to chemistry. Basic knowledge and skills are developed in Inorganic, Organic, and Biochemistry for general application in a wide range of professions. Registration-Enforced Prerequisite: MTH 065 or higher or math placement test score. 4 lecture, 3 lab hrs/wk. F, W, S, Su

**CH 221, 222, 223: General Chemistry (5,5,5)**

Sequence designed for science and pre-medical majors and engineering majors.

**CH 221:** Topics include atomic structure, stoichiometry, thermodynamics, periodic trends, bonding, molecular structure. Registration-Enforced Corequisite: MTH 111 or higher and Registration-Enforced Prerequisite: CH 104, CH 112, GS 105, or instructor approval. Instructor approval will be granted for students that have taken high school chemistry if copy of high school transcripts or other documentation of successful course completion is provided to UCC Science Department. 4 lecture, 3 lab hrs/wk. F

**CH 222:** States of matter, solution chemistry, kinetics, and equilibrium. Registration-Enforced Prerequisite: CH 221. W

**CH 223:** Gas laws, electrochemistry, nuclear chemistry, coordination chemistry, descriptive inorganic, introduction to organic chemistry. Registration-Enforced Prerequisite: CH 222. S

*Courses must be taken in sequence, or with consent of instructor. 3 lecture, 1 recitation hrs, 3 lab hrs/wk.*

### **CH 241, 242, 243: Organic Chemistry (4,4,4)**

Sequence designed for science and pre-professional medical majors.

**CH 241:** molecular structure and bonding, functional groups, acids-bases, alkanes, stereochemistry, addition reactions, free-radicals, alkenes and alkynes. Registration-Enforced Prerequisite :CH 223. F

**CH 242:** addition reactions, free-radicals, alcohols and ethers, conjugated systems, spectroscopy, aromatics. Registration-Enforced Prerequisite: CH 241. W

**CH 243:** aldehydes and ketones, carboxylic acids and derivatives, amines, phenols, macromolecules. Registration-Enforced Prerequisite: CH 242. S

*Courses must be taken in sequence, or with consent of instructor. 3 lecture, 3 lab hrs/wk.*

### **CH 280: Cooperative Work Experience: Chemistry (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **CIS – COMPUTER INFORMATION SYSTEMS**

### **CIS 100 Introduction to Windows and PCs (3)**

This course is designed as an introductory computer course for students with limited to no previous computer experience in all fields. Course content includes using Microsoft Windows, basic word processing, a web browser, internet skills, file management, and email. Students will also be exposed to a Learning Management System (LMS). 3 lecture hrs/wk. F, W, S, Su

### **CIS 111: Computer Systems Configuration (4)**

This is an introduction to computer hardware. The course is designed to supplement the Computer Information Systems training to the extent that the student can install, configure, troubleshoot and do simple repairs of computing hardware systems. Students will be exposed to the tools and equipment used in a hardware oriented laboratory environment. Registration-Enforced Prerequisite: CIS 120 or instructor approval. 3 lecture, 3 lecture/lab hrs/wk. F

### **CIS 120: Intro to Computer Information Systems (4)**

This course is designed as an introductory digital literacy course for students in all fields. Course content includes an overview and history of the field, basic computer architecture, auxiliary storage and file organization, data communications, with "hands-on" work using modern business application software packages on the microcomputer including word processing, spreadsheets, database, graphics, and communications as tools used in data processing. CIS majors are urged to enroll in CIS 122 in the Fall, concurrent with this course. Registration-Enforced Prerequisites: CIS 100 with a grade of C or better, computer placement test score or instructor approval. 4 lecture hrs/wk. F, W, S, SU

### **CIS 122: Orientation to Programming (4)**

This course is an introduction to problem solving and programming. Students will be introduced to an integrated Development Environment, tools and techniques of problem solving and the basic elements of well-structured programming. Visual C# or another modern programming language will be introduced. CIS 120 should be taken prior to or concurrent with this course. Registration-Enforced Prerequisite: MTH 095 or equivalent; placement into WR 121 or higher. 3 lecture, 2 lecture/lab hrs/wk. F

### **CIS 125A: Computer Application for Auto Technicians (3)**

This course is an introduction to computers and computer applications focused on the needs of the Automotive Tech student. Course work will include an overview of the use of computers in parts inventory, management and customer service applications. It will look at using the computer as a word processor to assist in creating professional documents in support of a small business. The course will also look at using spreadsheets as basic business management tools and as computation tools for automotive applications. A final module will cover the use of the computer as a basic communications tool to access industry supported bulletin boards and databases. Prerequisite: Automotive major. 2 lecture, 2 lecture/lab hrs/wk.

### **CIS 125D: Computer Applications – Database (3)**

This course will serve as an introduction to development and use of a modern database application. Course work will focus on proper design fundamentals used for database creation. Emphasis will be on using available DBMS tools for data entry forms and report generation. Registration-Enforced Prerequisite: CIS 120 or instructor approval. 2 lecture, 2 lecture/lab hrs/wk. S

### **CIS 125E: Computer Applications – Email (2)**

This course serves as an introduction to email software. The course is lab-oriented and will focus on learning the functions of a modern email program. In addition, this course will go beyond the basics, covering concepts such as advanced message options; calendar and contact management; data files; and basic email client security. Prerequisite: Basic keyboarding skills or instructor approval. 1 lecture, 2 lecture/lab hrs/wk. F

### **CIS 125H: Writing Web Pages (2)**

This course will be an introduction to the HTML language. Students will learn to write web pages. Topics will include: HTML commands, hyperlinks, use of graphics, and a basic introduction to Javascript. Prerequisite: Experience with current Windows operating system or instructor approval. 1 lecture, 2 lecture/lab hrs/wk. F



**CIS 125R: Computer Applications – Presentation Software (2)**

This course will serve as an introduction to presentation software. It is lab-oriented and will focus on using a modern presentation software application to create, modify, customize and preview slide show presentations. Students will manage presentations, work with text and visual elements; manipulate program features to enhance slide shows. Import and export of files from Microsoft Word and Excel, and the use sound and video clips in presentation; and create hyperlinks to other slides, presentations, applications, or the Internet. Students will learn to implement design principles to create professional-looking presentations. 1 lecture, 2 lecture/lab hrs/wk. F

**CIS 125S: Computer Applications – Spreadsheets (3)**

This course is a continuation of topics covered in CIS 120. This course is lab-oriented and will focus on the functions of a modern spreadsheet program. In addition, advanced formulas and functions, data presentation, and data management features of an integrated suite will be covered. Registration-Enforced Prerequisite: CIS 120 or instructor approval. 2 lecture, 2 lecture/lab hrs/wk. W

**CIS 125W: Computer Applications – Word Processing (3)**

This course will serve as an introduction to microcomputers and their applications in business. The course is lab-oriented and will focus on using a modern word processor. Terminology and concepts regarding microcomputers and their peripherals will also be covered. Emphasis is placed on developing confidence in use of computer hardware and software. Prerequisite: Keyboarding skills or instructor approval. 2 lecture, 2 lecture/lab hrs/wk. S

**CIS 133CS: Introduction to Programming I – Visual C# (4)**

This course is a continuation of CIS 122. Students will learn and apply programming concepts using a high-level programming language. This course will emphasize all phases of program development for the business environment including program design, development, documentation, test, implementation and maintenance.

Particular attention will be directed toward the use of structured programming techniques. The course will provide an introduction to writing programs to handle data files and interactive applications. Object orientation and design concepts will be introduced in this course. Registration-Enforced Prerequisite: CIS 122 and CIS 120, or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. W

**CIS 135: Applications Development for Computers (3)**

Students will learn to use a mainstream suite of applications. Applications will include, but not be limited to, word processing, database (DBMS), spreadsheet, and graphic presentations. The suite will be used to develop a representative business situation where the ultimate goal is integration of the various applications for correspondence, financial records, inventory management, and company presentations. Focus will be on determining, projecting, and meeting business needs within the confines of the application suite. Top down programming methods will be applied to the business situation and needs assessment as the primary method used to understand the business and its goals. Prerequisite: CIS 120 or instructor approval. 2 lecture, 2 lecture/lab hrs/wk. (not regularly offered)

**CIS 140L : Introduction to Linux Operating Systems (4)**

This course is a lab-oriented study of operating systems preparing students for an industry-based certification such as Comp TIA's Linux+ examination. The course includes the installation and administration of a desktop operating system as well as management, troubleshooting, and optimizing techniques. Registration-Enforced Prerequisite: CIS 120 or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. Su

**CIS 140M: Introduction to Microsoft Operating Systems (4)**

This course is a lab-oriented study of Microsoft desktop operating systems and prepares students for a Microsoft industry-based desktop certification. Topics include installation, management, and administration techniques as well as troubleshooting and optimization techniques using physical and virtual machine technology. Registration-Enforced Prerequisite: CIS 120 or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. F

**CIS 140W: Introduction to Windows (2)**

An introduction to the Windows operating system, the class will focus on working with windows, menus, dialog boxes, properties, shortcuts, Windows Explorer, Windows accessory applications and other Windows topics. 1 lecture, 2 lecture/lab hrs/wk. S

**CIS 145: Computer Forensics for Ethical Hackers (4)**

This course introduces students to the technologies and theory of computer forensics. This course is designed for system administrators, system engineers, and operators responsible for cybersecurity. Students will learn the application of computer investigation and analysis techniques to gather potential legal evidence, which is often available due to computer crime or misuse, theft of trade secrets, theft of or destruction of intellectual property, and fraud. Students will learn the basic principles and skills required to identify an intruder's footprints, properly gather applicable evidence, and safeguard it for law enforcement. Technologies covered may vary by term, depending on industry trends. Registration-Enforced Prerequisites: CIS 111 and CIS 140M or CIS 140L. 3 lecture, 2 lecture/lab hr/wk. S

**CIS 151C: Networking Essentials (4)**

This course serves as an introduction to networking and Cisco networking technologies. Instruction includes, but is not limited to, networking, network terminology and protocols, network standards, local-area networks (LANs), wide-area networks (WANs), the Open System Interconnection (OSI) and TCP/IP models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Emphasis is applied to the use of decision-making and problem-solving techniques to resolve networking problems. In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools and equipment and applicable safety, building and environmental codes and regulations. This is the first of a four-course sequence that prepares students for the CCNA (Cisco Certified Network Administrator) certification. Registration enforced prerequisite: CIS 120 or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. S



## **CIS 152C: Introduction to Basic Switching and Routers (4)**

This course serves as the second in a series of four courses and focuses on providing students with classroom and hands-on experience in current and emerging network technologies. Instruction includes, but is not limited to, logical and physical network models, local area networks (LANs), wide area networks (WANs), transmission control protocol/Internet protocol (TCP/IP) addressing, switches, switch configuration, routers, router configuration, routing and routing protocols, switch and router image management, and network troubleshooting. Emphasis is applied to understanding the nature and components of networks that make up LANs, WANs and the Internet. Students will become familiar with the use of command-line tools and protocols used to configure network devices, and will learn how to troubleshoot a switch- and-router-based network topology. Registration-Enforced Prerequisite: CIS 151C or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. F

## **CIS 153C: Intermediate Routing & Switching (4)**

This course serves as the third in a series of four courses and focuses on providing students with classroom and hands-on experience in current and emerging networking technologies. Instruction includes, but is not limited to, a review of logical and physical reference models, local area network (LAN) switching and routing. Ethernet and virtual LANS (VLANS), LAN design, routing and switching protocols, router and switch image management, and network troubleshooting techniques. Registration-Enforced Prerequisite: CIS 152C or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. Su

## **CIS 154C: Wide Area Network Protocols (4)**

This course serves as the last course in a series of four courses and focuses on providing students with classroom and hands-on experience in current and emerging networking technologies. Instruction, includes, but is not limited to, a review of local area network (LAN) switching, virtual LANs, LAN design, routing protocols, access lists, wide area networks (WANs), logical and physical reference models, device management, and WAN protocols. Registration-Enforced Prerequisite: CIS 153C or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. Su

## **CIS 195: Authoring for the World Wide Web I (4)**

Techniques and tools for designing and publishing on the World Wide Web; hypertext and HTML; site and page design; media integration; issues raised by Internet publishing. Registration-Enforced Prerequisite: CIS 120 or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. F

## **CIS 233CS: Introduction to Programming II – Visual C# (4)**

Continues Visual C# programming sequence utilizing arrays, objects, relational database access and data structures. Structured design techniques emphasized throughout. Registration-Enforced Prerequisite: CIS 133CS and CIS 275 or instructor approval (CIS 275 may be taken concurrently). 3 lecture, 2 lecture/lab hrs/wk. S

## **CIS 240M: Installing and Configuring Microsoft Windows Server (4)**

This course serves as the first in a series of three courses centered around managing Microsoft servers in a domain environment. Instruction includes, but is not limited to installation in a physical and virtual environment; virtualization techniques; deployment; Active Directory objects and management; command-line commands; IP management and implementation; DHCP; DNS; local and network storage; file and print services; group policy objects; and Windows security. Registration-Enforced prerequisites: CIS 120 or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. W

## **CIS 244: Systems Analysis and Design (4)**

This course is designed to provide the CIS student with a basic understanding of the importance of the Systems Analysis function in today's computer-focused businesses and institutions. It will enable students to better appreciate the importance of the role of the Systems Analyst, the Programmer, the User and the Manager in the development and implementation of modern, computer-based, information systems. The students will participate in a series of activities including group discussions, case studies, interviews, research reports, role playing and structured walk-throughs. Throughout the course, emphasis will be placed on human interaction situations with particular focus on teaming. A secondary goal of this

course will be to introduce students to many of the styles and structures of technical documentation that they will be expected to use in their subsequent employment. These documentation techniques will be taught in the context of the systems analysis project. Prerequisite: Second year CIS major or instructor approval. 4 lecture hrs/wk. (not currently offered)

## **CIS 245: Project Management (4)**

Project Management - Information Systems Study practical approaches for managing, planning, organizing and implementing Information Systems projects using modern management techniques. Complete hands-on projects requiring management of project resources, scope, time-line, cost, scheduling, human and other resources. Use Microsoft Project and other project monitoring tools. Registration-Enforced Prerequisite: CIS 122 or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. S

## **CIS 275: Introduction to Database Management Systems I (4)**

Students will be introduced to database management systems (DBMS). Topics include database theory and practice, administration, table creation, database normalization and structured query language (SQL). Students will use the tools of the DBMS to develop applications that include input screens, queries, reports and batch processes to automate a typical business computer application. Students will begin to learn and modify computer-generated programs to customize an application. Registration-Enforced Prerequisite: CIS 133VB, CIS 133CS or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. S

## **CIS 276: Introduction to Database Management Systems II (4)**

A continuation of the concepts and software expertise developed in CIS 275. Students will cover advanced SQL and database administration techniques and program on an enterprise level database. Registration-Enforced Prerequisite: CIS 275 and CIS 233CS or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. F

**CIS 279M: Microsoft Windows Server Administration I (4)**

This course is the second in a series of three courses centered around managing Microsoft servers in a domain environment. Instruction includes, but is not limited to, server image management; DNS; Active Directory; virtualization; user and password management; group policy objects; remote access; file, Windows, and network security, including AAA; file services; update management; and performance monitoring and management. This course will help students prepare for a current Microsoft Certified Professional Exam. Registration-Enforced Prerequisite: CIS 240M or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. S

**CIS 280: Cooperative Work Experience: Computer Information Systems (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

**CIS 284: Network Security Fundamentals (4)**

This course serves as an introduction to network and information technology security and prepares the student for further study in the field. Instruction includes, but is not limited to, threat migration; cryptography; authentication and role-based security; encryption and device security; the public key infrastructure; messaging security; ports and protocols; and business continuity concepts. This course will help students prepare for a current industry-recognized security certification exam. Registration-Enforced Prerequisite: CIS 240M or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. W

**CIS 285A: Ethical Hacking (4)**

This course focuses on hacking techniques and technologies, with an emphasis on the ethics and legality of hacking. Course content will include coverage in topics such as scanning, testing, and hacking of systems such as PCs, switches, and web servers. Students will also learn about the attack process, intrusion detection, intrusion prevention, social engineering, DDoS and other attacks, buffer overflows, and virus creation. All activities are performed in a safe environment and no

actual network is harmed. Registration-Enforced Prerequisite: CIS 152C or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. W

**CIS 285B: Advanced Network Device Security (CCNA Security) (4)**

This course is a Cisco Networking Academy course, mapped to the Cisco Certified Network Administrator Security (CCNA Security) industry credential. This course will expose students to the array of security features that can be implemented using Cisco switches and routers. Instruction will include, but is not limited to, authentication methods, common network attacks and how to safeguard against them, communication security (remote access, e-mail, the web, directory and file transfer, and wireless data), infrastructure security (network devices and media), and the proper use of perimeter topologies such as demilitarized zones (DMZs), Extranets, and Intranets to establish network security. Cryptography basics are also introduced, including the differences between asymmetric and symmetric algorithms, and the different types of Public Key Infrastructure (PKI) certificates and their usage. Operational/organizational security is discussed as it relates to physical security, and disaster recovery. Registration-Enforced Prerequisite: CIS 152C or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. W

**CIS 285C: Cloud Services Technologies (3)**

This course introduces students to the technologies and theory of Infrastructure as a Service (IaaS) using common cloud providers such as Microsoft Windows Azure and/or Amazon Web Services (AWS). Students will learn cloud computing, cloud storage and content delivery, cloud database types and uses, cloud networking (private and hybrid uses), cloud security, cloud deployment and management; and Enterprise IT applications. Registration-Enforced Prerequisite: CIS 288M or instructor approval. 3 lecture hrs/wk. S

**CIS 286A: Virtualization Technologies (3)**

This course introduces students to the technologies and theory of operating system virtualization. This course is designed for system administrators, system engineers, operators responsible for creating and implementing virtualization. Students will learn installation, configuration, and management of Hyper-V and Hyper-V Manager; and/or VMware vSphere, which consists of VMware ESXi and VMware

vCenter Server. This course is based on the current versions of Hyper-V, ESXi, and vCenter Server. Technologies covered will vary by term, depending on industry trends. Registration-Enforced Prerequisite: CIS 288M or instructor approval. 3 lecture hrs/wk. S

**CIS 288M: Microsoft Windows Server Administration II (4)**

This course is the third in a series of three courses centered around managing Microsoft servers in a domain environment. Instruction includes, but is not limited to, server image management; Active Directory; group policy object management; virtualization; user and password management; group policy objects; remote access; file, Windows, and network security, including AAA; and performance monitoring and management. This course will help students prepare for a current Microsoft Certified Professional Exam. Registration-Enforced Prerequisite: CIS 240M or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. F

**CIS 289M: Microsoft Windows Server Administration III (4)**

This course serves as the fourth in a series of four courses centered around managing Microsoft servers in a domain environment. Instruction includes, but is not limited to advanced network and file services; dynamic access control; network load balance; failover clustering; disaster recover; AD Certificate Services; and AD Federation Services. This course will help students prepare for a current Microsoft Certified Professional Exam. Registration-Enforced Prerequisite: CIS 240M or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. (not currently offered)

**CIS 295: Authoring for the World Wide Web II (4)**

Designing, developing, publishing, and maintaining dynamic websites; Web security and privacy issues; emerging Web technologies. Prerequisite: CIS 195 and CIS 275 or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. W

**CIS 297: Capstone Project (4)**

(This course is currently not being offered.) Student will develop an individual “real-world” project to demonstrate the ability to apply the concepts covered in the Computer Information Systems (CIS) curriculum. With guidance from a faculty advisor, students will analyze, design, program

and document a database, web-based or network system. Emphasis will be placed on working effectively with clients, professional work habits, and documentation. Registration-Enforced Prerequisite: Instructor approval; 1 lecture, 9 lab hrs/wk.

## CIV – CIVIL ENGINEERING

### CIV 214: CAD-Civil3D and Virtual Design (3)

This course uses Autodesk Civil 3D program to produce virtual design and drawings for civil engineering projects. Drafting practices are used to prepare site plans, layout building sites, and develop construction drawings of infrastructure. Design and building information models are used for making estimates of quantities and cost, and for determination of constructability problems. Registration-Enforced Prerequisite: DRF 112. 2 lecture, 2 lecture/lab hrs/wk. S

### CIV 280: Cooperative Work Experience: Engineering (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year, except for students taking Occupational Skills Training (OST) which has a limit of 24 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

### CIV 297: Continuing Professional Development for Professional Land Surveyors and Engineers. (1-3)

This course will cover a variety of topics to meet the needs of Professional Land Surveyors and Engineers. The course content and material will be structured to meet the requirements of the Oregon State Board of Examiners for Engineers and Land Surveyors as defined in OAR 820. The primary venue for this course will be Internet based. Prerequisite: Licensure by the Oregon State Board of Examiners for Engineers and Land Surveyors or Instructor approval. Credit will be assigned for each individual at the rate of one credit hour per ten hours of lecture. F, W, S, Su

## CJ – CRIMINAL JUSTICE

### CJ 100A: Law Enforcement Skills Training (2)

A variety of topics including: First Aid & CPR, Tactical Communication, Special Event Ops, Radio Communications, Search & Handcuffing, Confrontational Simulation, Chemical Agents. Corequisite: CJ 105 and CJ 110. Prerequisite: Acceptance into Police Reserve Academy. 4 lecture/lab hrs/wk. F

### CJ 100B: Law Enforcement Skills Training (2)

A variety of topics including: Emergency Vehicle Ops, Control Holds, Expandable Baton, Traffic Control, Crowd Control, Tactics & Strategies in Buildings and Open/Wooded Areas. Corequisite: CJ 120 and CJ 212. Prerequisite: Acceptance into Police Reserve Academy. 4 lecture/lab hrs/wk. W

### CJ 100C: Law Enforcement Skills Training (2)

A variety of topics including: Vehicle Stops, Defensive Tactics, Bicycle Patrol, Firearms. Corequisite: CJ 109 and CJ 112. Prerequisite: Acceptance into Police Reserve Academy. 4 lecture/lab hrs/wk. S

### CJ 101: Introduction to Criminology (3)

This course is designed as an introduction to the study of crime and criminal behavior. One segment covers concepts of crime and criminology, the nature and extent of crime, and victims and victimization. A second segment covers theories of crime causation, including choice and trait theories, social structure, social process, and social conflict theories, and developmental theories. A third segment covers crime typologies, including violent crimes, property crimes, enterprise crimes (white-collar, organized, and cyber crimes), and public order crimes. The final segment looks at the criminal justice system, including various functions of the system as well as different models applied to the field. 3 lecture hrs/wk. S. Available online F.

### CJ 105: Concepts of Criminal Law (3)

This class is designed to introduce students to the basic concepts underlying criminal law. Topics covered will include the origins of criminal law, the basic requirements of a criminal act, the limitations of criminal liability, types and classifications of criminal law, and procedural defenses. Additional topics covered include constitutional limits on law, inchoate crime,

and criminal culpability levels. 3 lecture hrs/wk. F. Available online Su.

### CJ 109: Contemporary Issues in Criminal Justice (3)

This course provides an intermediate look at modern criminal justice practices, operations, and issues. The Criminal Justice student and prospective law enforcement employee will develop a view of criminal justice careers from both theoretical and practical perspectives. This course will cover contemporary issues in operations and policies that include philosophies, criminal justice organization, management and supervision, crime control, and efficiency. 3 lecture hrs/wk. S (offered alternate years)

### CJ 110: Introduction to Law Enforcement (3)

A study of law enforcement that emphasizes police work at the community level. Students will review the history and evolution of law enforcement, the criminal justice system and the future of law enforcement. Particular areas of study include criminal law, responsibilities of law enforcement, community relations, accountability and corruption, values and judgement and careers in law enforcement. 3 lecture hrs/wk. F

### CJ 112: Field Operations and Patrol Procedures (3)

To introduce the student to the nature and purpose of patrol activities for the law enforcement officer. Includes tactics and strategies, routine and emergency procedures, types of patrols, crime prevention, and community policing. Prerequisite: Acceptance into Police Reserve Academy. 3 lecture hrs/wk. S

### CJ 114: Cultural Diversity Issues in Criminal Justice (3)

This course looks at the relationship between the criminal justice system, cultural and other diversity, and police/community dynamics. Focusing on positive police/citizen contacts, the principle emphasis will be on the importance of a continuing dialogue between law enforcement and all segments of the community. Students will acquire an understanding of cultural norms and their impact on criminal justice interactions. Other relevant issues such as hate crimes and racial profiling will be covered. 3 lecture hrs/wk. S

### **CJ 120: Introduction to Judicial Process (3)**

This course presents an examination of the responsibilities of each segment of the justice system. These segments include law enforcement, the judicial process and the courts, duties and responsibilities of corrections agencies, and the functions of related administrative agencies at the local, state, and federal levels. Past, present, and future relationships of these systems will be analyzed. 3 lecture hrs/wk. W

### **CJ 130: Introduction to Corrections (3)**

This course provides an overview of the American corrections system including its history, processes, purposes and goals. Course study will introduce the student to institutional and penal systems that include detention facilities, jails, prisons, and work release facilities. This course provides both a practical and theoretical perspective of the need and purpose for offender confinement and post-conviction jurisdiction within a free society. Supervision and management of confined and released offenders, juvenile and adult, will be reviewed. 3 lecture hrs/wk. S

### **CJ 140: Introduction to Criminalistics (Forensic Science) (3)**

This is an introductory course in forensic science. Forensic science or criminalistics applies the knowledge and technology of science for the definition and enforcement of laws, and to the solution of criminal offenses. Course study will include development of the principles and techniques used to compare and identify physical evidence collected at crime scenes. The course will explore services performed by evidence collection teams as well as activities of forensic scientists in the crime labs. 3 lecture hrs/wk. W

### **CJ 169: Terrorism and Homeland Security (3)**

This course examines the basic history, evolution and effects of terrorism on both domestic and international levels. Through historical and objective analysis the course is intended to provide a basic foundation for the root cause of terrorism and how terrorism is confronted by political, diplomatic, law enforcement and military intervention. This course provides a basic understanding of the various threats from terrorism, and the ability of terrorists to advance a political agenda, raise funds, and use the media to promote their vision ideology. 3 lecture hrs/wk. W, Su

### **CJ 203: Crisis Intervention (1)**

An overview of the techniques and approaches to crisis intervention for entry-level criminal justice professionals. Covers initial intervention, defusing and assessment, resolution and/or referral, with emphasis on safety. Includes personal effectiveness, recognition of threat levels, voluntary compliance, verbal and non-verbal communication, active listening, and mediation. 1 lecture hr/wk. W

### **CJ 210: Criminal Investigations (3)**

This course concentrates on the fundamentals of criminal investigation. The responsibilities of the preliminary crime scene investigator will be thoroughly studied. Areas of specific review will include: crime scene management; the collection, preservation, and recordation of recovered evidence; interview techniques; surveillance operations; follow-up investigations; report writing; and court procedures. 3 lecture hrs/wk. S

### **CJ 211: Ethics in Criminal Justice (3)**

This course examines the major concepts of ethics and its relationship to criminal justice system functions. The course will focus on the values, morality and ethics that guide today's criminal justice professional. Supplementing the text will be case studies from Oregon Department of Public Safety Standards and Training and other current sources. 3 lecture hrs/wk. W

### **CJ 212: Report Writing for Criminal Justice (3)**

The fundamentals of writing law enforcement reports including definitions, type, needs, and objectives. Emphasis will be on preliminary crime reports, arrest reports, evidence reports, and administrative reports. Students will obtain the necessary knowledge to investigate, interview, and distill general information into documented facts. Prerequisite: Acceptance into Police Reserve Academy. 3 lecture hrs/wk. W

### **CJ 216: Law Enforcement Supervision & Management (3)**

This course provides an in-depth examination of the role and responsibilities of the first-level supervisor and manager/command officer in the specialized field of law enforcement. Principles of effective leadership, team-building and specific operational issues related to law enforcement are also addressed. 3 lecture hrs/wk. F

### **CJ 226: Intro to Constitutional Law (3)**

This course provides an examination of the role of the U.S. Constitution in the development of criminal law and procedures. Emphasis is placed on relevant historic and political factors that have influenced constitutional criminal procedures, and the practical effect that case law has on the methods and extent to which the criminal justice community performs its duties. 3 lecture hrs/wk. W (Available online only)

### **CJ 230: Introduction to Juvenile Justice System (3)**

This course provides an introductory perspective of the historical and contemporary aspects of juvenile corrections. Topics covered include the components of the juvenile justice system and its philosophy, functions and goals, the role of law enforcement, the courts, community based corrections, and custodial facilities. Included is an overview of the ongoing debate over the Balanced and Restorative Justice approach in the juvenile justice system, especially as it relates to safety/security issues and public concern. 3 lecture hrs/wk. S

### **CJ 232: Introduction to Corrections Casework (3)**

Introductory overview of casework in corrections settings. Includes introduction to behavior modification theories and methods, contemporary counseling methods, assessment processes, and the development of officer/client relations. Emphasizes observation skills, perception issues, information gathering, interpersonal communication skills, and interviewing strategies and techniques as part of corrections casework. Registration-Enforced prerequisite: CJ 230 or CJ 261 or instructor approval. 3 lecture hrs/wk. Su

### **CJ 240: Criminalistics II (3)**

This is a course in forensic science and criminalistics. Forensic science applies the principles and technology of various scientific disciplines to the definition and enforcement of laws and to the solution of criminal offenses. Criminalistics is the collection of disciplines of forensic science commonly practiced in the modern crime lab and in laboratory services applied at crime scenes. This course will build upon basic principles of evidence processing and analysis covered in earlier coursework and integrate them with more advanced and individualizing techniques in forensic science. These include bloodstain pattern analysis, forensic toxicology, trace evidence processing and analysis, DNA, arson investigations and computer forensics. Registration-Enforced Prerequisite: CJ 140, 3 lecture hrs/wk. S



## **CJ 243: Narcotics and Dangerous Drugs (3)**

This course covers the full range of psychoactive drug use, from legal medicinal use to criminal recreational use, from casual use to addiction. Emphasis is on the sociological perspective, explaining the drug phenomenon supported by recent data from a wide range of sources. 3 lecture hrs/wk. F

## **CJ 261: Introduction to Parole & Probation (3)**

This course provides introductory perspectives of parole, probation, and community corrections. The course investigates the purposes of parole and probation as alternatives to incarceration of criminal offenders. Issues related to sentencing recommendations, terms and conditions of probation, day treatment options, group homes, and criteria for violating status are examined. 3 lecture hrs/wk. F

## **CJ 275: Comparative Criminal Justice Systems (3)**

Using a topical approach, this course compares the criminal justice systems in other nations with that in the United States. Underlying sources of law will be covered as well as practices and policies used by different nations in their criminal justice systems. This course will give students a better understanding of the similarities and differences of each system. 3 lecture hrs/wk. F

## **CJ 280: Cooperative Work Experience: Criminal Justice \* (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, SU

## **CJ 280: Cooperative Work Experience: Law Enforcement/Corrections \* (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab.

\*Students may select - either CJ 280 Cooperative Work Experience: OR CJ 298 Criminal Justice Independent Study. F, W, S, SU

## **CJ 298: Independent Study: Criminal Justice (1-6)**

Independent study on subjects outside the course curriculum or in-depth studies of a particular aspect of course content. Affords an opportunity for students with previous study in a subject area to pursue further investigations for credit. Registration-Enforced Prerequisite: Instructor, Department Chair, and Dean approval of study plan. 6 credits maximum total credit. F, W, S, Su

## **CS - COMPUTER SCIENCE**

### **CS 133U: Programming for Engineers (3)**

An introduction to problem analysis and programming in either C++ or Java. This course is intended as an introduction to programming for those with little or no previous experience. The course is designed for engineering majors and emphasis will be on programming engineering and mathematics problems. Prerequisite: MTH 095. 2 lecture, 2 lecture/lab hrs/wk. (not currently offered)

### **CS 160: Orientation to Computer Science (4)**

This course explores the discipline and profession of computer science. It provides an overview of computer hardware architecture, the study of algorithms, software design and development, data representation and organization, ethics and the history of computing and its influences on society. The student is exposed to both low-level and high-level programming languages. May be offered online. Registration-Enforced Prerequisite: MTH 095. 3 lecture, 2 lecture/lab hrs/wk. F

### **CS 161: Computer Science I (4)**

This is an introduction course to computer science. Topics covered are: Algorithms, programming concepts, programming in a structured language, and computer applications. The C++ or the Java language will be introduced. Prerequisite: MTH 111 or equivalent. 3 lecture, 2 lecture/lab hrs/wk. W

### **CS 162: Computer Science II (4)**

This course is a continuation of CS 161 and introduces the

student to the use of a variety of data structures. Topics include: string operations, records, stacks, queues, trees, recursion, sorting, linked lists, searching data structures. Programs will be written either in C++ or Java. Prerequisite: CS 161. 3 lecture, 2 lecture/lab hrs/wk. S

### **CS 260: Data Structures (4)**

This course is intended primarily for students seriously interested in computer science. Students will demonstrate the usage of using advanced data structures, including linked lists and tree structures using pointers, and advanced structure programming methods through a variety of programming projects. Course may be offered online. Registration-Enforced Prerequisite: CS 162 and MTH 111 or higher or instructor approval. 3 lecture, 2 lecture/lab hrs/wk. F

### **CS 271: Computer Architecture & Assembly Language (4)**

This course serves as an introduction to the functional organization and operation of digital computers. Coverage of topics includes assembly language; addressing, stacks, argument passing, arithmetic operations, decisions, macros, modularization, linkers and debuggers. Registration-Enforced Prerequisite: CS 162 or instructor approval. 3 lecture, 2 lab hrs/wk. S

## **CWE – COOPERATIVE WORK EXPERIENCE**

### **CWE 161 Seminar I (1)**

CWE 161 is intended to help students develop career preparation skills. This process will involve researching job markets, preparing resumes and cover letters, building an employment portfolio, and conducting an informational interview with an employer in a field of their choosing. 1 lecture hr/wk. F, S

### **CWE 162: CWE Seminar II (1)**

This course is planned for students enrolled in business programs. Students will work with a local organization or business to research and complete a project in specific areas of business such as personnel, inventory control, advertising, finance, or marketing. Prerequisite: CWE 161; instructor approval. 1 lecture hr/wk. W



## CWE – COOPERATIVE WORK EXPERIENCE, continued

### **CWE 163: CWE Seminar III (1)**

This course is a continuation of CWE Seminar II, with emphasis on managerial skills. The student is required to develop a marketing plan or business plan for a business organization of their choosing. Students will be expecting to select a business, prepare the plan, present an oral presentation, and submit a final written document. Prerequisite: CWE 162; instructor approval. 1 lecture hr/wk. S

## **DA – DENTAL ASSISTING**

### **DA 102: Advanced Clinical Experiences (4)**

In Advanced Clinical Experiences, students will demonstrate competence in several dental procedures. Each skill listed on the DANB EFDA check-off list will be discussed in detail. The intention of this course is to prepare students to become Oregon Expanded Functions Exam certified, as well to provide them with the necessary knowledge to complete the Oregon Expanded Functions Clinical Check-offs. Ergonomics is also covered with a special emphasis on practicing good body mechanics while performing expanded functions. Dental sealants are also covered. Cavity Classifications are reviewed and discussed in relation to matrix systems. Prerequisite: currently enrolled in Dental Assisting program. Registration-enforced prerequisite: DA 195, DA 196, 3 lecture, 3 lab hours/work. S

### **DA 103: Dentistry, Law & Ethics (1)**

This course introduces the Dental Assisting student to the dental office environment and the dental specialties. Identifies, describes and compares the role of each member of the dental team. Specific emphasis is placed on the students' exploration of the application of ethics in dentistry. The laws that cover dental professionals are covered broadly. Those laws that pertain specifically to dental assistants are covered in depth with particular attention to the Oregon Dental Practice Act. Prerequisite: currently enrolled in Dental Assisting program. 1 lecture/hr. F

### **DA 107: Dental Health Education I (1)**

Dental Health Education I develops the basic concepts of preventive dentistry including the study of plaque-related diseases, fluoride therapy, and brushing and

flossing techniques. The student will learn measures that are effective in improving oral health and preventing oral disease. Nutrition will be discussed and the students will apply the concepts they have learned to the health of patients they will treat in the future. Prerequisite: currently enrolled in Dental Assisting program. 1 lecture/hr. F

### **DA 108: Dental Health Education II (1)**

Must be taken in sequence. This course builds on the concepts in DA 107, reinforcing preventative dentistry concepts. Students will prepare an oral health presentation as a team. The concluding project of the class will take place at a local elementary school where students will apply the skills they have acquired in oral hygiene instruction. Prerequisite: currently enrolled in Dental Assisting program and DA 107. 1 lecture/hr. F

### **DA 110: Health Sciences (3)**

Dental Health Sciences introduces the student to the history of dentistry. Embryology, and developmental disorders in the oral cavity are discussed. The concepts of oral histology as well as tooth morphology are developed. Students will be able to understand the connection between patient diagnosis, charting and treatment. Prerequisite: currently enrolled in Dental Assisting program. 3 lecture hr/week. F

### **DA 111: Dental Terminology (2)**

This course provides students with a working knowledge of dental terminology. The course will include: spelling, pronunciation, and definition of terms as well as the use of a dental dictionary and related references. Students will be prepared for a career in the dental profession by providing them with the terminology to excel in both career orientated testing and while working as a Dental Assistant. Prerequisite: currently enrolled in Dental Assisting program. 2 lecture hr/week. W

### **DA 115: Dental Anatomy (3)**

The Dental Anatomy course presents the study of landmarks, tooth numbers, surfaces and morphology. Students learn the basic structure and function of human anatomy with special emphasis on the head and neck. Study models and diagrams are used to facilitate hands on learning. This course prepares students to apply the fundamentals of general and dental anatomy to informed decision making, and to professional



communication with colleagues and patients. Prerequisite: currently enrolled in Dental Assisting program. 3 lecture hr/week. W

### **DA 135: Oral Pathology (2)**

The study of diseases and conditions affecting the gingiva, dentition, tongue and oral cavity is the focus of this course. Oral manifestations of infectious diseases and injuries are also covered as well as ongoing discussions pertaining to the legal and ethical roles dental assistants encounter while assisting dentists and hygienists when pathological conditions are presented. Prerequisite: currently enrolled in Dental Assisting program. 2 lecture hr/week. S

### **DA 139: Medical Emergencies in the Dental Office (2)**

Students learn the signs and symptoms of medical emergencies that may occur in a dental office. The role each member of the dental team plays during a dental emergency is examined. Special emphasis is placed on the responsibilities of the dental assistant supporting the dentist and staff in the event of a medical emergency. Introduction to pharmaceutical agents used to treat dental clients and dental office emergencies. The principles and techniques of acquiring patient vital signs are explained and practiced. Treatment provisions for the medically compromised and other special needs patients are defined and explored. Prerequisite: currently enrolled in Dental Assisting program. 2 lecture hr/week. W

### **DA 192: Dental Materials I (3)**

This course covers the composition, clinical properties, preparation, use and storage of materials used in dentistry.

Students will produce negative impressions and pour positive models. The proper techniques for mixing and dispensing various impression materials, dental cements, liners, bases and restorative products are illustrated and applied. Prevention of cross contamination is established. Prerequisite: currently enrolled in Dental Assisting program. 2 lecture, 3 lab hrs/week. F

### DA 195: Chairside Procedures I (4)

The Chairside Procedures I course introduces students to the science of dentistry. This course prepares students to control infection, prevent disease, adhere to OSHA Standards, and safely manage hazardous materials. This course instructs students on proper moisture control techniques as well as an introduction to dental hand instruments, rotary instruments and hand pieces. The students are introduced to basic procedures including amalgam and composite. Dental unit waterlines and ergonomically safe practices are also covered. Prerequisite: currently enrolled in Dental Assisting program. 3 lecture, 3 lab hrs/week. F

### DA 196: Chairside Procedures II (4)

Chairside Procedures II helps prepare the student for the unlimited diversity of clinical responsibilities in both general and specialized settings. Students will be provided with a level of knowledge that will enable them to operate as competent chairside assistants. Dental specialties will be discussed as well as the instrumentation and principle procedures specific to each discipline. Post-operative instructions for common procedures will be presented and practiced in both the didactic and clinical setting. Prerequisite: currently enrolled in Dental Assisting program and DA 195. 3 lecture, 3 lab hrs/week. W

### DA 198: Dental Materials II (2)

In this course students will apply the principle and secondary uses, advantages, disadvantages and limitations of various dental materials. Students will refine their impression taking and model pouring skills as well as fabricate custom trays. Preparation of articulation, occlusal bite, and presentation of models as a diagnostic tool will be completed by the students. Materials and procedures specific to: Orthodontics, Endodontics, Prosthodontics, and Aesthetic specialties are covered. Prerequisite: currently enrolled in Dental Assisting program and DA 192 and DA 196. 1 lecture, 3 lab hrs/week. W

### DA 199: Dental Office Procedures (3)

The business office in today's modern dental practice functions as a highly technological facility with skilled personnel. This course enables students to acquire the abilities to succeed in today's contemporary dental practice. Telephone management, appointment scheduling and recall procedures are covered. The financial aspects of running a business are explored and applied. Students will experience a hands on computer application to help them synthesize the basics of dental front office management including all aspects of insurance forms and billing. Marketing, communication and resume skills are presented and refined. Prerequisite: currently enrolled in Dental Assisting program. 3 lecture hrs/week. S.

### DA 210: Dental Radiology I (4)

This course provides instruction in terminology and the basic physics of x-ray production. Radiological health measures for both patient and operator are studied. Examination and operation of the dental x-ray unit is taught. Darkroom basics and film mounting are covered as well as film grading and criteria. Students are instructed in bitewing, paralleling, and bisecting the angle radiographic techniques. Instruction is provided in anatomy and landmarks as well as common exposure errors. Infection control in regards to exposing and developing dental radiographs is discussed. Prerequisite: currently enrolled in Dental Assisting program. 3 lecture, 3 lab hrs/week. F

### DA 211: Dental Radiology II (3)

This course provides the basis for various occlusal film projections, intra-oral periapicals and panoramic radiographs. Dental x-ray film composition and processing is discussed as well as clinical grading review. The needs of patients with special circumstances are addressed as well as legal and ethical issues pertaining to dental radiography. The history of radiology is presented as well as a discussion on digital radiography. Throughout the course emphasis is placed on preparing students for the DANB RHS (Dental Assisting National Board Radiation Health and Safety) written and clinical exams. 2 lecture, 3 lab hrs/week. W

### DA 214: Dental Radiology License Prep Course (1)

This elective radiology techniques course will provide a review for various occlusal film projection, intra-oral periapicals and panoramic radiographs. Taking dental x-rays, film processing and clinical grading is reviewed as it pertains to the understanding of completion of course work and licensing the Dental Assisting student with standards set by the licensing agency DANB. 3 lab hrs/wk. S

### DA 280: Cooperative Work Experience: Dental Assisting

This course provides the student with Dental Assisting work experience in community businesses. The student will have the opportunity to integrate theory and practice gained in the classroom with practical experience in the professional world. In this course a student may develop skills, explore career options and network with professionals and employers while earning credit toward a certificate. Prerequisite: Currently enrolled in the Dental Assisting program; instructor approval. 10 credits CWE, W (1 cr), S (9 cr)

## DRF – DRAFTING

### DRF 112: Computer Aided Drafting I (3)

This is a beginning level course, which introduces computer aided drafting (CAD). The AutoCad 2011 software is used to set up drawings and perform basic drawing and editing commands. Emphasis is on two-dimensional drawings and engineering architectural aspects of computer drafting. This is an online enhanced course, meaning you are required to use online resources to pass this course. 2 lecture, 2 lecture/lab hrs/wk. F

### DRF 113: Computer Aided Drafting II (3)

Advanced two-dimensional, computer-aided drafting (CAD) commands and skills, integrated with engineering graphics. Orthographic and multi-view drawings are created using AutoCAD software. Emphasizes plotting final drawings to scale and following drafting standards, including standards for dimensioning, text, line weights, and title blocks. Registration-Enforced Prerequisites: CIV 112 or DRF 112, with a grade of C or better. 2 lecture, 2 lecture/lab hrs/wk. W



### **DRF 116: Computer Aided Drafting – Structural Drafting (3)**

This is an advanced level drafting course which introduces structural drafting processes for the computer aided drafter. AutoCad software is used to set up drawings and create basic structural drawings. Emphasis is on two-dimensional drawings and structural engineering computer drafting. Registration-Enforced Prerequisites: CIV 113 or DRF 113, with a grade of C or better. 2 lecture, 2 lecture/lab hrs/wk. S

### **DRF 280: Cooperative Work Experience: Drafting (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **ECON – ECONOMICS**

### **ECON 115: Introduction to Economics (3)**

Introduction to Economics is a course that focuses on the definition of economics and the application of economic analysis. This analysis will be conducted within the students own life, within business applications, product and labor markets, national monetary and fiscal policy, and international trade. Current issues will be used whenever possible to illustrate fundamental concepts. Reference and use of current internet and other research sites will be utilized to provide the students with an option for lifelong research into economics. 3 lecture hrs/wk. F, W

### **ECON 201: Microeconomics (4)**

A more advanced study into the social science of economics. These courses are designed for students seeking a transfer degree. The courses are taught in sequence and require students to be comfortable with general writing, general math concepts, basic graphing, and have access to a computer with internet capability. The courses require students to be comfortable with general writing, general math concepts, basic graphing, and have access to a computer with internet capability. Recommended but not required prerequisites: ECON 115, WR 121, WR 122, WR 123, and MTH 111 or any equivalent courses.

ECON 201 provides an overview of microeconomic concepts and analysis, supply and demand analysis, theories of the firm and individual behavior, competition and monopoly, and government policy influences on economics. Students will be introduced to the use of microeconomic applications including the use of economic graphs to address problems in current economic policy. 4 lecture hrs/wk. F, S

ECON 202 provides an overview of macroeconomic issues: the determination of output, employment, unemployment, interest rates, and inflation. Monetary and fiscal policies are discussed, important policy debates such as, the sub-prime crisis, social security, the public debt, and international economic issues are critically explored. The course introduces basic models of macroeconomics and illustrates principles with the experience in the U.S. economic system along with contrast and comparison to various international models. 4 lecture hrs/wk. W

### **ECON 202: Macroeconomics (4)**

Discussion and demonstration of increase in individual skills with an emphasis on advanced progression, participation and advanced skill development. Registration-Enforced Prerequisite: ECON 201. 4 lecture hrs/wk. W

### **ECON 280: Cooperative Work Experience: Economics (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S

## **ED – EDUCATION**

### **ED 100: Introduction to Education (3)**

An introductory course in the field of education. Students will be introduced to essential understandings of current practices in K-12 schools today. The class is an opportunity for students considering a career in education to reflect on key issues and gain practical experience in classrooms. Instructor approval required to ensure students have completed the background history check, and MMR vaccination verification before coursework can begin. 1 lecture hr/wk. Six practicum hrs/wk. F, S

### **ED 101: Early Childhood Education Seminar & Practicum I (4)**

Discussion centered on ECE lab activities, behavior management and problem-solving techniques. Practical work experience will provide the student with a variety of experience working with children in early childhood programs under the close supervision of the instructional staff. Students work with children individually and in small groups and supervising children in outdoor activities. Prerequisites: Oregon Childcare Registry enrollment required. Instructor approval required to ensure students have completed the background history check, MMR vaccination verification and a food handler's certificate before coursework can begin. NOTE: Students registered on the Oregon Registry Step 7 may begin from ED 102 through to their desired level of Practicum. 2 lecture, 6 practicum hrs/wk. F, W, S

### **ED 102: Early Childhood Education Seminar & Practicum II (4)**

Classroom time with ECE seminar instructor concerning practicum experiences — guidance of young children. Students will gain experience working with young children in an organized group setting, and will assist with supervision of the various daily activities in an ECE program. Prerequisites: ED 101, Oregon Childcare Registry enrollment, including background check, food handler card and MMR vaccine. NOTE: Students registered on the Oregon Registry Step 7 may begin from ED 102 through to their desired level of Practicum. 2 lecture, 6 practicum hrs/wk. F, W, S



## **ED 103: Early Childhood Education Seminar & Practicum III (4)**

Classroom time with ECE seminar instructor concerning practicum experiences - guidance of young children. Practical experience working with young children in the ECE lab. Activities and projects carried out will be student planned and implemented — more responsibility for student. Prerequisite: ED 102, Oregon Childcare Registry enrollment, including background check, Infant/Child First Aid and CPR and Food Handlers Certificate. 2 lecture, 6 practicum hrs/wk. F, W, S

## **ED 104: Early Childhood Education Seminar & Practicum IV (4)**

Classroom time with Early Childhood Educational seminar instructor concerning practicum experiences-guidance of young children. Practical experiences working with children. Explore interpersonal skills in order to function as a team member in planning and carrying out a comprehensive program for children. 2 lecture, 6 practicum hrs/wk. Prerequisite: ED 103, Oregon Childcare Registry enrollment, including background check, Infant/Child First Aid and CPR and Food Handlers Certificate. F, W, S

## **ED 105: Early Childhood Education Seminar & Practicum V (4)**

Discuss one's own teaching style and the relationship of a teacher to children and parents. Practical experiences working with children. Explore interpersonal skills in order to function as a team member in planning and carrying out a comprehensive program for children. Prerequisite: ED 104, Oregon Childcare Registry enrollment, including background check, Infant/Child First Aid and CPR and Food Handlers Certificate. 2 lecture, 6 practicum hrs/wk. F, W, S

## **ED 106: Early Childhood Education Seminar & Practicum VI (4)**

Review state and local regulations and agencies that deal with young children. Plan to implement programs that provide positive learning experiences for the individual child and groups. Assist with administrative and supervisory tasks. 2 lecture, 6 practicum hrs/wk. Prerequisite: ED 105, Oregon Childcare Registry enrollment, including background check, Infant/Child First Aid and CPR and Food Handlers Certificate. F, W, S

## **ED 113: Classroom Techniques in Reading & Language Arts (3)**

Introduces the nature of the reading process and presents a systematic approach to language arts instruction. Students learn to link literacy instruction and assessment to state content standards. Classroom observations require a background check. 3 lecture hrs/wk. (Currently not offered)

## **ED 114: Classroom Techniques in Math & Science (3)**

This course prepares instructional assistants to help children learn specific math and science concepts. This will help students apply concepts to solve problems and develop a positive attitude toward math and science. Classroom observations require a background check. 3 lecture hrs/wk. (Currently not offered)

## **ED 121, 122, 123: Leadership Development I, II, III (3,3,3)**

These courses are designed to provide emerging and existing leaders with the opportunity to explore the concept of leadership skills. The courses integrate readings, experiential exercises, films, and historical and contemporary readings on leadership.

**ED 121:** Leadership theory, philosophy, vision, goal-setting. F

**ED 122:** Decision making, team building, empowering and delegating. W

**ED 123:** Initiating change, managing conflict, leadership ethics, service. S

*May be taken singly or in any order, although sequence is recommended. 3 lecture hrs/wk.*

## **ED 125: Foundations of Learning Assistance (3)**

The purpose of this course is to introduce students to the field of learning assistance and the methods of effective tutoring. Students will be introduced to various topics that include but not limited to:

1. Basic Tutoring Procedures;
2. Effective Communication Strategies;
3. Individual and Group Dynamics in learning assistance;
4. The Role of Cultural Awareness and Understanding Culture Shock;
5. Using Praise Effectively;
6. The Socratic Method;
7. Andragogy vs. Pedagogy;
8. Critical Thinking
9. Thinking Ruts and Procrastination.

Registration-Enforced Prerequisite: WR 115 or higher. 3 lecture hrs/wk. F, W, S

## **ED 130: Classroom Management (3)**

Provides a foundation in comprehensive classroom management theory and application related to emotional education, management techniques, and problem-solving for effectively handling unproductive student behaviors in the classroom, the cafeteria, assemblies, on the playground, and on field trips. 3 lecture hrs/wk. (Currently not offered)

## **ED 131P: Instructional Strategies (3)**

This introductory course for educators focuses on the components of effective instruction. Students will design standards based activities that integrate multiple content areas, address the instructional needs of diverse learners and include appropriate strategies for assessment. 3 lecture hrs/wk. (Currently not offered)

## **ED 140: Introduction to Early Childhood Education (2)**

Focus on the historical and philosophical development of the field, programs, and major approaches to early childhood education and current trends in the field. Emphasis will be focused on early childhood education as a career. Students will become aware of professional organizations concerned with young children. 2 lecture hrs/wk. F

## **ED 150: Creative Activities for Children (3)**

Introduces creative activities suitable for preschool children in fields of art, music, dramatics, rhythms, games, finger plays, carpentry and water play. Development of the student's creative imagination will be stressed. Oregon Childcare Registry enrollment required, including a background check. 3 lecture hrs/wk. S

## **ED 154: Literature and Language for Children (3)**

This course provides an overview of literature and language development in young children. Quality children's literature, a rationale for the purpose of such literature, ways to implement its use, and ways to evaluate its appropriateness for young children are addressed. Lectures and demonstrations, reading and evaluations of children's books, and practical experiences with children and literature are included. Registration-Enforced Prerequisite: WR 121. 3 lecture hrs/wk. W

**ED 169: Overview of Students with Special Needs (3)**

This course is designed to introduce participants to categories of special education eligibility as defined by the Individuals with Special Disabilities Act. Through various activities students will learn to recognize, understand, and plan for instruction and/or tutoring for students with special needs. 3 lecture hrs/wk. W

**ED 178: Observing/ Guiding Behavior (3)**

Students will identify the guidance needs of young children and learn techniques and strategies to meet these needs. Exercises are designed to develop observation, recording and guidance skills. Students will be observing an early childhood education center. Oregon Childcare Registry enrollment required, including background check and verification of MMR vaccination. 3 lecture hrs/wk. S

**ED 200: Foundation of Education (3)**

This course will examine historical, philosophical, political, legal, and economic aspects of K-12 public education. Current issues and trends will also be explored. 3 lecture hrs/wk. W

**ED 209: Theory and Practicum (2)**

An introductory experience in an elementary or secondary classroom where the student experiences what teaching really is like, by “practice teaching” with an authorized supervising teacher. Prerequisite: Concurrent enrollment in ED 200. 6 lab hrs/wk.(Currently not offered)

**ED 229: Learning & Development (3)**

This class introduces the participant to theories of behavior, motivation and human development as applied to classroom practice and teaching/tutoring techniques. It also examines ways to personalize learning for a diverse student population. 3 lecture hrs/wk. S

**ED 235: Educational Technology (3)**

This course trains students in the preparation and use of media and technology in school settings. Students will develop an understanding of the role of media in learning and methods for incorporating media in instruction. Prerequisite: CIS 120 or Instructor approval. 3 lecture hrs/wk. F

**ED 240: Lesson & Curriculum Planning (3)**

Development of fundamental goals for facilitating growth and development of children in early childhood learning and care programs; planning daily and weekly program activities; emphasis on stimulating learning through a variety of materials and methods; building relations between home and early childhood learning and care programs. 3 lecture hrs/wk. W

**ED 244: Individual Learning for Preschoolers (3)**

Introduces students to methods of developing individualized learning materials in settings for preschool children. Designed specifically for people working with Early Childhood Education programs. Oregon Childcare Registry enrollment required, including background check and verification of MMR vaccination. 3 lecture hrs/wk. S

**ED 247: Administration of Child Care Centers (3)**

Overall view of administration and operation of child care centers: Site location and development, regulatory agencies and license requirements, policy formation and development, planning space and equipment, staff selection and management, boards and advisory committees, funding sources and legal responsibilities. 3 lecture hrs/wk. W, alternate years.

**ED 250: Essential Motivational Interviewing Strategies (1)**

This practice-based training class is designed for professionals in any setting who are working with people to change behavior. Participants will learn motivational interviewing as an approach to facilitating change, and its underlying principles. Participants will learn the spirit of motivational interviewing, ways of understanding motivation, the Stages of Change model. FRAMES, principles of motivational interviewing, five early strategies of motivational interviewing, how to evoke and facilitate “change talk”, when to be directive and non-directive, and how to recognize and respond to resistance. Participants will explore how to effectively adapt motivational interviewing concepts to the context of one’s work setting and role, including issues of complimentary service philosophies and approaches, program goals, service intensity, cultural congruence, and sequencing of services. 1 lecture hr/wk. Instructor approval required.

**ED 254: Instructional Strategies for English Language Learners (3)**

This course will examine pedagogical and cultural approaches which lead to successful acquisition of English Language skills and content knowledge. Classroom observations require a background check and verification of MMR vaccination. 3 lecture hrs/wk. (Currently not offered)

**ED 258: Multicultural Education (3)**

Introduces the philosophy, activities, and materials applied in developing a culturally-sensitive multicultural classroom and curriculum. 3 lecture hrs/wk. S

**ED 280: Cooperative Work Experience: Education or Practicum (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S

**EMS – EMERGENCY MEDICAL SERVICES**

**EMS 151: EMT Part 1 (5)**

Term one of a two-term series. Designed to train personnel to respond to emergency situations to render proper treatment in case of sudden emergencies, accidents or disasters. Course focuses on the recognition and treatment of shock, fractures, poisonings, burns, stroke and heart attack. Prerequisite: Completion of placement testing for reading at RD 90 or higher, writing skills at WR 115 or higher, and math at MTH 20 or higher. Must have a high school diploma, GED, or equivalent by the time of application for certification. Must meet standards as set by the Oregon State EMS Office for certification which includes health, driving, immunizations, and background check. Meets or exceeds intent of National Registry. 4 lecture, 2 lecture/lab hrs/wk. Fee: \$350. S. Program Coordinator Approval Required for Admission. F, S



## EMS 152: EMT Part 2 (5)

Term two of two-term series. After successful completion of EMS 152 the student can apply for certification at the state and national level for EMT Basic. Failure of this course will require retaking the full sequence of EMT Basic courses. Registration-Enforced Prerequisite: Successful completion of EMS 151. 4 lecture, 2 lecture/lab hrs/wk. Fee: \$350. W, Su

## EMS 170: Emergency Communication (2)

Communication systems, radio types, HEAR system, codes and correct techniques. 20 lecture hrs (1 wk). S

## EMS 171: Emergency Transport (2)

Ambulance operations, laws, maintenance, safety, emergency response driving and route planning. Fee: \$75. 20 lecture hrs (1 wk). S

## EMS 175: Introduction to Emergency Medical Services (3)

Organization, funding and role of ambulance and rescue services in medical care; personnel, history and trends, evaluation, planning, disaster response, training, leadership, career development. 3 lecture hrs/wk. F, S

## EMS 180: Crisis Intervention (3)

Intervention in behavioral crises of: sudden death, suicide, rape, murder, vehicle accidents, disease, trauma, and child abuse. Resources, supporting behavioral patterns, and handling emotional stress of the individual. Coping with emotional conflict within oneself. Prerequisite: EMS 151. 3 lecture hrs/wk. W

## EMS 251: Paramedic Part 1 (10)

Term one of a four-term series, plus specialty courses, in Paramedic education. The course begins with foundational competencies in medical terminology, patient assessment, airway and ventilation, pathophysiology of shock, intravenous access and limited pharmacology. Delivery of currently accepted protocols and procedures is applied to patients presenting the signs and symptoms consistent with emergencies in the above categories. Prerequisite: BI 231, BI 232, BI 233, WR 121, MTH 095, EMS 151, EMS 152, EMS 170, EMS 175, EMS 180, and MED 111 with a grade of C or better. Oregon Basic EMT or EMT Intermediate certification, current immunizations. 8 lecture, 4 lecture/lab hrs/wk. Fee: \$400. Program Coordinator Approval Required for Admission. F

## EMS 252: Paramedic Part 2 (8)

Term two of a four-term series, plus specialty courses, in Paramedic education. This course continues with objectives covered in EMS 251. This course will also cover Patient Assessment and Traumatic Injuries. Corequisite: EMS 261. Registration-Enforced Prerequisite: EMS 251. 6 lecture, 4 lecture/lab hrs/wk. Fee: \$400. W

## EMS 253: Paramedic Part 3 (8)

Term three of a four-term series, plus specialty courses, in Paramedic education. This course continues with objectives covered in EMS 251 & EMS 252. This course will also cover endocrine, abdomen, genitourinary, and environmental problems, anaphylaxis, toxicology, drug and alcohol abuse and infectious diseases. Corequisite: EMS 262. Registration-Enforced Prerequisite: EMS 252. 6 lecture, 4 lecture/lab hrs/wk. Fee: \$400. S

## EMS 254: Paramedic Part 4 (6)

Term four of a four-term series, plus specialty courses, in Paramedic education. This course continues with objectives covered in EMS 251, EMS 252, & EMS 253. This course will also cover patients with special needs, social issues, and chronic illnesses. This course also covers assessment-based management, clinical decision making, system status management, and crime scene awareness. A comprehensive final written and practical exam is included. Corequisite: EMS 263. Registration-Enforced Prerequisite: Completion of EMS 253. 4 lecture, 4 lecture/lab hrs/wk. Fee: \$400. Su

## EMS 261: Paramedic Clinical & Field Experience Part I (2)

Begin in-hospital clinical experience including direct patient care responsibilities necessary for completion of the educational goals and objectives. Patients are in a hospital/clinical setting with disease and injury conditions comparable to those the student will experience in the pre-hospital care situations. Begins field experience designed to expose student to disease and injury conditions. This segment begins the required 250 hours of clinical experience and number of pre-hospital calls necessary to fulfill the State curriculum. Department permission required. Corequisite: EMS 252. Prerequisite: Completion of EMS 251. Fee: \$200. 6 practicum hrs/wk. W

## EMS 262: Paramedic Clinical & Field Experience Part 2 (2)

Continue in-hospital clinical experience including direct patient care responsibilities necessary for completion of the educational goals and objectives. Patients are in a hospital/clinical setting with disease and injury conditions comparable to those the student will experience in the pre-hospital care situations. Continue field experience designed to expose student to disease and injury conditions. Department permission required. Corequisite: EMS 253. Prerequisite: Completion of EMS 252 & EMS 261. Fee: \$200. 6 practicum hrs/wk. S

## EMS 263: Paramedic Field Internship (4)

Field internship is the final phase of the student's paramedic education. The student will work on an emergency ambulance as a third team member where they will be evaluated by a Paramedic preceptor. The student will apply the didactic knowledge, psychomotor skills, and clinical instruction in delivering advanced patient care in the field setting. Department permission required. Corequisite: EMS 254. Prerequisite: Completion of EMS 253 & EMS 262. Fee: \$200. 12 practicum hrs/wk. Su

## EMS 280: Cooperative Work Experience: Emergency Medical Services (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## EMS 298: Independent Study: EMS (1-3)

Independent study on subjects outside the course curriculum or in-depth studies of a particular aspect of course content. Affords an opportunity for students with previous study in a subject area to pursue further investigations for credit. Registration-Enforced Prerequisite: Instructor, Department Chair, and Dean approval of study plan. 6 credits maximum total credit.

## ENG – ENGLISH

### ENG 104,105,106: Intro to Literature (4,4,4)

In the Introduction to Literature series, students are introduced to the conventions and characteristics of short fiction (ENG 104), drama (ENG 105) and poetry (ENG 106). In ENG 105, students get the opportunity to attend a play in Ashland. Through active reading, critical thinking, engaged discussion, and effective writing, students will learn to interpret, analyze, critically evaluate, and appreciate a variety of literature. The changing historical, political, and cultural contexts in which the works were produced will be examined, as will the remarkable diversity of writers and subject matter, including issues of race, ethnicity, class, gender, and sexual orientation. The courses also introduce students to literary theory, including technical terms and their application. The three courses need not be taken in sequence. Recommended Prerequisites: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 090 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. F, W, S

### ENG 107,108,109: World Literature (4,4,4)

ENG 107 examines the literature of Greece, Rome, the Bible and the European medieval period. ENG 108 covers the Renaissance, Neoclassical, Romantic, and Modern periods of Western literature as well as some contemporaneous literatures worldwide. ENG 109 deals exclusively with non-Western literatures, including those from Asian, African, and non-Western cultures worldwide. Courses need not be taken in sequence. Recommended Prerequisites: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 090 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. F, W, S

### ENG 201, 202: Shakespeare (4,4)

The Shakespeare sequence (ENG 201 and 202) provides an introduction to Shakespeare's dramatic work and poetry. It proceeds chronologically: ENG 201 focuses on selected comedies, tragedies, histories, and poems from Shakespeare's early to middle career; ENG 202 focuses on selected comedies, tragedies, romances, and poems from Shakespeare's middle to late career. Students will learn to interpret Shakespeare's work using a variety of critical strategies, including literary, historical, sociological, psychological, and philosophical approaches. They will study Shakespeare's language and poetry, including

a focus on vocabulary, figurative language, and allusions. Topics include early modern ideas and attitudes about gender, sexuality, class, and identity; Shakespeare's influences and sources, both classical and contemporary; historical and contemporary conventions of drama; changing perceptions of Shakespeare through history; Elizabethan and Jacobean politics in City and Court; Shakespeare's subversion and/or support of cultural norms; and Shakespeare's representation of women and other marginalized groups. Courses may be taken out of sequence. Available to both first-year and sophomore students. Recommended Prerequisites: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 090 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. ENG 201 - F, Su; ENG 202 - W, Su

### ENG 204, 205, 206: Survey of English Literature (4,4,4)

Class discussion emphasizes the content and meaning of the selections read. ENG 204: Principal works of the Old English, Middle English, and Renaissance periods in English literature. ENG 205: Selections from the principal English writers of the seventeenth, eighteenth, and early nineteenth centuries. ENG 206: Works of representative novelists, essayists, and poets from the Romantic period to the present day. Intercultural aspects of each era are emphasized. Courses may be taken out of sequence. Recommended Prerequisites: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 090 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. F, W, S

### ENG 230: Environmental Literature (4)

This course aims to explore the ways in which ideas about the physical or "natural" environment have been shaped into American literature. The course will survey a variety of important texts in this tradition and introduce students to different eras and genres, including early environmental thinkers, policy documents, progressive and radical writers, as well as gendered discourse. Students will employ critical writing, critical thinking and critical reading skills. Although this is a literature course, we will keep issues from environmental ethics and environmental history close at hand, and students will be invited to devote one paper to linking environmental questions to an area of their own interest. Recommended Prerequisites: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 090 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. S

### ENG 250: Intro to Mythology (4)

This is a survey of global myth and sacred texts, with emphasis on, but not limited to, those myths emerging within the confines of early Western civilizations. The course emphasizes an understanding of both the impetus for and development of sacred stories in a particular cultural context, and also the resulting influence of myth on the social, political, psychological and philosophical development of a particular people. The course examines the dominant themes of global myth in a comparative context. The course also examines the transition of stories emerging in oral tradition to those that become later literary texts. The course emphasizes both a scholarly and multicultural examination of global myth. 4 lecture hrs/wk. S

### ENG 253, 254, 255: Survey of American Literature (4,4,4)

This series of courses is a survey of American literature spanning pre-Columbian America to present day with emphasis on literary and cultural values. The courses are designed to introduce students to a variety of different writers and to help students develop a sense of how literature and culture has evolved from the pre-colonial period through the early 21st Century. In doing so, we will also explore the different forms popular in these periods, from sermons and autobiographies to short stories, poems, and plays. While students will be introduced to stylistic aspects of the texts, such as diction, imagery, meter, irony, dialogue, and metaphor, the course will focus on the relation between the literature and the historical and social context in which each work was written. The classes will cover a range of subjects, including representations of gender, class and race in American literature, using a variety of critical and analytical approaches. Courses need not be taken in sequence. Prerequisites: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 090 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. F, W, S

### ENG 260: Intro to Women's Literature (4)

This course introduces students to a wide range of works—poetry, short fiction, a novel, essays — by women writers in English traditions from the nineteenth and twentieth centuries. While learning to appreciate the aesthetic qualities of diverse literary works, the class will focus on ways these works illuminate a variety of issues pertinent to women, including the ways in which women are impacted by the patriarchal,



often misogynistic, views of the dominant culture of their time. Students will be introduced to feminist theory and literary criticism to help illuminate the role of gender and sexism in shaping identity and experience. We will also consider the ways that other markers of identity — such as class, race, ethnicity, and sexual orientation — intersect with gender, resulting in different forms and degrees of inequality and discrimination. Active reading, critical thinking, engaged discussion, and effective writing and speaking are emphasized. Recommended Prerequisite: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 090 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. Su

### **ENG 288: Cultural Diversity in Contemporary American Literature (4)**

In ENG 288, students are introduced to the conventions and characteristics of literary fiction. Through active reading, critical

thinking, engaged discussion and effective writing, students will learn to interpret, analyze, critically evaluate and appreciate a variety of literature. The changing historical, political and cultural contexts in which the works were produced will be examined, as will the remarkable diversity of writers and subject matter, including issues of race, ethnicity, class, gender and sexual orientation. The courses also introduce students to literary theory, including technical terms and their application. Recommended Prerequisites: WR 095 with a grade of C or better or appropriate placement test scores; AND RD 90 with a grade of C or better or appropriate placement test scores. 4 lecture hrs/wk. W

## **ENGR – ENGINEERING**

### **ENGR 111: Engineering Orientation I (3)**

Engineering as a profession, historical development, ethics, curricula and engineering careers. Introduction to problem analysis and solution, data collection, accuracy and variability. Registration-Enforced Prerequisite: MTH 065. 3 lecture hrs/wk. F

### **ENGR 112: Problem Solving and Technology (3)**

Systematic approaches to engineering problem solving using computers, spreadsheets, logical analysis, flow charting, input/output design, introductory computer programming. Registration-Enforced Prerequisite: ENGR 111. or FOR 111 or NR 201, 3 lecture hrs/wk.

### **ENGR 201: Electrical Fundamentals I (4)**

Introduces students to basic circuit elements and circuit analysis techniques. Covers Ohm's and Kirchhoff's Laws, network theorems, node voltage analysis and mesh current analysis. Operational amplifiers, inductors, capacitors, RC and RL transient response are also covered. Circuit simulation, math analysis software, and laboratory experiments are incorporated to solidify classroom theory and practice. Corequisite: MTH 251. 3 lecture, 3 lab hrs/wk. F

### **ENGR 202: Electrical Fundamentals II (4)**

Covers RLC circuits, transformers, AC power, and three-phase power. Explores steady state sinusoidal analysis and phasor techniques. Introduces the Laplace Transform. Also incorporated is circuit simulation, math analysis software, and laboratory experiments to solidify classroom theory and practice. Corequisite: MTH 252. 3 lecture, 3 lab hrs/wk. W

### **ENGR 203: Electrical Fundamentals – Signals and Controls (4)**

Covers transient circuit analysis-RL, RC, RLC. Introduces LaPlace Transform and its use in circuit analysis, the transfer function, Bode diagram and two port networks. Registration-Enforced Prerequisites: ENGR 202. 3 lecture, 2 lecture/lab hrs/wk. S

### **ENGR 211: Statics (4)**

Analysis of forces induced in structures and machines by various types of loading. Corequisite: MTH 251. 4 lecture hrs/wk. F

### **ENGR 212: Dynamics (4)**

Kinematics, Newton's laws of motion, and work-energy and impulse-momentum relationships applied to engineering systems. Prerequisite: ENGR 211, MTH 251. 4 lecture hrs/wk. W

### **ENGR 213: Strength of Materials (4)**

Properties of structural materials; analysis of stress and deformation in axially loaded members, circular shafts, and beams and in statically indeterminate systems containing these components. Prerequisite: ENGR 211. 4 lecture hrs/wk. S

### **ENGR 245: Engineering Graphics (3)**

This course is an introduction to technical graphics as used for the communication of concepts in design and manufacturing, with practical applications using solid modeling software to capture design intent and to generate engineering drawings. SolidWorks is the computer software used for the course. Registration-Enforced Prerequisites: CIV 112 or DRF 112, with a grade of C or better. 2 lecture, 2 lecture/lab hrs/wk. S

### **ENGR 271: Digital Logic Design (3)**

Provides an introduction to digital logic and state machine design. Covers logic design, including logic gates, gate minimization methods and design with standard medium scale integration (MSI) logic circuits. Includes basic memory elements (flip-flops) and their use in simple-state machines. Registration-Enforced Prerequisites: ENGR 201. 3 lecture hrs/wk. S

### **ENGR 272: Digital Logic Design Lab (1)**

A lab to accompany ENGR 271 Digital Logic Design. Illustrates the topics covered in ENGR 271 using computer-aided design, verification tools and photocopying hardware. Registration-Enforced. Prerequisite: ENGR 201. 2 lecture/lab hrs/wk. S



## ES - EMERGENCY SERVICES

### ES 101: Principles of Emergency Services (3)

This course provides an overview to fire protection and emergency services. This course compares the function of public and private EMS and fire protection services. This course introduces the student to local government laws and regulation affecting the fire service, fire service nomenclature and specific fire protection functions. This course will also introduce the students to basic fire chemistry and physics, firefighting strategy and tactics life safety initiatives, and fire protection systems.

3 lecture hrs/wk. F, S

### ES 103: Occupational Safety and Health for Emergency Services (2)

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency services operations. 2 lecture hrs/wk. W

### ES 107: Legal Aspects of Emergency Services (2)

This course addresses federal, state and local laws that regulate emergency services and includes a review of national standards and consensus standards. 2 lecture hrs/wk. S

### ES 109: Principles of Fire and Emergency Service Administration (FESA) (3)

This course introduces the student to the organization management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer. 3 lecture hrs/wk. W.

### ES 113: Emergency Medical Services Rescue (3)

Covers the elementary procedures of rescue practices, systems, components, support and control or rescue operations including basic rescue tools. Introduces techniques and tools of patient extraction emphasizing application to traffic accidents and low angle rescue.

3 lecture/lab hrs/wk. Su

## FA – FILM ARTS

### FA 256: American Film History (4)

American Film History is an introductory course designed to bring American film into clear focus as an art form, a business, and a cultural phenomenon. The course explores how feature films work technically, artistically, and culturally. The course will probe the deeper meaning of American movies — the hidden messages of genres, the social and psychological effects of Hollywood film style, and mutual influence of society and popular culture.

4 lecture hrs/wk. F

## FN – FOOD & NUTRITION

### FN 225: Human Nutrition (4)

A study of the biochemical nature of food nutrients; the physiological means of digestion, absorption, and transport; and the metabolic pathways involved in their disposition by the body. Includes fundamental chemical and biological concepts relevant to nutrition, diet-assessment procedures, and the relationship between diet and health, body composition, and physical fitness/athletic performance. Basic biology and chemistry preferred. 4 lecture hrs/wk. F, W, S

### FN 230: Personal Nutrition (3)

Personal and social aspects of nutrition and basic nutrients as they apply to growth and development throughout the life cycle. Emphasis on the health and safety of the young child. Activities relate to the application of nutrition knowledge to everyday life. 3 lecture hrs/wk. F, W, S

## FOR - FORESTRY ENGINEERING

### FOR 111: Introduction to Forestry (3)

Introduction of forest resources in the world; forests and human well-being; where and how forests grow; environmental and human values; products, characteristics, and uses; basic elements of use, planning and management. Interpretation of forestry literature; professional origins in the U.S. Field trips required. 2 lecture, 3 lab hrs/wk.

### FOR 112: Problem Solving and Technology (3)

Systematic approaches to engineering problem solving using computers and technology. Logical analysis, flow charting, input/output design, introductory computer programming are covered. Two distinct software applications are covered in this course-Microsoft Excel and MathWorks MATLAB. This course is cross listed as both ENGR 112 and FOR 112. Registration Enforced Prerequisite: ENGR 111 or FOR 111 or NR 201.

3 lecture hrs/wk. W

### FOR 141 - Tree and Shrub Identification (3)

Identification of the principal forest trees of North America, emphasizing trees and shrubs of SW Oregon and N California. Introduction to the forested regions of the world, and to the structure and function of woody plants. This is a hybrid course -- during spring term, students must enroll in the online NR 141 course. A six-day field tour of Southwestern Oregon and Northern California will follow in early summer. The use of cameras and field notebooks for documenting tree and shrub identification, location and habitat will be emphasized. The field tour will highlight the use of botanical keys to identify native woody plants while touring through regional plant communities. The tour will leave from the UCC campus, and will likely include stops in the Siskiyou Mountains, Smith River, Redwood State and National Parks, Trinidad State Beach, the Trinity River, the Mt. Hood/McCloud River area, McArthur-Burney Falls State Park, Lava Beds National Monument, Crater Lake National Park, the North Umpqua River, and other sites of botanical interest before returning to UCC. Students should be reasonably fit and prepared to hike several miles over the course of the tour on easy to moderately difficult trails, and to camp at improved campsites each night. This is an extended spring term course and grades will be awarded after the tour during the following summer term. A fee is required to cover transportation, food and camping. 11 lecture hours online, 44 lecture/lab hrs. on the tour. S

### FOR 161: Surveying I (4)

Course includes the fundamental concepts of plane surveying including the theory of measurements; systematic and random errors; distance and angle measurement using total stations and differential leveling. Course also includes calculation of bearings, azimuths, coordinates, area, and traverse adjustments with an introduction to horizontal and vertical curve computations. Registration-Enforced

Corequisite: MTH 112, with grade of C or better or instructor approval. 2 lecture, 4 lecture/lab hrs/wk. S

### **FOR 201 - Introduction to Natural Resources (3)**

Introductory course for Natural Resources majors. Overview of the underlying principles and complexities involved in managing natural resources of the Pacific Northwest. Investigation of major natural resource issues of the region. Development of critical thinking and collaboration skills useful in seeking solutions. 3 lecture hrs/wk.

### **FOR 206: Soil Science Lab (1)**

Laboratory exercises and field trips designed to develop student competency in soil processes, description, analysis, and assessment with a particular emphasis on the role of soils in managed and unmanaged forest ecosystems. Registration-Enforced Prerequisite/Corequisite: SOIL 205. 3 lab hrs/wk. S

### **FOR 209: Photogrammetry and Intro to Remote Sensing (4)**

Management and conservation of natural resources with the fundamentals of spatial data acquisition from airborne and spaceborne sensors. Introduction to theory of spectral reflectance properties of vegetation, the principles of photographic analysis and aerial photo-interpretation and new advances such as LIDAR. Registration-Enforced Corequisite/Prerequisite: MTH 112. 3 lecture, 3 lab hrs/wk.

### **FOR 234: GIS I Introduction to Geographic Information Systems (4)**

This course is designed as an introduction to Geographic Information Systems and the spatial concepts it promotes. An understanding of digital geographic information and the intelligence behind it will be understood. ArcGIS is the software program used for spatial data input, analysis, and display. 3 lecture, 2 lecture/lab hrs/wk. W

### **FOR 240 - Forest Biology (4)**

Forest Biology is a basic course that provides a broad foundation in biology that is relevant to many natural resource issues. This course examines forest biology at multiple levels of organization, from molecules to the globe; principles of ecosystem dynamics in managed and unmanaged forest communities, landscapes and bioregions;

coevolution of competition, predation, decomposition, and mutualism; energy flow, nutrient cycles and feedback controls; the effects of disturbance and succession on carbon storage, biodiversity, and habitat stability through time. Registration-Enforced Prerequisite: completed course in Biology or Natural Resources or instructor approval. 3 lecture, 3 lab hrs/wk. F

### **FOR 241 - Dendrology (4)**

Identification of the principal forest trees of North America, emphasizing trees and shrubs of the Pacific Northwest. Other topics include the ranges over which these species grow, their structure and function, important ecological characteristics, and principal uses. We will also survey forested biomes of the world. Field trips required on and off campus. This course is cross listed as both NR 241 and FOR 241. Registration-Enforced Prerequisite: previous course in Biology or Natural Resources or Instructor's consent. 3 lecture hrs/wk.

### **FOR 261 - Recreation Resource Management (4)**

Overview of recreation resource management including study of land and water resources used for outdoor recreation. The planning and management of natural and cultural resources for long-term resource productivity, with a focus on rural and wildlife areas of the forest, range and coast. 4 lecture hrs/wk. S

### **FOR 280: Cooperative Work Experience: Forestry (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year, except for students taking Occupational Skills Training (OST) which has a limit of 24 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **FR – FRENCH**

### **FR 101: First-Year French (4)**

Through active classroom participation the student will develop the basic skills of speaking, listening, reading and

writing in French. The course emphasizes the learning of French within a culturally-authentic context, while introducing the student to the diversity of the French-speaking world. Registration-Enforced Prerequisite: WR 115 with a grade of C or better. 4 lecture hrs/wk. F (Not offered 2018-2019)

### **FR 102: First-Year French (4)**

Students will further develop the basic skills of speaking, listening, reading and writing. The course emphasizes oral communication and listening comprehension within a culturally-authentic context. Students will deepen their awareness of the French-speaking world. Registration-Enforced Prerequisite: WR 115 and FR 101 with a grade of C or better. 4 lecture hrs/wk. W (Not offered 2018-2019)

### **FR 103: First-Year French (4)**

Students will practice active communication while strengthening speaking, reading, writing, and listening skills within a culturally-authentic context. Through the study of literature and other media, students will deepen their awareness of the French-speaking world. Registration-Enforced Prerequisite: WR 115 and FR 102 with a grade of C or better. 4 lecture hrs/wk. S (Not offered 2018-2019)

### **FR 201: Second-Year French (4)**

This course promotes intensive development of oral and written French language skills. Students will review and expand on first-year structural patterns and vocabulary by integrating listening, speaking, reading, and writing skills. In-depth exploration of cultures is offered through the use of authentic materials from the French-speaking world. Conducted in French. Registration-Enforced Prerequisite: FR 103 with a grade of C or better or equivalent. 4 lecture hrs/wk. F (Not offered 2018-2019)

### **FR 202: Second-Year French (4)**

This course continues an in-depth development of oral and written French language skills with further emphasis on vocabulary and complex grammatical concepts. In-depth exploration of cultures is offered through the use of authentic materials from the French-speaking world. Conducted in French. Registration-Enforced Prerequisite: FR 201 with a grade of C or better or equivalent. 4 lecture hrs/wk. W (Not offered 2018-2019)



**FR 203: Second-Year French (4)**

This course promotes continued development of French language skills through in-depth oral activities and discussions of themes, analysis of current events relating to the French-speaking world; and the use of written materials as a means of communication. In-depth exploration of cultures is offered through the use of authentic materials from the French-speaking world. Registration-Enforced Prerequisite: FR 202 with a grade of C or better or equivalent. 4 lecture hrs/wk. S (Not offered 2018-2019)

**FR 211, 212, 213: Conversational French (3,3,3)**

This course provides students with an opportunity for intensive speaking and listening practice to improve oral/aural communication skills in French. Students will learn new vocabulary and expressions through reading and listening activities from culturally authentic sources representative of the Francophone world. Students will apply these concepts to communicate in conversations, interviews, and role-play skits with other students. Prerequisite: FR 203 or equivalent. 3 lecture hrs/wk. F, W, S (Not offered 2018-2019)

**FRP – FIRE PROTECTION TECHNOLOGY**

**FRP 101: Fire Fighter Safety & Survival (3)**

The course is designed for entry-level fire fighters as well as company and chief fire officers. Emphasis is placed on reducing future injuries and deaths through improving safety behaviors through a study of case reviews, group exercises, and individual research work. Meets or exceeds intent of: NFPA 1021-3-7, 3-7.1, NFPA 1521 5.1-5.14. 3 lecture hrs/wk.

**FRP 111: Building Construction for Fire Suppression (3)**

This course provides the components of building construction related to firefighter life and safety. The elements of construction and design to structure are shown to be key factors when inspecting buildings, preplanning fire operations and operating at emergencies. 3 lecture hrs/wk.

**FRP 121A: Elementary Fire Science Part 1 (4)**

Elementary Fire Science covers basic firefighting skills of a firefighter including the following: Principles of Fire Behavior,

Fire Streams, Ventilation, Breathing Apparatus, Search and Rescue Practices, Ropes and Knots, Portable Fire Extinguishers, Ladders, Fire Hose, Salvage Covers, Small Hand Tools, and Firefighter Safety. This class is part 1 or a two-part class leading to NFPA/DPSST firefighter certification. 3 lecture, 2 lecture/lab hrs/wk. F

**FRP 121B: Elementary Fire Science Part 2 (4)**

Elementary Fire Science Part 2 covers advanced firefighting skills of a firefighter including the following: Exterior and interior structural fire attack, Search and Rescue Practices, Understand the Mayday procedures. Demonstrate controlling vehicle fires, working in an ICS management system. The student will use Principles of Fire Behavior, Fire Streams, Ventilation, Breathing Apparatus, Search and Rescue Practices, Ropes and Knots, Portable Fire Extinguishers, Ladders, Fire Hose, Salvage Covers, Small Hand Tools, and Firefighter Safety learned in part 1 of this class. This class is part 2 of a two part course leading to NFPA/ DPSST firefighter certification. 3 lecture, 2 lecture/lab hrs/wk. F

**FRP 122: Fundamentals of Fire Prevention (3)**

This course explores the fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; and life safety education; fire investigation. 3 lecture hrs/wk. F

**FRP 123: Hazardous Materials Awareness/Operations (4)**

Hazardous Materials is designed for entry-level firefighters, as well as industrial fire brigade or safety team members. This course covers how to recognize and handle emergencies involving hazardous materials, within the scope of an Awareness and Operations level responder. It includes: hazard recognition, responding, intervening, and stabilizing the situation. 4 lecture hrs/wk. F

**FRP 132: Fire Pump Construction and Operation (3)**

Theory of pump operation, types and features of various pumps, practical operation of fire pumps and accessories. Includes drafting, hydrant and tanker operations, and "rule-of-thumb" fire ground hydraulic calculations. Students should also receive actual practice using local department's apparatus. Meets or exceeds intent of: NFPA 1001-5.1, 5.2,

NFPA 1002-4.1, 4.2, 4.3, 5.1, 5.2, 8.1, 8.2, 10.1, 10.2 Annex B.1. Registration-Enforced Prerequisite: Second-year standing or instructor approval. 2 lecture, 2 lecture/lab hrs/wk. S

**FRP 133: Natural Cover Fire Protection (3)**

Studies causes, prevention, fire behavior, standing orders, and fire suppression methods of natural cover fires. Focuses on urban interface fire problems. Meets or exceeds intent of: NWCG-S-130, S-190, I-100, L180. 3 lecture hrs/wk.

**FRP 135: Hazardous Materials Chemistry (2)**

This course explores basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency services. 1 lecture, 2 lecture/lab hrs/wk. W

**FRP 151A, B, C: CPAT Training (3)**

This is a sequential course that progresses from A to C through the academic year. New students must attend these classes in order unless they have instructor approval. Classes consist of daily physical training including jogging, running, weight lifting, stretching, and drills that familiarize the student with CPAT events. Each part has a time requirement that decreases through the sequence until a desired time is achieved. 9 lab hrs/wk.

**FRP 159: Fire Behavior and Combustion (2)**

This course explores the theories and fundamentals of how and why fires start, spread and how fires are controlled. 1 lecture, 2 lecture/lab hrs/wk. F

**FRP 163: NFPA Fire Instructor I (2)**

This course provides the student with the basic understanding to be an effective instructor. The class will teach principles of adult learning. The class will describe how to manage a classroom including how to prepare course outlines and lesson plans. The class will discuss training aids and devices. The class will also describe how to evaluate students. This class leads to NFPA/DPSST certification as Fire Instructor I. Prerequisite: Second-year standing with fire protection agency or instructor approval. 2 lecture hrs/wk. F

**FRP 201A: Fire Rescue Practices – Rough Terrain (1)**

Introduction to techniques and equipment of vertical rescue operations and Fire Rescue Practices, for fire

department rescuers using advance rope and raising practices as per the NFPA 1670 standards. Meets or exceeds intent of: NFPA 1670 6.1-6.4. 12 lecture, 8 lab hours (1 weekend). S

### **FRP 201B: Fire Rescue Practices – Swift Water (1)**

This course is designed to provide students with knowledge and skills to function safely under emergency conditions present during water rescue operations. The students will use advanced rope and water rescue practices as per the NFPA 1670 standards. Meets or exceeds intent of: NFPA 1670 9.1-9.4. 12 lecture, 8 lab hours (1 weekend). Su

### **FRP 201C: Fire Rescue Practices – Vehicle Extrication (1)**

Elementary procedures of rescue practices, systems, components, support, and control of rescue operations. The students will use extrication techniques as per the NFPA 1670 standards. Meets or exceeds intent of: NFPA 1670 8.1-8.4. 12 lecture, 8 lab hours (1 weekend). W

### **FRP 201D: Swift Water Advance (2)**

Advance Fire Rescue Practices, for SR 1 rescuers using advance rope and water rescue practices as per the NFPA 1670 standards. Meets or exceeds intent of: NFPA 1670. 15 lecture, 25 lab hours (1 weekend). Su

### **FRP 202: Fire Protection Systems (3)**

This course provides information relating to the features of design and operation of fire alarm systems, waterbased fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. 3 lecture hrs/wk. W

### **FRP 212: Fire Investigation (3)**

This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause. Preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes. Prerequisite: Second-year standing or instructor approval. 3 lecture hrs/wk. W.

### **FRP 213: Fire Fighting Tactics & Strategy (3)**

This course provides the principles of fire ground control through utilization of personnel, equipment and extinguishing agents. This course explores fire service history, fire related laws, fire codes and national standards that effect developing and implementing firefighting tactics and strategies. Prerequisite: Second-year standing or instructor approval. 3 lecture hrs/wk. W

### **FRP 230: Fire Service Hydraulics (4)**

This course 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. 3 lecture; 2 lecture/lab hrs/wk. F

### **FRP 263: NFPA Fire Instructor II (2)**

Provides the fire service instructor with the knowledge and necessary skills needed to prepare class outlines and basic instructional materials needed to teach formalized classes. Areas covered include lesson plan preparation, selection and use of audio/visual aids, the learning/teaching process, student evaluation, and one practice teaching session. Meets or exceeds intent of: NFPA 10415.1-5.5. Prerequisite: FRP 163. 2 lecture hrs/wk.

### **FRP 270: NFPA Fire Officer I A (4)**

Designed to meet National Fire Protection Association Standard 1021 (NFPA). This is the first of a two-part series that explores a contemporary look at the duties and responsibilities of first-level supervisors and covers first-level supervisory functions associated with human resource management, community and government relations, fire administration, inspection and investigative emergency service delivery and safety. Registration-Enforced Prerequisite: Instructor approval required. 4 lecture hrs/wk. F, W, S

### **FRP 271: NFPA Fire Officer I B (4)**

Designed to meet National Fire Protection Association Standard 1021 (NFPA). This is the second part of the requirements of Fire Officer I and further explores the duties and responsibilities of first level supervisors and covers first level supervisors and covers first

level supervisory functions with human resource management, community and government relations, fire administration, inspection and investigative emergency service delivery and safety. Registration-Enforced Prerequisite: FRP 270. 4 lecture hrs/wk. F, W, S

### **FRP 280: Fire Related Skills (6 terms at 1 credit/term)**

Orientation to fire incident related experience courses, engine company organization, engine configuration, small tools and minor equipment carried, basic hose practices, basic hose lays, use of protective breathing apparatus, response, district maps, phantom box areas, communication procedures, fire apparatus driving practices. Completion of FRP 280 (6 credits) meets Department of Public Safety Standards and Training (DPSST) NFPA Fire Fighter I. 10-12 lab hrs/wk each. Registration-Enforced Prerequisite: Instructor approval required. F, W, S, Su

### **FRP 290: NFPA Fire Officer II A (4)**

Designed to meet National Fire Protection Association Standard 1021 (NFPA). This is the first of a two-part series that explores a contemporary look at the duties and responsibilities of second-level supervisors. This course covers second-level supervisory functions associated with human resource management, community and government relations, fire administration, inspection and investigation emergency service delivery and safety. Registration-Enforced Prerequisite: FRP 271. 4 lecture hrs/wk. F, W, S

### **FRP 291: NFPA Fire Officer II B (4)**

Designed to meet National Fire Protection Association Standard 1021 (NFPA). This course is the second part of the requirements of Fire Officer II and further explores the duties and responsibilities of second-level supervisors. This course covers second-level supervisory functions associated with human resource management, community and government relations, fire administration, inspection and investigation emergency service delivery and safety. Registration-Enforced Prerequisite: FRP 290. 4 lecture hrs/wk. F, W, S

## **G – GEOLOGY**

### **G 140: Volcanoes, Earthquakes and other Geologic Disasters (3)**

As Will Durant observed, "Civilization exists by geological consent, subject to change without notice." This course will investigate large natural events that impact society on a yearly basis, such as earthquakes, tsunamis, volcanoes, landslides, sinkholes and floods. This course will investigate both the geologic principles as well as the societal impacts of these events. Emphasis will be given to destructive solid-earth phenomena. 3 lecture hrs/wk. W

### **G 145: Geology of the Pacific Northwest (3)**

Geology and geologic history of the different provinces of Oregon, Washington, Idaho and adjacent regions of Nevada and California. Special attention paid to the intersecting geologic provinces in Douglas County: the Coast Range, Klamath and Cascade Provinces. 3 lecture hrs/wk. W, alternate years.

### **G 146: Rock and Minerals (4)**

This course is designed for non-science majors and those interested in amateur rock and mineral collecting. Crystal growth, form, and symmetry will be explored in the laboratory, as well as physical, chemical and optical properties of common rocks and minerals that aid in their identification in the field and laboratory. Special attention is paid to the occurrences of unique rock types and mineral deposits in Oregon. 3 lecture, 3 lab hrs/wk. (Not offered every year)

### **G 180: Regional Field Geology (4)**

This course is a field study of geology features and history in a selected region. Consists of on-campus meetings and a multi-day field trip to illustrate the geologic setting, stratigraphy, structure, topography, age, origin, specific events through geologic time, and features unique to the region. 3 lecture, 3 lab hrs/wk. S

### **G 201, 202, 203: General Geology (4,4,4)**

An introduction to the study of the earth, physical processes affecting the earth, and events of earth history that have shaped it. G 201: Earth materials, rocks and minerals, volcanism, geophysics and seismology, plate tectonics. G 202: Surficial

processes, weathering, mass wasting, erosion. Landforms of deserts, coasts, rivers, glaciers. Environmental topics; mining, climate change, fossil fuels, ground and surface water use, and waste disposal. G 203: History of the earth and the fossil record as recorded in the sedimentary sequence. MTH 060 recommended. Optional field excursions to areas of geologic interest. May be started any term. 3 lecture, 3 lab hrs/wk. F, W, S

### **G 213: Geology of the National Parks (3)**

This course is intended for non-science majors who wish to explore the landscape formation and geologic history of North America's scenic National Parks. Of use or interest to outdoor recreation majors, those intending to work on our public lands, education, or geology majors. 3 lecture hrs/wk. F

### **G 221: Environmental Geology (4)**

This course will emphasize the occurrence and distribution of geologic hazards, such as earthquakes, volcanoes, flooding, and slope failure and geologic resources, such as water, air, minerals and energy. The interactions between humans and the geologic environment, including mitigation strategies, will also be covered. 3 lecture, 3 lab hrs/wk. F

## **GER – GERMAN**

### **GER 101,102,103: First-Year German (4,4,4)**

Survey of German grammar with the aim of mastering all the grammatical forms. Development of speaking ability. Reading and understanding of simple texts. Must be taken in sequence, but entrance permitted at any level. Recommended Prerequisite: WR 095 with a grade of C or better or placement test scores of 70 or above in writing; AND RD 090 with a grade of C or better or placement scores of 85 or above in Reading. 4 lecture hrs/wk. F, W, S (Not offered 2018-2019)

### **GER 201, 202, 203: Second-Year German (4,4,4)**

Systematic discussion of selected grammatical difficulties. Intermediate composition. Reading and discussion of contemporary literary texts. Studies German-speaking countries in general, their people and customs, and their cultural contribution to the Western Hemisphere. Prerequisite: GER 103 or equivalent. 4 lecture hrs/wk. F, W, S (Not offered 2018-2019)

### **GER 211, 212, 213: Conversational German (3,3,3)**

Continuation of the audio-lingual method of GER 201-3. Review of grammar patterns. Expansion of conversational and written skills plus vocabulary through oral discussion and written exercises. Writing German essays on historic and current issues in Germany. Reading and discussion of select German literature. Participate in community activities with students in GER 101-203. Prerequisite: GER 203 or equivalent. 3 lecture hrs/wk. F, W, S (Not offered 2018-2019)

## **GIS – GEOGRAPHIC INFORMATION SYSTEMS**

### **GIS 203: Digital World and Geospatial Concepts (4)**

Introduction to geospatial technologies such as GPS, smartphones, mobile devices, and online mapping and navigation tools used in GIS, remote sensing, and geovisualization. Introduction of how present day information systems attempt to represent the features and attributes of our natural world in digital form. Examination of how these systems can be used to portray and solve geospatial problems. Introduction to the concept, vocabulary, and use of GIS. Concepts and applications in government, business, and the environment. 3 lecture, 2 lecture/lab hrs/wk. F

### **GIS 234: GIS I Introduction to Geographic Information Systems (4)**

This course is designed as an introduction to Geographic Information Systems and the spatial concepts it promotes. An understanding of digital geographic information and the intelligence behind it will be understood. ArcGIS is the software program used for spatial data input, analysis, and display. 3 lecture, 2 lecture/lab hrs/wk. W

### **GIS 235: GIS II Data Analysis and Applications (4)**

Applications-based course. Develop and conduct geospatial analyses using various spatial data structures, techniques and models. Students acquire, clean, integrate, manipulate, visualize and analyze geospatial data through laboratory work. Import feature and non-feature data into a GIS. Data Conversion. Use of hand-held GPS/GIS units. Use and create web-based GIS applications and services. 3 lecture, 2 lecture/lab hrs/wk. S

## **GIS 280: Cooperative Work Experience: Geographic Information Systems (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year except for students taking Occupational Skills Training (OST), which has a limit of 24 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **GS – GENERAL SCIENCE**

### **GS 104: Physical Science (4)**

Elementary concepts of physics including motion, forces, energy and momentum, and thermodynamics. Should not be taken for credit if student has completed six or more hours of college-level courses in physics. Registration-Enforced Prerequisite: MTH 060. 3 lecture, 3 lab hrs/wk. F

### **GS 105: Physical Science (4)**

Elementary concepts of chemistry including atomic structure, bonding, states of matter, solutions, chemical reactions, nuclear and organic chemistry. Should not be taken for credit if student has completed six or more hours of college-level courses in chemistry. Registration-Enforced Prerequisite: MTH 060. 3 lecture, 3 lab hrs/wk. W

### **GS 106: Physical Science (4)**

Elementary concepts of earth science including rock and mineral formation, plate tectonics, earthquakes, volcanoes and other surface processes. Should not be taken for credit if student has completed six or more hours of college-level courses in geology. Registration-Enforced Prerequisite: MTH 060. 3 lecture, 3 lab hrs/wk. S

### **GS 107: Beginning Astronomy (4)**

Introductory course in Astronomy for non-science majors featuring the scientific method; study of planetary and lunar motion including phases of the moon and eclipses; the sun, moon, planets, asteroids, comets, and meteors. Students will learn about the night sky and constellations; formation and destruction of stars; our galaxy and other galaxies;

and cosmology. Lab required with either at home night sky observing or optional on-campus observing. Required use of campus observatory either online or on-site for lab projects. Class is completely online with optional and highly recommended use of campus observatory. 3 lecture, 3 lab hrs/wk. Su

### **GS 112: Making Sense of Science (4)**

A course for non-science majors on the processes and methods of scientific inquiry and how “scientific knowledge” is perceived differently from other types of knowledge. Students will develop skills to analyze and evaluate societal issues that involve scientific knowledge. Laboratory work, student collaboration and peer review are designed to simulate the processes involved in scientific inquiry within a scientific community. 3 lecture hrs/3 lab hrs/wk. F

### **GS 113: Intro to Geology (3)**

A survey course providing a comprehensive study of the Earth’s physical processes and properties, with emphasis on understanding the scientific theories behind geological principles. Both dramatic forces - volcanic activity and earthquakes - as well as more subtle forces of the natural geological process are presented to make apparent the connection between human activity and geologic change. 3 lecture hrs/wk. (Not offered every year)

### **GS 147: Intro to Oceanography (3)**

A survey course introducing the origin and development of the oceans, marine geology and its effect on life in the seas. Discusses waves, tides, currents, and their impact on shorelines, the ocean floor, and basins. Examines physical and chemical processes as they relate to oceanographic concepts. This includes plate tectonics, ocean circulation, properties of seawater, sedimentation, marine ecosystems and climate effects. 3 lecture hrs/wk. W – (Not offered every year)

## **HD – HUMAN DEVELOPMENT**

### **HD 100: College Success (1-3)**

This course is designed for students who are just starting college. Its aim is to provide learner-centered instruction in strategies for achieving success for college, and in life. Topics include decision-making, discovering one’s

personal identity, goal setting, time management, memory strategies, study skills, diversity, communication, use of resources, taking responsibility, and other skills that will allow students the opportunity to thrive in the culture of college. This course is a combination of lecture and workshop. In-class participation is an integral part of the format. Students will practice skills and techniques and receive instructor and peer feedback for self improvement. This course is required for all students in the Gateway to Success cohort. (Instructor approval required for variable credit only.) 1-3 lecture hrs/wk. F, W, S, Su

### **HD 101: SSS Planning College Finances (1)**

Explores issues involved in creating a personal plan for financing higher education. Includes types of financial aid, scholarship searching, student loans, financial planning, and financial decision-making strategies. Students must be enrolled in the Student Support Services program to enroll. 1 lecture hr/wk. S

### **HD 106: Gateway Study Skills (2)**

This course serves as a support and instructive aid for Gateway to Success students in planning, prioritizing and developing overall positive study habits. The course is part of the Gateway to Success cohort. Students will gain skills in functioning as a college student, learning and applying available resources, practicing homework skills, and supporting the practice of other students. Much of the work is hands-on, and in-class participation is an integral part of the class format and grading. 2 lecture hrs/wk. F. W. S

### **HD 107: Practicing Success with Emotional Intelligence (2)**

This course is designed to enhance the college experience of students enrolled in the Practicing Success cohort and those that independently choose to enroll for enrichment through instructive and supportive aid. Students will learn to cultivate traits, skills and habits that will lead them to achieving success and happiness in both college and career. Registration-Enforced Corequisites: RD 090, WR 095, and HD 136. 2 lecture hrs/wk. F, W, S



**HD 110: Career Planning (1-2)**

This course is designed to expose students to a wide variety of today's career choices. We will explore the availability of community resources and support systems, create awareness of UCC programs and services, learn skills in self-assessment, career materials and research, develop effective job search techniques, and assist in the development of a comprehensive career plan. 1-2 lecture hrs/wk. Instructor approval required. (Pass/Fail grade for 2 credits; standard grade for 1 credit) F, W, S

**HD 118: Test Taking Strategies (1)**

Designed to help students develop more efficient methods of preparing for tests and more effective ways for reducing test anxiety. Emphasis will be on developing an organized system for taking tests and will focus on learning by practice and feedback. 10 lecture hrs in 3 weeks. F, W, S

**HD 119: Note Taking/Text Book Reading (1)**

Designed to help students develop more efficient and organized methods of taking notes and reading textbook material. 10 lecture hrs in 3 weeks. F, W, S

**HD 121: Time Management/  
Stress Management (1)**

Designed to help students develop essential time management skills and learn strategies for dealing with stress students often experience while attending college. 10 lecture hrs in 3 weeks. F, W, S

**HD 122: Learning Styles/Memory Strategies (1)**

Designed to help students identify and explore various learning styles and determine their individual learning preferences. This course also provides instruction in various memory-enhancement techniques which students will adapt to their unique learning style. 10 lecture hrs in 3 weeks. F, W, S

**HD 136: Strategies for Success (3)**

This course is designed to help students create greater success in college and in life. Students will explore empowering strategies by writing a guided journal, participating in small group and class activities, and completing a final course project. Making these strategies their own through application, they will have the ability

to improve the outcomes of their lives academically, professionally, and personally. This course is required for all students in the Practicing Success cohort. 3 lecture hrs/wk. F, W, S

**HD 208: Career and Life Planning (3)**

Career Planning is designed to help students make occupational decisions based on self-evaluation and on information and analysis of current career information. Career planning is an on-going dynamic process not a one time decision. This class will focus on the development of a "Life Plan," an integration of information about you and your life goals, and which careers are suitable for this plan. People in the class are at various stages of career planning; some are taking initial steps in the process while others have a solid plan in place. Prerequisite: RD 080, WR 095. 3 lecture hrs/wk. F, W, S

**HD 208A: Career and Life Planning –  
Self Assessment (1)**

The purpose of this class is to help students in making occupational decisions based on the self-evaluation process. Students will utilize the results of personal evaluation tools such as preference tests, interest surveys, skills assessments, and values clarification exercises to analyze career choices. 1 lecture hr/wk. F, W, S

**HD 208B: Career and Life Planning –  
Research Work World (1)**

This course provides tools needed to make informed career decisions. Students will learn how to locate occupational information, conduct informational interviewing and analyze labor market information. 1 lecture hr/wk. F, W, S

**HD 208C: Career and Life Planning –  
Decision Making (1)**

In this course students will explore methods of decision-making and apply them to the career and life planning process. Students will evaluate their risk taking style as well as potential barriers (real and perceived) as related to the career planning process. Students will establish short-and-long term goals as related to career. Personal and work ethics will be examined. Integration of these concepts will be utilized to develop a career action plan. 1 lecture hr/wk. F, W, S

**HD 214: Transition to University (1)**

For Transfer Opportunity Program students planning to transfer to a four-year college or university, this course will prepare students to make a successful academic and personal transition from the community college to the four-year college or university as well as provide survival skills for success. 1 lecture hr/wk. Transfer Opportunity Program students only. F, W

**HDFS – HUMAN DEVELOPMENT  
& FAMILY STUDIES**

**HDFS 201: Individual and Family Development (3)**

Using a lifespan development approach, this course studies individual development, dynamics, and relationships, both within the family and as a part of the larger environment. Prerequisite: WR 115 or placement into/completion of WR 121. 3 lecture hrs/wk. F, W, S

**HDFS 225: Child Development (3)**

Students will explore inherited and environmental factors which influence the developing child. Physical, social, emotional, and intellectual growth of children from birth through middle childhood. 3 lecture hrs/wk. F

**HDFS 226: Infant and Toddler Development (3)**

Students will explore developmental issues concerning children from birth to 30 months; designing and evaluating activities and programs to enhance development. 3 lecture hrs/wk. S

**HDFS 228: The Exceptional Child (3)**

Students will build understanding of the exceptional child: the emotionally disturbed, the mentally accelerated, the challenged learner, the physically handicapped, and the culturally and economically disadvantaged. 3 lecture hrs/wk. F

**HDFS 240: Contemporary American Family (3)**

Study of the American family from a sociological perspective, emphasizing the family as an influence in socialization and development; theories for analyzing the family, alternative family forms, cross-cultural and historical comparisons. 3 lecture hrs/wk. F, S



## HE – HEALTH

### HE 252: First Aid (3)

Immediate and temporary care for a wide variety of injuries and illnesses, control of bleeding, care for poisoning, and proper methods of transportation, splinting and bandaging. 2 lecture, 2 lec/lab hrs/wk. F, S, Su

### HE 280: Cooperative Work Experience: Health (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## HPE – HEALTH AND PHYSICAL EDUCATION

### HPE 295: Wellness & Health Assessment (3)

A foundation course including lecture and physical activity designed to expose the student to the inter-relation of health and physical fitness. Course covers both assessment and improvement of the following: physical fitness, nutritional status, and the ability to cope with stress. The interacting role of the three components in achieving optimal health will be explored with particular emphasis on the cardiovascular system. 2 lecture, 2 lec/lab hrs/wk. F, W, S, Su

## HRM – HOSPITALITY & RESTAURANT MANAGEMENT

### HRM 176: Responsible Alcohol Service and Bar/Beverage Management (2)

The course is designed to prepare the student for a management position in an establishment that serves alcoholic beverages. Topics include: a basic overview of wine, beer and spirits and their effects on the human body, the legal aspects of alcohol service, professional/responsible bar service, staffing, purchasing, receiving, storage and cost control, checking identification, handling difficult situations and mixology. 2 lecture hrs/wk.

### HRM 177: Hospitality/Restaurant Management and Human Relations (2)

This course is designed to prepare the student for a management position in the Hospitality/Restaurant industry. Topics include: leadership roles within the industry, facilitating an effective work force, hiring, training, scheduling, performance evaluation, operation standards, employee compensation and benefits, professional development, and maintaining a safe and healthy work environment. 2 lecture hrs/wk.

### HRM 178: Hospitality/Restaurant Marketing and Customer Service (2)

The course is designed to provide the student with an understanding of the basic principles of industry-specific customer service and marketing techniques. Topics include: customer-centric service, professionalism, service standards, operation work-flow, the marketing process, market environment, customer behavior, advertising and public relations. 2 lecture hrs/wk.

### HRM 230: Principles of Hospitality/Restaurant Industry Cost Controls (3)

The course is designed to prepare the student for a management position in the Hospitality/Restaurant industry. Topics include: cost and sales concepts, the control process and cost-volume profit relationships. In-depth instruction will be given on the topics of food, beverage and labor control. The use of spreadsheet software (MS Excel) will be implemented in exercises designed to simulate real occupational situations. Registration-Enforced Prerequisite: BA 231. 3 lecture hrs/wk.

## HS – HUMAN SERVICES

### HS 100: Introduction to Human Services (3)

An overview of the scope and development of human services, including models of service delivery, historical context, clientele, the helping process, career opportunities, and professional ethics. 3 lecture hrs/wk. F

### HS 102: Addiction Pharmacology (3)

An overview of drug use, misuse and addiction, including drug chemistry, physiological effects upon the body and specific treatment formats and techniques. Consideration of current drug use and the psychological/behavioral aspects of client misuse and addiction will be examined along with the impact of culture and genetics. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors. (Formerly titled Psychopharmacology.) 3 lecture hrs/wk. W

### HS 108: Understanding Behavior and Emotional Issues in Older Population (3)

This class is an introduction to the issues of aging. Although designed for human service workers in various fields, others working with the public in any field of study may find their skills in working with the elderly enhanced. The class is interdisciplinary in its approach, including the review of articles related to biological sciences, medicine, nursing, psychology, sociology, and social work. As the population in the United States ages, it is vital that we recognize the importance of effectively relating to older clients, patients and consumers. 3 lecture hrs/wk. S

### HS 110: Substance-Related Peer Recovery Mentor (3)

This course is designed to help students interested in becoming a Certified Peer Recovery Mentor (CPRM) obtain the skills, resources, and evidence-based practices that are essential for Peer Delivered services in an Addiction Treatment environment. The course will provide opportunities to explore recovery tools consistent with current evidence-based practices while using a developmental cross-cultural perspective for professional development. 3 lecture hrs/wk. F

### HS 144: Creating Effective Programs (1)

Developing, maintaining, evaluating, and sustaining effective service delivery programs. The use of evidence-based practices from identification and implementation through fidelity evaluation will be included. Students will be exposed to various “logic” models for planning and evaluating programs. 1 lecture hrs/wk. W

**HS 150: Personal Effectiveness for Human Services Workers (3)**

This course develops knowledge and skills to improve personal effectiveness. Readings, surveys, interviews, and in class exercises to improve skills in self-awareness, values clarification, individual working and communication styles, conflict resolution, and problem-solving strategies. 3 lecture hrs/wk. F

**HS 154: Community Resources (3)**

An overview of the diversified field of human services via classroom presentations and field trips to local human services agencies/organizations in order to understand their purpose and philosophy, scope of services, methods of operation, funding services, populations served, and career opportunities. 3 lecture hrs/wk. W, S

**HS 155: Counseling Skills I (3)**

This course will provide students with theoretical knowledge and interviewing skills required of human service workers in a variety of work settings including substance abuse counselors. Students will learn the basic processes used for information gathering, problem-solving, and information or advice giving. They will learn about and practice the skills associated with conducting an effective interview. Students will be sensitized to the issues common to interviewing people of differing cultural backgrounds. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors. (Formerly titled Interviewing Theory and Techniques.) 3 lecture hrs/wk. W

**HS 211: HIV/AIDS & Other Infectious Diseases (2)**

The epidemiology of HIV/AIDS, hepatitis, tuberculosis, and sexually transmitted diseases that frequently infect people who use drugs or who are chemically dependent. Students will examine prevention strategies, risk assessment protocols, harm reduction methods, and treatment options. The legal and policy issues that impact infected individuals as well as the larger community will be explored. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors. 2 lecture hrs/wk. S

**HS 217: Group Counseling Skills (3)**

An introductory course designed to prepare students to describe, select, and appropriately use strategies from

accepted and culturally appropriate models for group counseling with clients having a variety of disorders including substance abuse. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors. Registration-Enforced Prerequisite: HS 155 or instructor approval. 3 lecture hrs/wk. F

**HS 226: Ethics and Law (3)**

How to deal with and apply ethical and legal standards. Federal and state laws and regulations that apply to the field of human services and substance abuse treatment. This class is accepted by ACCBO to meet certification requirements for alcohol and drug counselors. 3 lecture hrs/wk. S

**HS 227: Understanding Dysfunctional Families (3)**

Dynamics of dysfunction in family systems. Students will engage in class discussion, research, and perform skills necessary to recognizing the symptoms of family dysfunction, intervention strategies, and local community resources to assist families with whom they may be working. 3 lecture hrs/wk. F, W

**HS 229: Crisis Intervention and Prevention (3)**

Crisis counseling, early intervention, and nonphysical methods for preventing or controlling destructive behavior. How to recognize an individual in crisis, assess their needs, and prevent an emotionally or physically threatening situation from escalating. 3 lecture hrs/wk. W

**HS 265: Counseling Skills II (3)**

This course builds on the skills covered in HS 155: Counseling Skills I. In addition to reviewing the basic processes and skills used for interviewing clients, students will explore and practice new technical skills. These include the skills of confrontation, focusing the interview, eliciting and reflecting meaning, strategies for change, skill integration and determining personal style. Cross-cultural counseling issues will also be included. (Formerly titled Casework Interviewing.) Prerequisite: HS 155 or Instructor approval. 3 lecture hr/wk. Su

**HS 266: Case Management for Human Service Workers (3)**

Concepts, ideas, and skills necessary to effectively work as a case manager for any human services delivery program. Identifying participant (client) strengths and strategies for the case manager to provide an environment for change that

encourages movement from one stage into another is the primary focus of the course. Classroom practice in all areas of case management will allow for student skill development. (Not recommended for first-year students.) 3 lecture hrs/wk. W

**HS 267: Cultural Competence in Human Services (3)**

Understanding how cultural differences impact service delivery in human service programs. Personal, community, and institutional bias will be discussed. Practice in delivery and adaptation of counseling strategies cross-culturally will be included. 3 lecture hrs/wk. S

**HS 280: Cooperative Work Experience: Human Services (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 11 credits per year. Registration-Enforced Prerequisite: Instructor approval. 3-39 lab hrs/wk. 1 credit = 33 hours of lab. F, W, S, Su

**HST – HISTORY**

**HST 104: World History (3)**

The emergence of organized civilizations in Europe, the Near East, Asia, the Americas, and Africa. The growth of complex civilizations, the rise to predominance and decline of major civilizations. 3 lecture hrs/wk. F

**HST 105: World History (3)**

Focuses on the world after 1000. Study of the Crusades, Renaissance, Reformation, new political and economic developments in 17th and 18th centuries; commercial and cultural developments in Europe, India, Japan, Africa, the Americas, and China. 3 lecture hrs/wk. W

**HST 106: World History (3)**

The growth of the early modern world focusing on the impact of new forms of government and the emergence of a technological world. An examination of political revolutionary events, nationalism and colonialism. A review of the world at war, the late 20th and early 21st centuries, and the prospects for the future. 3 lecture hrs/wk. S

## HST 201: History of United States (3)

The American heritage; European colonization; the Colonial Period and internal development; the American Revolution, early national period. 3 lecture hrs/wk. F

## HST 202: History of United States (3)

The American Nation; problems, turmoil, and the Civil War; Reconstruction; America reshaped by industrial development, imperial foreign policy, and domestic era of progress. 3 lecture hrs/wk. W

## HST 203: History of United States (3)

America in the 20th Century; World War I & II, the Depression, the Cold War, domestic change and Asian war in the 1960s, the politics and domestic history of the 70's to present, and the international role of the U.S. since 1945. 3 lecture hrs/wk. S

## INTL - INTERNATIONAL EXCHANGE PROGRAM

### INTL 211: Internal Exchange Program

Through an immersion experience, students will have daily exposure to the given culture/language to be studied. Through visits to local sites of historical and cultural importance, lectures, readings and classroom discussion, students will acquire a foundational knowledge of the target culture's history and culture, and be provided with an immersion experience of the target language, if applicable. 1-4 lecture hrs/wk. (not offered every year)

## J – JOURNALISM

### J 205: Introduction to Public Relations (3)

An introductory course in the theory and practice of Public Relations as a function of modern business, industry and government. Emphasis is on research and program development which utilizes public opinion, persuasion and media relations techniques in helping organizations deal with the various public to which it must respond. Registration-Enforced Prerequisite: WR 115 with a grade of C or better. 3 lecture hrs/wk. S



### J 211: Introduction to Mass Communication (3)

Survey of news and opinion media; how the media functions; rights and responsibilities, problems, and criticism; effects of media on society; relation of advertising to media and society; propaganda and the media. 3 lecture hrs/wk. S

### J 215: Journalism Production (1-3)

Provides students with practical experience in the processes and production of student media. Experiences may include editorial, photojournalism, or web advertising, and/or graphic design aspects of the student newspaper. Variable credit granted by the instructor depending upon each student's production. 3-9 lab hrs/wk. F, W, S

### J 251: Writing for the Media (3)

Introduction to the process and practice of writing for mass media channels. Discussion of rights and responsibilities of the public communicator. 3 lecture hrs/wk. F

### J 280: Cooperative Work Experience: Journalism (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Preregistration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## LA – LEGAL ASSISTANT/PARALEGAL

### LA 100: Legal Procedures I (4)

Introductory course focusing on the roles and duties of legal support personnel. Students will identify professional responsibility, unauthorized practice of law, and required ethical standards and behavior. Students will format legal documents using MS Word with emphasis on correct formatting using Oregon Revised Statutes (ORS) and Supplemental Local Court Rules (SLCR). Instructor enforced prerequisites: Working knowledge of MS Word, accurate keyboarding speed of 45 wpm. Registration-Enforced Prerequisite: placement test scores into WR 121 or instructor permission. Registration-Enforced Corequisite: LA 102. 4 lecture hrs/wk. F, W

### LA 101: Introduction to Paralegal Studies (3)

Identify the roles and duties of paralegals including regulations, confidentiality, and conflicts of interest. Develop workplace success skills including techniques of interviewing, tracking billable hours, professionalism, and etiquette. Identify sources of American Law and the civil and criminal law systems. Learn the different levels of federal, state, and municipal court systems. 3 lecture hrs/wk. W, S

### LA 102: Legal Terminology (3)

Will emphasize developing an understanding of legal terminology through study in all areas of law and on using legal terminology in many different ways. Focus will be on legal definitions, usages, spelling, and pronunciations to help students appropriately speak and apply appropriate legal terminology. 3 lecture hrs/wk. F, W, Su

### LA 105: Civil Procedure (3)

This course will focus on the various stages of the civil litigation process, including the initial client interview, process leading to the filing of a civil lawsuit, its resolution by settlement or trial, and a brief overview of the appellate process. Emphasis will be on the actual preparation of the documents, with a major focus on the discovery phase of the civil litigation process. Covers how each stage of civil litigation builds, relates to, and is dependent upon the others. Registration-Enforced Prerequisites: LA 101 and LA 128 with a grade of C or better. 3 lecture hrs/wk. S, Su



**LA 128: Legal Procedures II (4)**

Transcription course to correctly prepare legal documents by applying Oregon Revised Statutes (ORS) and Supplemental Local Court Rules (SLCR). Registration-Enforced Prerequisites: LA 100, OA 128, and LA 102, all with a grade of C or better. 2 lecture, 4 lecture/lab hrs/wk. W, S

**LA 132: Ethics for Legal Professionals (3)**

Covers the study of ethics as it relates to the legal profession. Study the concepts of “ethics” and “being ethical”, explore the differences between morality and rules of ethics, and the rules of professional responsibility as they pertain to legal support staff (and lawyers). Discussions and opinions of ethical issues in real-world situations will help facilitate the learning process on this topic. Intended to enhance legal vocabulary as it is used in ethics and study the Oregon Rules of Ethics and practical application. Registration-Enforced Prerequisites: LA 101 and LA 128, all with a grade of C or better. 3 lecture hrs/wk. S, Su

**LA 204: Legal Research and Writing I (4)**

Introduction to legal research and writing. Focus will be on identifying basic principles of legal research and performing legal research using various tools including LexusNexus. Students will identify sources of law and be able to validate research by appropriate citation. Registration-Enforced-Prerequisite: LA 105 with a grade of C or better. 2 lecture, 4 lecture/lab hrs. F

**LA 205: Legal Research and Writing II (4)**

Builds on Legal Research and Writing I, covering realistic research and writing exercises using LexusNexus as the primary search tool. Focus will be on writing memorandum of law, persuasive writing, writing motions, and legal correspondence. Registration-Enforced Prerequisite: LA 204 with a grade of C or better. 2 lecture, 4 lecture/lab hrs./wk. W

**LA 208: Family Law (3)**

Explore the social philosophy and laws governing domestic relations. Discuss court jurisdiction, pleading and practice before juvenile and domestic courts, and law office management of domestic relations cases. Registration-Enforced Prerequisite: LA 105 with a grade of C or better. 3 lecture hrs/wk. F

**LA 210: Wills, Probate, and Estates (3)**

Introduction to estates, trusts, probate, and the laws of testate and intestate succession. Students will examine procedures in probate court, including opening, administration, and closing of probate estates. Identify the various tax laws governing trust estates and the passing of estate property through probate proceedings. Registration-Enforced-Prerequisite: LA 105 with a grade of C or better. 3 lecture hrs/wk. F

**LA 217: Real Estate Law (3)**

Introduce the principles of business law as applied to real estate. The topics covered include ownership rights and limitations, transfer and reservation of ownership rights, brokerage relationships, laws of agency, contracts, fair housing, owner/tenant relationships, and other topics illustrated by case law and practice. Registration-Enforced Prerequisite: LA 105 with a grade of C or better. 3 lecture hrs/wk. S

**LA 224: Torts Pleading and Practice (3)**

Introduces the theory and practical application of the law of torts. The fundamentals of drafting legal documents normally associated with torts are addressed with application of state and local rules of civil procedure. Registration-Enforced Prerequisite: LA 105 with a grade of C or better. 3 lecture hrs/wk. W

**LA 226: Criminal Law for Paralegals (3)**

Introduces criminal law and procedure with an emphasis on the legal assistant’s role in the criminal justice system. Learn procedural rules, including the right to counsel, search and seizure, interrogation, and self-incrimination. Cover the stages of prosecution, pre-trial motions, jury selection, document preparation, trial practice, verdict, sentencing and judicial review, and sources of criminal law. Registration-Enforced Prerequisite: LA 105 with a grade of C or better. 3 lecture hrs/wk. S

**LA 280: Cooperative Work Experience: Legal Assistant (1-12)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. Registration-

Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, SU (A maximum of 12 credits may be applied towards a Paralegal Associate Degree.)

**LIB – LIBRARY**

**LIB 127: Library and Internet Research (3)**

This course is designed to take students through the research process as they learn to search, find, access, and utilize information efficiently from a variety of library and Web resources. Upon successful completion of this course, students gain transferable research skills for academic and career success, personal interests, and lifelong learning. As this course focuses on critical thinking, students learn to evaluate, select, and interpret information sources. Students are introduced to information issues that affect their local and global communities as they learn to share information ethically according to Copyright and Creative Commons licenses and apply a standard citation style format to their work. Students take an active role by clearly and effectively contributing what they have learned to a larger community or scholarly conversation. 3 lecture hrs/wk. F, W, S

**MED – MEDICAL OFFICE**

**MED 060: Math for the Medical Assistant (3)**

This course is designed to provide students with math skills required to work in allied health fields. The course includes ratio and proportion calculations, an introduction to the metric and apothecary systems of measure, metric-household-apothecary conversions, use of a 24-hour clock, general accounting concepts applicable to running medical offices, unit conversions between Fahrenheit and Celsius scales, insurance co-pay and deductible calculations, interpretation of physician drug orders, and a brief introduction to statistics as it applies to the allied health field. 3 lecture hrs./wk. S

**MED 111: Medical Terminology I (3)**

Medical Terminology I is the first course in a two-course sequence designed to introduce students to medical terminology through the study of medical word roots, prefixes, and suffixes within the context of body systems. Students will also learn abbreviations as well as pathology and procedure terminology within the context of body systems.

Focus is placed on constructing words and defining words given the word elements. 3 lecture hrs/wk. F, W, Su

### **MED 112: Medical Terminology II (3)**

Medical Terminology II is the second course in a two-course sequence designed to introduce students to medical terminology through the study of medical word roots, prefixes, and suffixes within the context of body systems. Students will also learn abbreviations as well as pathology and procedure terminology within the context of body systems. Focus is placed on constructing words and defining words given the word elements. Registration-Enforced Prerequisite: MED 111 with a grade of C or better. 3 lecture hrs/wk. W, S, Su

### **MED 114: Medical Coding for the Physician's Office (3)**

This course covers theoretical and practical fundamentals of outpatient billing, including Current Procedural Terminology (CPT), International Classification of Diseases, 9th or 10th Revision, Clinical Modification (ICD-9 or ICD-10) and CMS Healthcare Common Procedural Coding System (HCPCS), Registration-Enforced Prerequisite: MED 111 with a grade of C or better. 3 lecture hrs/wk. W

### **MED 115: Anatomy and Physiology for Medical Assistants (3)**

This course includes basic concepts of anatomy and physiology, integrated disease-related information, clinical applications, and terminology. Students will gain in understanding of body structure and function and disease process as it relates to work in a clinic or doctor's office. The course will cover recognition of systems and reporting criteria. Registration-Enforced- Prerequisite: MED 111 with a grade of C or better. 3 lecture hrs/wk. W

### **MED 140: Electronic Health Records (3)**

This course reinforces theoretical concepts with hands-on exercises using electronic health records that simulate real-world situations in the clinical setting. The course covers exam notes, prescriptions, lab orders and results, as well as the history, theory, and potential benefits of electronic health records. Prerequisites: CIS 120 and MED 220 or instructor approval. 2 lecture, 2 lec/lab hrs/wk. S

### **MED 182: Health Care Delivery Systems (3)**

Explains the past, present, and future influences on the delivery of health care. Covers provider organizations and settings in health care, financing of health care, causes and characteristics of health care utilization in the United States, regulation and monitoring of health care systems and ethical issues associated with health care technology. Registration-Enforced Prerequisite: CIS 120 or instructor approval. 3 lecture hrs/wk. F

### **MED 220: Medical Office Procedures I (3)**

The course is an introductory course in current office procedures. Subjects taught include the medical office environment, current practices and problems, medical ethics and law, and patient relations and communications. Registration-Enforced Prerequisite or Corequisite: MED 111. 3 lecture hrs/wk. F

### **MED 221: Medical Office Procedures II (3)**

This is an intermediate course in medical office procedures. Students are exposed to a variety of subjects, all of which pertain to medical assisting: medical records, drug and prescription records, health care reimbursement issues and regulations, and coding. Registration-Enforced Prerequisite: MED 220 with a grade of C or better. 3 lecture hrs/wk. W

### **MED 230: Health Insurance Concepts (3)**

This course is designed to give students a good working knowledge of health insurance for medical offices and clinics, i.e., non-hospital settings. Topics include the CMS-1500 and the rules and regulations governing Medicare, Medicaid, Workers' Compensation, Blue Cross Blue Shield, and managed care programs. Registration-Enforced Prerequisite: MED 111 with a grade of C or better. 3 lecture hrs/wk. W

### **MED 231: Health Care Reimbursement and Collections (3)**

This course provides students with health care reimbursement, accounting and collection processes for medical offices and clinics. Students will be presented with how to file insurance claims and what to do after the insurance. These topics include how to request an appeal or review, managing the accounts receivable and how to collect the balance due from the patient. Compliance and HIPAA regulations. Registration Enforced-Prerequisite: MED 230. 3 lecture hrs/wk. S

### **MED 260: Medical Document Processing (3)**

A beginning medical transcription course. The types of reports and medical specialties will vary. Students will be required to use correct punctuation and spelling in documents. Students will begin using a variety of medical reference books. Registration-Enforced Prerequisites: OA 123, OA 128 and MED 112, all with a grade of C or better. 1 lecture, 4 lecture/lab hrs/wk. S

## **MFG – MACHINE MANUFACTURING TECHNOLOGY**

### **MFG 104: Principles of Lean Manufacturing (1)**

This course provides foundations and practices related to lean manufacturing and is targeted to employees of business, government, and agencies in this community that are interested in lean. Lean manufacturing processes address societies' needs to maximize the use of resources in order to compete effectively in the global economy. Lean is a re-generation of Total Quality Management with new principles that use data for decision-making for system improvement. Instructor approval required. 1 lecture hr/wk.

### **MFG 108: Starrett: PMI - Precision Measurement Instruments (2)**

This course covers, safety, equipment, and essential variables of operation for the Starrett Precision Measurement Instruments Certification. This course will involve the use of tape measures, scales, and rules, slide calipers, gauge measurement, angle measurement, micrometer measurement, dial indicator and bore measurement. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. 4 lecture/lab hrs/wk.

### **MFG 111: Machine Shop Practices I (3)**

Introduces the student to semi-precision and precision measuring and layout procedures, the use of bench tools, saws, drill presses and their accessories. Registration-Enforced Prerequisite: MFG 108 and MTH 052 or MTH 060. 6 lecture/lab hrs/wk.



### **MFG 112: Machine Shop Practices II (3)**

The student learns the operation of the turning lathe including setup, turning tapers, threads (National, Acme, Square) and forms. Use of accessories is stressed such as chucks, steady rests, follower rests and grinders. Registration-Enforced Prerequisite: MFG 111. 6 lecture/lab hrs/wk.

### **MFG 113: Machine Shop Practices III (3)**

The student learns the operation of horizontal and vertical milling machines, their setup, basic operation and use of accessories such as digital readouts, rotary table, dividing head, gear and cam milling and the use of indicators, wigglers and edge finders. Registration-Enforced Prerequisite: MFG 112.

### **MFG 121: Hydraulics I (3)**

An introductory course covering the basic principles of hydraulics for the future industrial hydraulics technician. Included in the course are pressure, force and area relationships, HP, GPM, and velocity relationships, fundamentals of reservoir design, fluids and fluid flows, and fundamentals of hydraulic pumps. Common industrial circuits are developed and studied with the use of lab trainers. Students will disassemble, inspect, and reassemble both components and circuits in structured lab sessions. Registration-Enforced Prerequisite: MTH 052 or MTH 060. 3 lecture hrs/wk.

### **MFG 122: Hydraulics II (3)**

This is the second in a five-course series for the industrial apprentice and is a continuation of Hydraulics I. The focus is on pressure relief valves, hydraulic actuators and flow controls. Each component is studied in structured classroom sessions, while lab activities are directed at disassembly, inspection and circuitry involving the specific component. Students will be using lab trainers to examine the operation of circuits using these components. Registration-Enforced Prerequisite: MFG 121. 3 lecture hrs/wk.

### **MFG 123: Hydraulics III (3)**

This is the third in a five-course series for the industrial apprentice and is a continuation of Hydraulics II. Each student will study contamination control, hydraulic actuators, flow controls, and hydraulic accessories. Circuits using those

components are fabricated, discussed, and studied during structured lab sessions. Registration-Enforced Prerequisite: MFG 122. 3 lecture hrs/wk.

### **MFG 124: Hydraulics IV (3)**

This is a continuation of Hydraulics I, II, and III with an emphasis on the symbols, hydraulic schematics, and troubleshooting of hydraulic circuits. The class will be divided into two different sessions. The first session will be devoted to studying symbols and schematics, while the second session will work with circuits on lab trainers. Specific class sessions will be devoted to developing the skills and knowledge necessary to successfully pass the National Fluid Power Certification Exam. Registration-Enforced Prerequisite: MFG 123. 3 lecture hrs/wk.

### **MFG 125: Hydraulics V (3)**

This is the fifth course in a series for practicing industrial maintenance millwrights desiring instruction in industrial hydraulics. This course is an introduction to proportional and servo valves used in modern hydraulics systems. Students will work with simulators, lab trainers, program cards and related hydraulic and electronic components. Because an understanding of electricity and basic electronics is needed in this course, two sessions will be devoted to the study of these concepts using electrical training simulators. Some diagnostic and troubleshooting skills relative to the adjustment and programming of both proportional and servo systems will be presented. Registration-Enforced Prerequisite: MFG 124. 3 lecture hrs/wk.

## **MTH – MATHEMATICS**

### **MTH 010: Math Skills (4)**

Topics include operations on whole numbers, common fractions and decimal fractions. Students learn mathematical processes and thinking through applications. A small class size encourages individual attention and student interaction. Students learn through group work, discussions, and lecture. Successful completion prepares the student for MTH 020, Pre-Algebra. Registration-Enforced Prerequisite: Placement test. 4 lecture hrs/wk. F, W, S, Su (not offered 2018-19)

### **MTH 020: Pre Algebra (4)**

This course is a continued study of arithmetic concepts, as well as an introduction to algebra. Topics include basic operations with fractions, ratio and proportion, decimals, percent, integers and a brief look at algebraic expressions/ equations. Problem solving is emphasized. Successful completion prepares the student for Math 060, Introduction to Algebra. Registration-Enforced Prerequisite: MTH 010 with a grade of C or better or placement test. 4 lecture hrs/wk. F, W, S, Su

### **MTH 040, 041, 042: Math Skills Lab (1)**

This course offers supplementary instruction to students enrolled in MTH 020 or MTH 060. Group tutoring and one-on-one tutoring will be used for individualized skill development. Upon completion of MTH 040 students may repeat the course up to two times by registering for MTH 041 and MTH 042. Prerequisite: Registration-Enforced Corequisite: MTH 020 or MTH 060. 1 lecture hr/wk. (not offered 2018-19)

### **MTH 052: Introduction To Algebra for the Trades (4)**

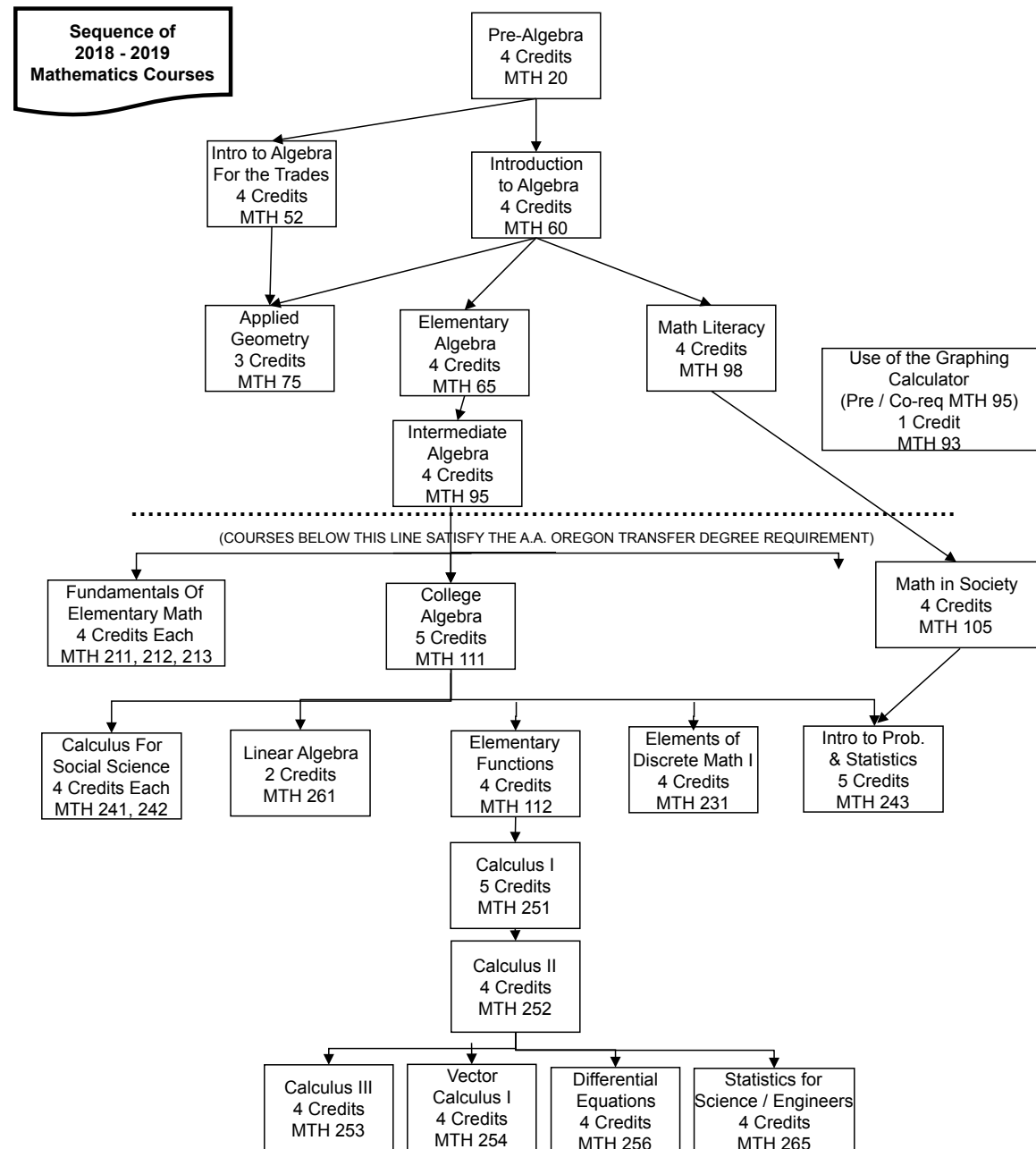
This is an introductory algebra and geometry class in professional-technical mathematics. Topics covered include signed numbers, algebraic equations and formulas, ratio and proportion, perimeters, areas, volumes. This course does not serve as a prerequisite for MTH 065. Registration-Enforced Prerequisite: MTH 020 with a C or better, placement by approved measure, or instructor permission. 4 lecture hrs/wk. W

### **MTH 060: Intro to Algebra (4)**

This course is intended for students who wish to start at the very beginning of algebra. The course emphasizes basic concepts, definitions, and procedures along with practical applications and problem-solving skills. This course introduces basic operations with integers, exponents, scientific notation, algebraic expressions, linear equations, geometry, ratio and proportion, unit conversions, percent, operations with polynomials, and factoring polynomials. Registration-Enforced Prerequisite: MTH 020 with a C or better, placement by approved measure, or instructor permission. 4 lecture hrs/wk. F, W, S, Su

## Umpqua Community College Sequence of Mathematics Courses

(students may begin in the course indicated by placement test scores)



**MTH 063: Use of the Scientific Calculator (1)**

This course is an introduction to the scientific calculator. Topics include: operations using real numbers, evaluating expressions, fractions and decimals, correct use of significant digits, powers and roots, memory functions, and scientific notation. This course does not cover graphing. Registration-Enforced Prerequisite or Corequisite: MTH 060 with a grade of C or better, placement by approved measure, or instructor approval. 1 lecture hr/wk. F, W, S, Su (Not offered 2018-2019)

**MTH 065: Elementary Algebra (4)**

This course in algebra is intended for the student who has familiarity with beginning algebra and geometry concepts. The course emphasizes basic concepts, definitions, and procedures along with practical applications and problem-solving skills. This course includes graphing lines, solving systems of equations in two variables using elimination or substitution, factoring polynomials, and solving quadratic equations by factoring. Registration-Enforced Prerequisite: MTH 060 with a grade of C or better, placement by approved measure, or instructor permission. 4 lecture hrs/wk. F, W, S, Su

**MTH 075: Applied Geometry (3)**

Industrial applications of basic algebra and geometry. Emphasis on formulas, ratio-proportion, applied geometry, trigonometry, area, volumes. Registration-Enforced Prerequisite: MTH 052 or MTH 060 with a grade of C or better, placement by approved measure, or instructor permission. 3 lecture hrs/wk. S

**MTH 093: Using the Graphing Calculator (1)**

This course is an introduction to the graphing calculator. An emphasis will be on graphing and the skills necessary for MTH 111. Topics include: evaluation expressions, correct use of significant digits, graphing functions, solving equations graphically, scatter plots and regression equations, and using the tools of the graphing calculator to explore the properties of a graph. 1 lecture hr/wk. F, W, S

**MTH 095: Intermediate Algebra (4)**

This course is intended for students with prior exposure to algebra topics including linear equations in one and two variables, polynomials and factoring. The course emphasizes basic concepts, definitions, and procedures along with practical applications and problem-solving skills. Although

fundamental concepts are stressed, the pace of the course is faster than an introductory course. This course covers unit conversions, an introduction to functions, rational expressions and equations, radical expressions and equations, and quadratic expressions and equations. Registration-Enforced Prerequisite: MTH 065 with a grade of C or better, placement by approved measure, or instructor permission. 4 lecture hrs/wk. F, W, S

**MTH 098: Math Literacy (4)**

MTH 098 provides algebra, quantitative reasoning, and problem-solving skills needed in MTH 105 and in other college courses in programs not requiring calculus or trigonometry. For students who do not need calculus or trigonometry, MTH 098 is an alternative to MTH 065/095 as a pathway to MTH 105. Registration-Enforced Prerequisites: MTH 060 with a grade of C or better, or placement by approved measure into MTH 065 and higher. 4 lecture hrs/wk. W

**MTH 105: Math in Society (4)**

Math in Society is a rigorous mathematics course designed for students in Liberal Arts and Humanities majors. This course provides a solid foundation in quantitative reasoning, symbolic reasoning, and problem solving techniques needed to be a productive, contributing citizen in the 21st century. Applications of mathematics will be explored with a major emphasis on the integration of mathematics with other subjects, communicating mathematics effectively orally and in writing, and reasoning quantitatively. Registration-Enforced Prerequisite: MTH 095 or MTH 098 with a grade of C or better, placement by approved measure, or instructor permission. 4 lecture hrs/wk. W, S

**MTH 111: College Algebra (5)**

This course is intended for students requiring college-level algebra. This course is a study of functions and their uses. Primary topics are basic properties of functions, operations involving functions, and basic analysis and graphing of quadratic, polynomial, rational, exponential, and logarithmic functions. Additional topics include solving equations involving each function type, obtaining models from descriptions and data, and solving systems of equations. Applications, modeling, and problem-solving are stressed throughout the course. The use of computers or graphic

calculators is an integral part of the class. Registration-Enforced Prerequisite: MTH 095 with a grade of C or better, placement by approved measure, or instructor permission. 5 lecture hrs/wk. F, W, S, Su

**MTH 112: Elementary Functions (4)**

The study of Trigonometry and its applications in the world around us. Topics include: trigonometric functions, radian measure, graphs of trig functions, solutions of right and oblique triangles, identities, conic sections, special formulas, inverse trig functions, polar coordinates, complex numbers, DeMoivre's Theorem. Instructor-Enforced Prerequisite: MTH 111 or equivalent with a grade of C or better, or instructor permission. 4 lecture hrs/wk. F, W, S, Su

**MTH 211: Fundamentals of Elementary Mathematics I (4)**

The first of a three-term sequence of mathematics for prospective elementary and middle school teachers. Topics include mathematical patterns, problem solving, sets, natural numbers, whole numbers, one-to-one correspondence, numeration systems, tests of divisibility, prime and composite numbers, greatest common divisor, least common multiple, computer literacy activities, and elementary school activities in mathematics. Registration-Enforced Prerequisite: MTH 095 with a grade of C or better, placement by approved measure, or instructor permission. 4 lecture hrs/wk. F

**MTH 212: Fundamentals of Elementary Mathematics II (4)**

The second of a three-term sequence of mathematics for prospective elementary and middle school teachers. Topics include: fractions, integers, decimals, percent, ratio, elementary probability and statistics, beginning algebra concepts, irrational numbers, scientific notation, computer literacy activities, and elementary school activities in mathematics. Registration-Enforced Prerequisite: MTH 211 with a grade of C or better, or instructor permission. 4 lecture hrs/wk. W

**MTH 213: Fundamentals of Elementary Mathematics III (4)**

The third of a three-term sequence of mathematics for prospective elementary and middle school teachers. Topics include; two and three dimensional geometric figures, measurement, areas, perimeters, volumes, congruency and

similarity of geometric figures, computer literacy activities, and elementary school activities in mathematics. Registration-Enforced Prerequisite: MTH 212 with a grade of C or better, or instructor permission. 4 lecture hrs/wk. S

### **MTH 231: Elements of Discrete Mathematics I (4)**

Introductory course in discrete mathematics, designed to introduce basic non-calculus mathematics required in the study of computer science. Topics include elementary logic, set theory, functions, mathematical induction, matrices, and combinatorics. Instructor-Enforced Prerequisite: MTH 111 or MTH 105T or equivalent with a grade of C or better, or instructor permission. 4 lecture hrs/wk. W

### **MTH 241: Calculus for Management & Social Science I (4)**

This is the first of two courses in elementary calculus designed especially for business and social science majors. The student will gain an understanding of differential calculus numerically, algebraically, and graphically, and will be able to use it to analyze and solve problems. Throughout the course, applications to business, economics, and social science will be stressed. Computers and graphing calculators will be used to learn and demonstrate the mathematical concepts. Registration-Enforced Prerequisite: MTH 111 with a grade of C or better, or instructor permission. 4 lecture hrs/wk. W

### **MTH 242: Calculus for Management & Social Science II (4)**

This is the second of two courses in elementary calculus designed especially for business and social science majors. The student will gain an understanding of integral calculus numerically, algebraically, and graphically, and will be able to use it to analyze and solve problems. Throughout the course, applications to business, economics, and social science will be stressed. Computers and graphing calculators will be used to learn and demonstrate the mathematical concepts. Registration-Enforced Prerequisite: MTH 241 with a grade of C or better, or instructor permission. 4 lecture hrs/wk. S

### **MTH 243: Introduction to Probability & Statistics (5)**

Introductory course in probability and statistics, designed to acquaint the student with some basic theory and applications. Calculators will be used throughout the course. Basic topics include probability models, random

variables, probability distributions, sampling distributions, descriptive statistics, and methods of estimation. Registration-Enforced Prerequisite: MTH 105 or above with a grade of C or better, or instructor permission. 5 lecture hrs/wk. F,W,S, Su

### **MTH 251: Calculus I (5)**

This course deals entirely with differential calculus. The course (1) develops the main ideas of calculus forming a sound theoretical basis (proving some of the theorems and deriving the various formulas and methods), (2) presents applications of the calculus, (3) provides the necessary background for MTH 252, and (4) uses technology to teach and demonstrate the mathematical concepts of calculus. Registration-Enforced Prerequisite: MTH 112 or with a grade of C or better, or instructor permission. 5 lecture hrs/wk. F, W

### **MTH 252: Calculus II (4)**

This course is a continuation of MTH 251. The course (1) presents a blend of theory and applications of integral calculus and (2) provides the necessary background for MTH 253, and (3) uses computers to learn and demonstrate the mathematical concepts of the calculus. Registration-Enforced Prerequisite: MTH 251 with a grade of C or better, or instructor permission. 4 lecture hrs/wk. W, S

### **MTH 253: Calculus III (4)**

This is the third quarter of a four-quarter sequence for math majors and engineering students. Topics include improper integrals, conic sections, polar coordinates, parametric equations, and infinite series. Computers and graphing calculators will be used to learn and demonstrate the mathematical concepts. Instructor-Enforced Prerequisite: MTH 252 with a grade of C or better, or instructor permission. 4 lecture hrs/wk. S

### **MTH 254: Vector Calculus I (4)**

The study of multivariate calculus with a vector approach. Topics include; vectors, vector calculus, functions of several variables, gradients, differentials, and multiple integration. Registration-Enforced Prerequisite: MTH 252 with a grade of C or better, or instructor permission. 4 lecture hrs/wk. F

### **MTH 256: Differential Equations (4)**

Methods of solving ordinary differential equations. Topics include; study of first, second, and higher order differential equations with applications. Registration-Enforced Prerequisite: MTH 252 with a grade of C or better. 4 lecture hrs/wk. W

### **MTH 261: Intro to Linear Algebra (2)**

This class is designed as a companion course to MTH 253 to satisfy entry requirements into Oregon State University's School of Engineering, but can also be taken as an introduction to Linear Algebra. Linear Algebra deals with the study of linear systems, matrices and linear transformations. Topics include: the algebra of matrices, the systematic solution of linear systems by reduction methods, linear transformations and eigenvalues. Applications to various fields of interest will be emphasized throughout the course. Registration-Enforced Prerequisite: MTH 111 with a grade of C or better, or instructor permission. 2 lecture hrs/wk. S

### **MTH 265: Statistics for Scientists and Engineers (4)**

This course covers probability and inferential statistics applied to scientific and engineering problems. Includes random variables, expectation, sampling, estimation, hypothesis testing, regression, correlation and analysis of variance. This course satisfies the OSU requirement of ST 314 for engineering programs. Registration-Enforced Prerequisite: MTH 252 with a grade of C or better. 4 lecture hrs/wk. S

### **MTH 280: Cooperative Work Experience: Mathematics (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su



## **MUP – MUSIC PERFORMANCE**

### **MUP 101-292: Performance Studies (1-2)**

Individual instruction in the performance techniques of voice, brass, woodwinds, piano, and strings. 100: Technical stylistic aspects of artistic performance; first level of lower division study for music majors. 200: Second level of lower division study for music majors. Special fee assessed. 1-2 lecture hrs/wk.

### **MUP 114: General Ensemble (1)**

Formation of traditional chamber groups such as woodwind, quartet, quintets, brass ensemble, strings quartets, other duets and trios. Groups will meet weekly to rehearse and will give a concert at the end of each term. 2 lecture/lab hrs/wk. F, W, S

### **MUP 121: Symphonic Choir (1)**

The Vintage Singers is a small ensemble; entry is by audition with instructor. Students should have exceptional musical skills and considerable background in serious formal choral music. There are extra rehearsals and performances. 2 lecture/lab hrs/wk. F, W

### **MUP 151: Music Theatre (3)**

The students perform in the cast of the Oregon Musical Theatre Festival. The student must participate as a singing cast member, as a principle character or member of the chorus. 6 lecture/lab hrs/wk. Su

### **MUP 158A, 158B, 158C - 192A, 192B, 192C**

### **MUP 258A, 258B, 258C - 292A, 292B, 292C**

### **Performance Studies (1-2)**

Individual instruction in the performance techniques of voice, brass, woodwinds, piano, and harpsichord. 100: Technical stylistic aspects of artistic performance; first level of lower division study for music majors. 200: Second level of lower division study for music majors. Special fee assessed. 1-2 lecture hrs/wk.

### **MUP 189A, 189B, 189C: Chamber Choir (2)**

Study of vocal jazz and popular music. The Umpqua Singers is a vocal jazz ensemble with emphasis on the performance of contemporary music. Entry by audition only. 6 lab hrs/wk. F, W, S

### **MUP 195A, 195B, 195C: Concert Band (1)**

The UCC Concert Band provides music and non-music majors an opportunity for woodwind, bass, and percussion students to study, rehearse and perform all types of concert band literature. 2 lecture/lab hrs/wk. F, W, S

### **MUP 196A, 196B, 196C: Chamber Orchestra (1)**

The Umpqua Chamber Orchestra is open to strings; brass and woodwinds selected on basis of music to be performed. 2 lecture/lab hrs/wk. F, W, S

### **MUP 197A, 197B, 197C: Concert Choir (1)**

The UCC Chamber Choir is for majors and non-majors in music and offers varied selection of choral music experiences. Entry by permission of the instructor. 3 lab hrs/wk. F, W, S

### **MUP 295: Jazz Band (1)**

This Big Horn Jazz Band is open to students and community musicians. All types of jazz band literature will be rehearsed and performed, from swing to jazz-rock. By instructor approval. 2 lecture/lab hrs/wk. F, W, S

### **MUP 297A, 297B: Concert Choir (1)**

The Roseburg Concert Chorale is a non-audition community choir that performs two major concerts each year. 2 lecture/lab hrs/wk. F, W

## **MUS – MUSIC**

### **MUS 100A, 100B, 100C Musical Fundamentals (3)**

An introduction to the elements of music for the non-music major and pre-music major. The course includes beginning piano music notation, scales, rhythm and ear training. No previous musical training is required. 3 lecture hrs/wk. F, W, S, Su

### **MUS 105: Intro to Rock Music (3)**

This course will examine the sociological and musical perspectives of the sixty years of rock music. The effects of rock music on our society, politics, and economics will be explored. The class will incorporate recorded and live music, videos, lecture, and group discussion. Students will be required to do reading, listening, and a significant amount of writing. This course meets Humanities requirements. 3 lecture hrs/wk.

### **MUS 111, 112, 113: Music Theory (3,3,3)**

Basic theory. A study of patterns, melody, harmony, and form in music. Fundamental knowledge for composers and performers. Completing the two-year sequence satisfies the Theory requirement for music majors at state colleges. Prerequisite: ability to play simple piano music from score. (Class piano or individual piano lessons must be taken concurrently with Music Theory until adequate pianistic skills are acquired.) Registration-Enforced Corequisite: MUS 114, 115, 116. 3 lecture hrs/wk. F, W, S

### **MUS 114,115,116: Aural Skills I (1,1,1)**

The study of ear training and sight singing. Stresses music terminology, rhythm, intervals. Registration-Enforced Corequisite: MUS 111,112,113. 1 lecture hr/wk. F, W, S

### **MUS 117, 118, 119: Intro to Music & Technology (2)**

Recording, arranging, music notation, digital and analog synthesis. Students will learn how to create sound in a digital environment, edit sound recordings, and create music manuscripts. Minimum piano keyboard skills or music reading ability required. 2 lecture hrs/wk. F, W, S

### **MUS 131,132,133: Class Piano (2,2,2)**

First year class piano for music majors with little or no previous instruction. Students learn basic fundamentals of reading music and playing the piano. Class piano or individual piano lessons must be taken concurrently with Music Theory until adequate pianistic skills are acquired. Registration-Enforced Corequisites for MUS 131: MUS 111 and MUS 114; for MUS 132: MUS 112 and MUS 115; for MUS 133: MUS 113 and MUS 116. 2 lecture hrs/wk. F, W, S

### **MUS 134, 135, 136: Class Voice (2,2,2)**

Class Voice is open to all students who wish to learn basic vocal skills in a class setting. Emphasis will be on breathing techniques, posture, voice placement, vowel production and easy literature. 2 lecture hr/wk. F, W, S

### **MUS 137, 138, 139 Beginning Class Guitar (2,2,2)**

An introduction to guitar technique for the beginning guitar student. The course teaches the fundamentals of guitar playing, music theory and ear training as it relates to the guitar, and appreciation of traditional and contemporary guitar performers. 2 lecture hrs/wk. F, W, S



### **MUS 161: Jazz Improvisation: Instrumental (3)**

The objective of this course is to teach the participant how to improvise or improve the existing improvisational skill. Presentations and discussions will cover a variety of improvisational styles including jazz, rock, country, and classical. Class time will include listening, observing, and performing. Written assignments will consist of transcriptions. 3 lecture hrs/wk. Su

### **MUS 201, 202, 203: Intro to Music & Its Literature (3,3,3)**

Cultivation of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles. This course is designed for general campus students and the transfer music major. No previous musical experience is required. 3 lecture hrs/wk. F, W, S

### **MUS 204: Music of the World (3)**

This course will allow the student to study a variety of musical styles from around the world. Special emphasis will be placed on examining the relationship between a culture or society and the music that it creates. No previous musical experience will be necessary and students will be taught a range of basic skills to evaluate, analyze, and critically assess what they hear. Different genres, styles, and aesthetics will be covered, including the music of Africa, South America, and Indonesia. Additionally, Native American and African American musical heritages will be discussed. 3 lecture hrs/wk. W, S

### **MUS 205: Intro to Jazz History (3)**

This course provides the student with listening skills and historical overview of jazz from its origin to the present. Emphasis on in-class listening and discussion of the music. No musical background is needed to take this class. The course meets Arts & Letters requirements. 3 lecture hrs/wk.

### **MUS 211, 212, 213: Music Theory II (3,3,3)**

Second year theory examines the structure and elements of music through analysis of the styles of major composers. Prerequisite: MUS 111, 112, 113. Corequisite: MUS 224, 225, 226. Class piano or individual piano lessons must be taken concurrently with Music Theory until adequate pianistic skills are acquired. 3 lecture hrs/wk. F, W, S

### **MUS 214, 215, 216: Intermediate Piano (2,2,2)**

Second year of class piano. Offers theory and practice in piano techniques such as modulation, transportation, chord, reading, and extemporaneous playing. Prerequisite: MUS 131,132,133 or equivalent skills. 2 lecture hrs/wk. F, W, S

### **MUS 224, 225, 226: Aural Skills II (1,1,1)**

The study of ear training and sight singing. Stresses music terminology, rhythm, intervals. Corequisite: MUS 211, 212, 213. 1 lecture hr./wk. F, W, S

### **MUS 280: Cooperative Work Experience: Music (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **NR – NATURAL RESOURCES**

### **NR 141: Tree and Shrub Identification (3)**

Identification of the principal forest trees of North America, emphasizing trees and shrubs of SW Oregon and N California. Introduction to the forested regions of the world, and to the structure and function of woody plants. This is a hybrid course -- during spring term, students must enroll in the online NR 141 course. A six-day field tour of Southwestern Oregon and Northern California will follow in early summer. The use of cameras and field notebooks for documenting tree and shrub identification, location and habitat will be emphasized. The field tour will highlight the use of botanical keys to identify native woody plants while touring through regional plant communities. The tour will leave from the UCC campus, and will likely include stops in the Siskiyou Mountains, Smith River, Redwood State and National Parks, Trinidad State Beach, the Trinity River, the Mt. Hood/McCloud River area, McArthur-Burney Falls State Park, Lava Beds National Monument, Crater Lake

National Park, the North Umpqua River, and other sites of botanical interest before returning to UCC. Students should be reasonably fit and prepared to hike several miles over the course of the tour on easy to moderately difficult trails, and to camp at improved campsites each night. This is an extended spring term course and grades will be awarded after the tour during the following summer term. A fee is required to cover transportation, food and camping. 11 lecture hours online; 44 lecture/lab hrs. on the tour. S

### **NR 201: Introduction to Natural Resources (3)**

Introductory course for Natural Resources majors. Overview of the underlying principles and complexities involved in managing natural resources of the Pacific Northwest. Investigation of major natural resource issues of the region. Development of critical thinking and collaboration skills useful in seeking solutions. 3 lecture hrs/wk. F

### **NR 221: Water Resource Science (4)**

This course will cover the basic physics principles which determine the hydrological properties of natural water resources; the role these properties play in shaping the local ecology; and methods used to measure, monitor, and model these properties for the purposes of water resource management and restoration. Registration-Enforced Prerequisite: MTH 111. 3 lecture, 3 lab hrs/wk. W

### **NR 240: Forest Biology (4)**

Forest Biology is a basic course that provides a broad foundation in biology that is relevant to many natural resource issues. This course examines forest biology at multiple levels of organization, from molecules to the globe; principles of ecosystem dynamics in managed and unmanaged forest communities, landscapes and bioregions; coevolution of competition, predation, decomposition, and mutualism; energy flow, nutrient cycles and feedback controls; the effects of disturbance and succession on carbon storage, biodiversity, and habitat stability through time. Registration-Enforced Prerequisite: completed course in Biology or Natural Resources or instructor approval. 3 lecture, 3 lab hrs/wk. F



### NR 241: Dendrology (4)

Identification of the principal forest trees of North America, emphasizing trees and shrubs of the Pacific Northwest. Other topics include the ranges over which these species grow, their structure and function, important ecological characteristics, and principal uses. We will also survey forested biomes of the world. Field trips required on and off campus. This course is cross listed as both NR 241 and FOR 241. 3 lecture, 3 lab hrs/wk. S

### NR 242: Ecosystems of Southwest Oregon and Northern California (4)

This is a hybrid course taught partly online and partly during a 6-day bus tour of Southwestern Oregon and Northern California. Resources for learning the distributions, unique species compositions, population interactions, nutrient and energy cycles, disturbance processes, and ecological histories of the landscapes of this region will be presented online. The bus tour begins immediately after the spring term ends, and will emphasize applications of this information during stops in the Siskiyou Mountains, Smith River, Redwood National Park, Trinidad State Beach, the Trinity River, Lassen Volcano National Park, McArthur-Burney Falls State Park, Lava Beds National Monument, Crater Lake National Park, the North Umpqua River, and other sites of ecological interest. Students should be reasonably fit and prepared to hike several miles over the course of the tour on easy to moderately difficult trails, and to camp at improved campsites each night. This is an extended spring course and grades will be awarded after the tour during the following summer term. A fee is required to cover transportation, food and camping. Recommended Prerequisite: Course in Biology, Natural Resources or instructor approval. 33 lecture hrs. online, 33 lecture/lab hrs. on the tour. S

## NR – NATURAL RESOURCES

### NR 243: Historical Ecology of Pacific Northwest Landscapes (3)

Students will learn about changes in the landscape of the Pacific Northwest from the end of the last ice age to the present with an emphasis on Southwestern Oregon and Northern California. Students will examine the changing uses of the environment by a succession of cultures, and their effects on landscape structure and function by using a range of tools to analyze archaeological, historical and ecological data to reconstruct historic landscapes. Instructor-Enforced Prerequisite: WR 121. 3 lecture hrs/wk. W

### NR 251: Principles of Fish and Wildlife Conservation (3)

History of conservation and natural resource use; ecological principles, and social and economic limitations of conservation; principles and practices of wildlife and fisheries management; role of research in management. Recommended Prerequisite: a previous course in Biology or Natural Resources. 3 lecture hrs/wk. W

### NR 255: Field Sampling of Fish and Wildlife (3)

Introduction to sampling design and methods for quantifying aquatic and terrestrial resources in the Pacific Northwest with geographic emphasis on southwestern Oregon and northern California. Students will learn and apply standard field protocols used by the US Forest Service, the Bureau of Land Management, the Oregon Department of Fish and Wildlife, the Oregon Department of Environmental Quality, and other state and national land and resource management agencies. Registration-Enforced Prerequisite: any NR (Natural Resources) or BI (Biology) course. 2 lecture hrs/3 lab hrs/wk. S

### NR 261: Recreation Resource Management (4)

Overview of recreation resource management including study of land and water resources used for outdoor recreation. The planning and management of natural and cultural resources for long-term resource productivity, with a focus on rural and wildlife areas of the forest, range and coast. 4 lecture hrs/wk. S

### NR 295: Environmental Dispute Resolution (3)

This course examines natural resource-based conflicts on public and private lands, and presents strategies to resolve them. Analysis of root causes of environmental gridlock,

including important values people hold towards the environment and development, and the tendency of groups and individuals to rely on traditional and well-understood methods for dispute resolution such as the courts and electoral and legislative processes. Course will focus on why disputants and the interested public find themselves increasingly frustrated by gridlock and dismayed at gridlock's effects on both environmental quality and local and regional economies, and how these frustrations are leading to the use of alternative resolution methods. 3 lecture hrs/wk. W

## NRS – NURSING

### NRS 101: Nursing Assistant (9)

A mandatory attendance course (164 hrs) designed to provide basic nursing skills for employment as a Certified Nursing Assistant once a student has successfully passed the CNA written and practical examination administered by the Oregon State Board of Nursing. The course consists of classroom instruction during weeks 1-7. The first 7 weeks includes lecture, observation, demonstration, and return demonstration of basic nursing skills, followed by 3 weeks of supervised clinical instruction. Course restrictions: Conviction of a felony and/or drug usage or distribution may result in the Oregon State Board of Nursing withdrawing the privilege of writing the Certified Nursing Assistant examination. Prerequisites: A student must be 16 years of age. A copy of the applicant's placement test scores indicating reading skills at RD 090 OR higher, WR 090 or higher, and MTH 020 or higher. Alternatively, a copy of the applicant's transcripts (Official or Unofficial) that confirms that the applicant has completed courses at or above these placement scores. Background Checks: Students are required to complete and pass an Oregon State Background History check. On the first day of class, students must show evidence that they have mailed their fingerprints to the Oregon State Police that begins the process of a background clearance check. Failure to do so will result in the student being dropped from the class. NOTE: Students having questions relating to the past backgrounds should refer to both the OSBN (Oregon State Board of Nursing) at <http://tinyurl.com/mspo898> or DHS (Department of Human Services) at <http://www.oregon.gov/business-services/chc/pages/index.asp> All students are required to have a TB screening test, the first

injection of the three-part immunization series for Hepatitis B, and students born after 1956 must also provide official written proof of immunity against measles, (rubella and rubeola). prior to the first day of clinicals. Students are required to complete and pass an Oregon State Background History Check prior to class start. 9 credits - 80 lecture, 80 clinical hrs F, W, S, Su

## **NRS 110: Foundations of Nursing in Health Promotion (9)**

This course introduces the learner to the framework of the Oregon Consortium Nursing Education (OCNE) curriculum. The emphasis is on health promotion across the life span including self-health as well as client health practices. To support self and client health practices, students learn to access and read research literature about healthy lifestyle patterns, risk factors for disease/illness, and interventions to promote health behavior change. Students learn to conduct age-appropriate and culturally sensitive assessments about client health practices and risks, recognize roles of a multidisciplinary team, give and receive feedback about performance, and use reflective thinking about their practice as nursing students. Screening of healthy school aged children, teaching the family experiencing a normal pregnancy, interventions to prevent substance abuse and motivational interactions with healthy, community-dwelling older adults are exemplars. Prerequisite: Acceptance into the nursing program. 5 lecture/seminar; 10 clinical hrs. and 2 hrs independent study/wk. F

## **NRS 111: Foundations of Nursing in Chronic Illness I (6)**

This course introduces assessment and common interventions (including technical procedures) for clients with chronic illnesses common across the life span in major ethnic groups within Oregon. The client and family's "lived experience" of the illness, coupled with clinical practice guidelines and extant research evidence is used to guide clinical judgments in care to the chronically ill. Roles of multidisciplinary team in care of the chronically ill and legal aspects of delegations are explored. Cultural, ethical, health policy, and health care delivery system issues are explored in the context of the chronic illness care. Case exemplars include children with asthma, adolescent methamphetamine abuse, adult-onset diabetes, and older adults with dementia. Prerequisite: NRS 110. 3 lecture/seminar hrs, 9 clinical hrs/wk. W

## **NRS 112: Foundations of Nursing in Acute Care I (6)**

This course introduces assessment and common interventions (including relevant technical procedures) for care of patients during an acute episode of disease/illness. Common disease/illness trajectories and their clinical practice guidelines and/or standard procedures are considered in relation to their impact on providing culturally sensitive, client-centered care. Prerequisite: NRS 110. 3 lecture/seminar hrs, 9 clinical hrs/wk. S

## **NRS 115: LPN Transition to OCNE (6)**

This course introduces the learner to the framework of the UCC and Oregon Consortium for Nursing Education (OCNE) curriculum including the OCNE competencies and benchmarks and the clinical judgment model. The student is introduced to the role and practice of the registered nurse. Program Director approval required to register for this course which is offered either in Spring or Summer term prior to 2nd year entry into the RN program. 5 lecture hrs/3 lab hrs/wk. Su

## **NRS 221: Foundations of Nursing in Chronic Illness II and End-of-Life (9)**

This course builds on Foundations of Nursing in Chronic Illness I. The evidence base related to family care giving and symptom management is a major focus and basis for nursing interventions with patients and families. Ethical issues related to advocacy, self-determination, and autonomy are explored. Complex skills associated with symptom management, negotiating in interdisciplinary teams, and the impact of cultural beliefs are included in the context of client and family-centered care. Exemplars include patients with chronic mental illness and as well as other chronic conditions and disabilities affecting functional status and family relationships. Includes classroom and clinical learning experiences. 5 lecture/seminar, 12 clinical hrs/wk. F

## **NRS 222: Foundations of Nursing in Acute Care II (9)**

This course builds on Nursing in Acute Care I focusing on more complex and/or unstable patient care situations some of which require strong recognitional skills, rapid decision making, and some of which may result in death. The evidence base supporting appropriate focused assessments, and effective, efficient nursing interventions is explored - life span factors, cultural variables, and legal aspects of care

frame, the ethical decision-making employed in patient choices for treatment or palliative care within the acute care setting. Case scenarios incorporate prioritizing care needs, delegation and supervision, family and patient teaching for discharge planning. Exemplars include acute psychiatric disorders as well as acute conditions affecting multiple body systems. Includes classroom and clinical learning experiences. 5 lecture/seminar, 12 clinical hrs/wk. W

## **NRS 224: Scope of Practice & Preceptorship for AAS Completion (9)**

This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. The preceptorship model provides a context that allows the student to experience the nursing work world in a selected setting, balancing the demands of job and life long learner. Faculty/preceptor/student analysis and reflection throughout the experience provide the student with evaluative criteria against which they can judge their own performance and develop a practice framework. Includes seminar, self-directed study and clinical experience. Required for AAS and eligibility for RN Licensure. 2 lecture/seminar hrs/wk, 220 clinical hours. S

## **NRS 230: Clinical Pharmacology I (3)**

This course introduces the theoretical background that enables students to provide safe and effective care related to drugs and natural products to persons throughout their lifespan. Students will learn to make selected clinical decisions regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. Drugs are studied by therapeutic or pharmacological class using an organized framework. Prerequisite: Admission into Nursing program; BI 231, 232, 233 Anatomy and Physiology sequence; Corequisite: NRS 111. 3 lecture/seminar hrs/wk. W

## **NRS 231: Clinical Pharmacology II (3)**

This sequel to Clinical Pharmacology I continues to provide the theoretical background that enables students to provide



safe and effective care related to drugs and natural products to persons throughout their lifespan. Students will learn to make selected clinical decisions regarding using current, reliable sources of information, monitoring and evaluating the effectiveness of drug therapy, teaching persons from diverse populations regarding safe and effective use of drugs and natural products, intervening to increase therapeutic benefits and reduce potential negative effects, and communicating appropriately with other health professionals regarding drug therapy. The course addresses additional classes of drugs and related natural products not contained in Clinical Pharmacology I. Prerequisite: NRS 230. Corequisite: NRS 112. 3 lecture/ seminar hrs/wk. S

### **NRS 232: Pathophysiological Processes I (3)**

This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. Students will learn to make selective clinical decisions regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes. Registration-Enforced Prerequisite: BI 231, 232, 233, Anatomy and Physiology sequence; Corequisite: NRS 111. 3 lecture/seminar hrs/wk. W

### **NRS 233: Pathophysiological Processes II (3)**

This sequel to Pathophysiological Processes I continues to explore pathophysiological processes that contribute to disease states across the lifespan and human responses to those processes. Students will learn to make selected clinical decisions regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes. The course addresses material not covered in Pathophysiological Processes I. Registration-Enforced Prerequisite: NRS 232. Corequisites: NRS 112. 3 lecture hrs/wk S

### **NRS 280: Cooperative Work Experience: Nursing (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **OA – OFFICE ADMINISTRATIVE ASSISTANT**

### **OA 110: Alphabetic Keyboarding (2)**

This course teaches alphabetic keyboarding skills to students with no previous keyboarding experience. Students will develop touch keyboarding skill on the alphabetic keyboard and will develop proofreading skills. 4 lecture/lab hrs/wk. F, W

### **OA 115: Administrative Office Professional (3)**

This course introduces students to the administrative office professional career. Multiple aspects of the office environment are covered, including time management, customer service, communication, meeting and travel planning, stress management, technology, working with others, and career exploration. Students create a growth plan with the objective of moving towards an entry-level career. 3 lecture hrs/wk. F

### **OA 116: Records Management (2)**

In this course, students gain proficiency in alphabetic, subject, geographic, and numeric filing methods. Students will also learn basic records management concepts, such as classification, records life cycle, the records management plan, storage and retrieval, and security. 1 lecture, 2 lecture/lab hrs/wk. F

### **OA 123: Formatting (4)**

A course that builds and improves upon basic keyboarding skills acquired in OA 124 and introduces the basics of word processing. Students will format business documents including letters, memos, tables, and simple reports. Document production timings and straight-copy timings are used to measure skill improvement. Registration-Enforced Prerequisite: OA 124 or instructor permission; Instructor-Enforced Prerequisite: Keyboarding speed 35 wpm or more. 3 lecture, 2 lecture/lab hrs/wk. W

### **OA 124A: Keyboarding Skill Enhancement (3)**

An individualized speed-building course for students who already know the keyboard without looking. The course is designed to build speed while maintaining accuracy and using correct touch-typing technique. Computer software provides skill building exercises and progress assessments. Instructor enforced Prerequisite: Touch typing at 20 wpm. 6 lecture/lab hrs/wk. W

### **OA 128: Editing for Business (3)**

A comprehensive, activity-oriented course designed to sharpen proofreading and editing skills. Reviews and applies the rules governing punctuation, sentence structure, grammar, and correct word usage in order to create professional business documents. The course will also provide a spelling review. Instructor-enforced prerequisites: Basic keyboarding and word processing skills. 2 lecture, 2 lecture/lab hrs/wk. W

### **OA 131: Ten-Key Calculator (1)**

Introductory course designed to familiarize a student with the functions of the ten-key calculator and to develop speed and accuracy when operating the machine by touch. Students will also develop speed and accuracy on the computer keypad. 2 lecture/lab hrs/wk. F

### **OA 225: Document Processing (3)**

Covers the preparation of business documents from pre-recorded dictation using transcription equipment and word processing software. Reviews pre-transcription skills for spelling, word usage, grammar, and punctuation, which are essential for successful completion of this course. 2 lecture, 3 lab hrs/wk. W

### **OA 245: Office Administration (1)**

This is a professional development course designed for the Office Technology AAS students. It should be taken the term prior to graduation. Students will engage in activities and assignments that will make them better prepared for meeting the expectations of the workplace. Registration-Enforced Corequisite or Prerequisite: OA 123 and CWE 161. 1 lecture hr./wk. W

### **OA 250: General Office Procedures (3)**

An advanced office procedures course in which the student learns to employ acceptable techniques in handling typical

administrative level secretarial duties such as planning and organizing meetings, making travel arrangements, helping with reports, and making decisions. Prerequisite: OA 115, OA 116, OA 124, CIS 120. 2 lecture, 3 lab hrs/wk. S

### **OA 260: Principles of Office Management (3)**

This course is designed to familiarize students with principles used in setting up and managing an office: including organization, problem-solving, communicating, human resources, office systems, and office environments; assists in developing techniques for planning, organizing, and simplifying work. 3 lecture hrs/wk. S

### **OA 280A: Cooperative Work Experience: Administrative Assistant/Office Assistant (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. Prerequisite: Second year standing; instructor approval. 3-39 lab hrs/wk. 33 hrs lab = 1 credit. F, W, S, Su

### **OA 280C: Cooperative Work Experience: Administrative Medical Assistant (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. Prerequisite: Second year standing; instructor approval. 3-39 lab hrs/wk. 3 3 hrs lab = 1 credit. F, W, S, Su

### **OA 280D: Cooperative Work Experience: Clinical Medical Assistant (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. Registration-Enforced Prerequisite: MED 124 with a grade of C or better; Instructor-Enforced Prerequisite: proof of the following prior to enrollment: Hep B and MMR vaccinations and a PPD test; proof of a clean background history check. 3-39 lab hrs/wk. 33 hrs lab = 1 credit. F, W, S, Su

## **PE – PHYSICAL EDUCATION &**

## **OUTDOOR RECREATION**

### **PE 102: Injury Prevention (2)**

This course provides students an opportunity to work in an environment that deals with injuries related to fitness and sports. Students will acquire the skills to provide injury care and apply prevention techniques. 4 lecture/lab hrs/wk. W

### **PE 110: Introduction to Rock Climbing (1)**

Basic introduction to Rock Climb, includes gear, knots, beginning techniques. 2 lecture/lab hrs/wk. There is some physically demanding hiking involved. 2 ten-hour days. F, S, Su

### **PE 111: Beginning White Water Raft (1)**

Rafters paddle. Class 2-3 rapids. 1 five-hour classroom session, 1 ten-hour river session. .5 lecture, 1 lecture/lab hrs/wk. S

### **PE 112: Beginning Kayaking (1)**

Class 2-3 rapids. Sit on top kayak. 1 two-hour classroom session, 1 ten-hour river session. .5 lecture, 1 hr lecture/lab hrs/wk. S

### **PE 113: Beginning Kayak Roll (1)**

Class takes place in pool, students learn how to roll in an enclosed kayak. 5 two-hour pool sessions, 1 ten-hour river sessions. 2 lecture/lab hrs/wk. S, Su

### **PE 114: Beginning Mountain Biking (1)**

Beginning to Intermediate level recommendation. 1 four-hour classroom session, 2 eight-hour trail riding sessions. Must have own bike and helmet. 2 lecture/lab hrs/wk. F, S

### **PE 115: Discover SCUBA (1)**

Designed to introduce students to four days of SCUBA. Determines whether they want to pursue this activity. 1 four-hour classroom session, 2 eight-hour pool sessions. 2 lecture/lab hrs wk. F, W, S, Su

### **PE 116: Fly Fishing (1)**

Introductory class on fly fishing techniques. 5 one-hour classroom sessions, 1 ten-hour river and pond session. 4 lecture, 1 lecture/lab hrs/wk. S, Su

### **PE 117: Steelhead Fishing (1)**

Introductory class for steelhead fishing techniques. Course will also focus on comprehension of the steelhead life cycle, terminology, and fishing regulations in the Oregon marine environment. 2 lecture/lab hrs/wk. W

### **PE 135: Anatomy & Physiology for Fitness (4)**

Presents the basic principles of anatomy & physiology and how that applies to exercise and fitness. This class will introduce concepts in biochemistry, cells, tissues and metabolism as they apply to the following systems: cardiovascular, pulmonary, musculoskeletal, nervous and endocrine systems. This course is also suitable for Physical Education majors as well as college transfer students seeking a course for their Laboratory Science Requirement. 3 lecture, 3 lab hrs/wk. S

### **PE 182F: Triathlon Training (1)**

The course trains students for a Sprint Triathlon through normal competition, field trips, sport specific training, and strength training. Workouts will include and be guided by experts in swimming, biking, and running. Prerequisite: Basic Swimming. Equipment Requirements: road or mountain bike, bicycle helmet, swim goggles, running shoes. 1 lecture, 2 lab hrs/wk.

### **PE 185: Activity Courses (1) (co-educational)**

Discussion and demonstration of individual skills and team strategies with an emphasis on progression, sequence, participation and skill development. Physical conditioning classes offers a conditioning program through the use of polymetrics, strength, cardiovascular and agility exercises. 3 lab hrs/wk. F,W,S,Su

### **PE 180: Advanced OCR (1)**

3 lab hrs/wk. F, W, S

### **PE 1850C: Physical Conditioning OCR (1)**

3 lab hrs/wk. F, W, S

### **PE 1850S: OCR Strategy (1)**

3 lab hrs/wk. F, W, S

### **PE 185A: Aerobic Fitness (1)**

3 lab hrs/wk. F, W, S



PE – PHYSICAL EDUCATION & OUTDOOR RECREATION, *continued*

**PE 185AB: Advanced Baseball (1)**

3 lab hrs/wk. F, W, S

**PE 185B: Beginning Basketball (1)**

3 lab hrs/wk. F, W, S

**PE 185BA: Advanced Basketball Women – Tm (1)**

3 lab hrs/wk. F, W, S

**PE 185BB: Advanced Basketball Men – Tm (1)**

3 lab hrs/wk. F, W, S

**PE 185BM: Physical Conditioning –  
Mens Basketball (1)**

3 lab hrs/wk. F, W, S

**PE 185BS: Basketball Strategy Women – Tm (1)**

3 lab hrs/wk. F, W, S

**PE 185BT: Basketball Strategy Men – Tm (1)**

3 lab hrs/wk. F, W, S

**PE 185BW: Physical Conditioning – Women's  
Basketball (1)**

3 lab hrs/wk. F, W, S

**PE 185FA: Fitness Center – Aerobic (1)**

3 lab hrs/wk. F, W, S, Su

**PE 185FB: Fitness Center – Basic (1)**

3 lab hrs/wk. F, W, S, Su

**PE 185FS: Fitness Center – Strength (1)**

3 lab hrs/wk. F, W, S, Su

**PE 185G: Beginning Golf (1)**

3 lab hrs/wk. F, W, S

**PE 185L: Beginning Bowling (1)**

3 lab hrs/wk. F, W, S

**PE 185MA: Self Defense A(1)**

3 lab hrs/wk. F, W, S, Su

**PE 185MB: Self Defense B(1)**

3 lab hrs/wk. F, W, S, Su

**PE 185MC: Self Defense C(1)**

3 lab hrs/wk. F, W, S, Su

**PE 185P: Physical Conditioning (1)**

3 lab hrs/wk. F, W, S

**PE 185PB: Physical Conditioning, Baseball (1)**

3 lab hrs/wk. F, W, S

**PE 185PI: Pilates (1)**

3 lab hrs/wk. F, W, S, Su

**PE 185QB: Beginning Swim (1)**

3 lab hrs/wk. F, W, S

**PE 185QF: Swim Fitness (1)**

3 lab hrs/wk. F, W, S

**PE 185QI: Intermediate Swim for Fitness (1)**

3 lab hrs/wk. F, W, S

**PE 185R: R.I.P.P.E.D. (1)**

(Resistance, Intervals, Power, Plyometrics, Endurance and Diet)

3 lab hrs/wk. F, W, S

**PE 185S: Step and Pump (1)**

3 lab hrs/wk. F, W, S

**PE 185SB: Baseball Strategies (1)**

3 lab hrs/wk. F, W, S

**PE 185T: Athletic Team Members (1)**

3 lab hrs/wk. F, W, S

**PE 185TI: Intermediate Tennis (1)**

3 lab hrs/wk. F, W, S

**PE 185TN: Beginning Tennis (1)**

3 lab hrs/wk. F, W, S

**PE 185TP: Pickleball (1)**

3 lab hrs/wk. F, S, Su

**PE 185U: Turbo Kick Boxing (1)**

3 lab hrs/wk. F, W, S

**PE 185V: Beginning Volleyball (1)**

3 lab hrs/wk. F, W, S

**PE 185VA: Advanced Volleyball – Tm (1)**

3 lab hrs/wk. F, W, S

**PE 185VS: Volleyball Strategy – Tm (1)**

3 lab hrs/wk. F, W, S

**PE 185VW: Physical Conditioning – Women's  
Volleyball (1)**

3 lab hrs/wk. F, W, S

**PE 185W: Weight Training (1)**

3 lab hrs/wk. F, W, S

**PE 185 WC: Physical Conditioning Wrestling (1)**

3 lab hrs/wk. F, W, S

**PE 185 WJ: Walk, Jog, and Run (1)**

3 lab hrs/wk. F, W, S

**PE 185 WS: Wrestling Strategy (1)**

3 lab hrs/wk. F, W, S

**PE 185 WT: Advanced Wrestling (1)**

3 lab hrs/wk. F, W, S

**PE 185 XA: Advanced Cross Country (1)**

3 lab hrs/wk. F, W, S

**PE 185 XC: Physical Conditioning Cross Country (1)**

3 lab hrs/wk. F, W, S

**PE 185 XS: Cross Country Strategy (1)**

3 lab hrs/wk. F, W, S

**PE 185Y: Yoga (1)**

3 lab hrs/wk. F, W, S

**PE 185YI: Yoga Intermediate (1)**

3 lab hrs/wk. F, W, S

## PE 185Z: Zumba (1)

3 lab hrs/wk. F, W, S

## PE 186L: Big Band Swing Dancing (1)

This course is designed to teach students the fundamentals of big band swing dancing in a relaxed, fun environment. The course will be learning basic dance techniques applied to swing-related dance styles including the lindy hop, Charleston, east coast, and the jitterbug scroll. 3 lab hrs/wk. F, W, S

## PE 194F: Fitness Assessment and Exercise Prescription (2)

Basic fitness principles and techniques for physical fitness assessments including cardiovascular endurance, blood pressure, joint flexibility, body composition, and muscular strength and endurance. Topics include health screening, informed consent, field test protocols, data interpretation, and exercise prescription. Students will have the opportunities for practical experience in assessing fitness levels and developing appropriate exercise prescription for apparently healthy individuals as well as special populations such as physically challenged, pregnant and postpartum women, and mature adults. 4 lecture/lab hrs/wk. F

## PE 194S: Principles of Strength Training for Fitness Tech (2)

Fundamental techniques of resistance training, and programs/systems of conditioning. Includes safety concerns, flexibility exercises, exercise modalities, aerobic conditioning, exercise prescription, exercise principles, weight loss and fitness assessment. Designed for those students who wish to be teachers/coaches or work in a private/corporate fitness setting. 4 lecture/lab hrs/wk. S

## PE 210: Rock Climbing I (1)

Rappel and belay climbing as well as top rope climbing. Physically demanding climbing involved. 2 lecture/lab hrs/wk. 2 ten-hour days. F, S, Su

## PE 211: Open Water SCUBA (2)

This course teaches students to dive independently with certification upon completion. 5 two-hour classroom sessions, 5 two-hour pool sessions, 1 ten-hour open water dive. 1 lecture, 2 lecture/lab hrs/wk. F, W, S, Su

## PE 240: Rock Climbing II (1)

Multi-pitch climbing as well as rappel and belay technical climbs. Physically demanding climbing involved. Registration-Enforced Prerequisite: PE 210 or instructor approval. 2 lecture/lab hrs/wk. 2 ten-hour days. F, W, S, Su

## PE 241: Advanced White Water Raft (1)

Rafters paddle. Class 3-5 rapids. One 5-hour classroom session, 1 ten-hour river session. .5 lecture, 1 lecture/lab hrs/wk. S

## PE 242: Advanced SCUBA (1)

Emphasis on Adv. open water and deep water dives. 2 one-hour sessions, 2 eight-hour water sessions. Adv. PADI certification upon completion. Instructor-Enforced Prerequisite: PADI requirement upon entry. 2 lecture/lab hrs/wk. F, W, S, Su

## PE 243: Altitude Diver (1)

This course is designed for the Advanced Scuba student looking to advance their certification through PADI (Professional Association of Diving Instructors). Altitude diving is any time that you are diving 1,000 feet to 10,000 feet above sea level. The Altitude Diver course teaches students the effects of pressure at altitudes and how to adjust your dive plan accordingly. 2 lecture/lab hrs/wk. F, S, Su

## PE 245: Rock Climbing III (1)

Practice rock climber safety, establishing anchors. Follow and lead on multiple pitch routes. Registration-Enforced Prerequisite: PE 240 or instructor approval. 2 lecture/lab hrs/wk. 2 ten-hour days. S, Su

## PE 253: Wilderness Emergency Care (2)

Course provides necessary knowledge and skills to care for an injured or suddenly ill person in a remote location more than one hour from definitive care. Course follows "Wilderness Medical Society" guidelines. 4 lecture/lab hrs/wk. F

## PE 254: Compass, Maps & GPS (2)

Course provides hands-on knowledge on how to use the compass, Global Positioning System, read maps and terrain in the back country. Course also covers orienteering and geocaching. 4 lecture/lab/hrs/wk. F

## PE 255: Wilderness Survival (2)

Course provides hands-on knowledge on basic principles of surviving in the back country, how to use the compass, Global Positioning System, read maps and terrain in the back country. Course also covers orienteering and geocaching. 4 lecture/ lab/hrs/wk. S

## PE 280: Cooperative Work Experience: Fitness Technician Majors (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## PE 284: Snow Boarding/Skiing (1)

Introductory to Advanced levels of instruction on Snow Boarding or Skiing. 7.5 hrs/wk. x 6 visits to mountain. 2 lecture/ lab hrs/wk. W

## PE 290: Fitness Instructor (3)

The purpose of the course is to teach and train students how to become Fitness Instructors. They would be employed at health clubs, schools, and organizations that offered courses in this subject. Two levels of certification: Level 1 – non-rhythmic classes and Level 2 – rhythmic classes. 2 lecture, 2 lecture/lab hrs/wk. W

## PE 291: Lifeguarding (2)

Teaches students to become a certified Lifeguard, specific to pool settings and non-surf open water. First Aid and CPR will be included. 5 two-hour classroom sessions, 6 five-hour pool sessions. Instructor-Enforced Prerequisites: minimum 15 years of age, Intermediate level swimmer. 1 lecture, 3 lab hrs/wk. S

## PE 292: Water Safety Instructor (WSI) (2)

Teaches student to become a certified swim instructor for children up to adults. 5 two-hour sessions, 6 five-hour pool sessions. Instructor-Enforced Prerequisites: minimum 16 years of age. 1 lecture, 3 lab hrs/wk. S

## PE – PHYSICAL EDUCATION & OUTDOOR RECREATION, *continued*

### PE 294R: Rock Climbing Instructor Aide (3)

This course is designed for the student to be introduced to the basic concepts of guiding. The student will assist in one of each course: Intro, Rock Climbing I and II (within one term, if possible). Registration-Enforced Prerequisite: Instructor approval. 1 lecture, 6 lab hrs/wk. 70 hrs F, S, Su

### PE 294S: Rescue Diver (1)

PADI Advanced Open Water or Advanced Plus and must be 15 yrs. old upon entry. Effectively perform diver assists and respond to diving accidents and rescue. 2 two-and-one-half hour sessions, 2 five-hour pool sessions. Instructor-Enforced Prerequisite: PADI Advanced Open Water or Advanced Plus and must be 15 yrs. old upon entry. .5 lecture, 1 lecture/lab hrs/wk. F, W, S, Su

### PE 294W: White Water Raft Guide (2)

Students learn the basics of whitewater guiding, with techniques of paddling as well as rowing. 1 four-hour classroom session, 4 nine-hour river sessions. Students will assist in one each of Beginning Whitewater Rafting and Advanced Whitewater Rafting. 4 lecture/lab hrs/wk. S

## PH – PHYSICS

### PH 201, 202, 203: General Physics (5,5,5)

Algebra-based physics including topics: mechanics, fluids, waves, thermodynamics, electricity and magnetism, light and optics.

**PH 201:** Units, vectors, motion, dynamics, energy, and momentum. Registration-Enforced Prerequisite or Corequisite: MTH 111 or equivalent. F

**PH 202:** Rotation, gravitation, equilibrium, fluids, and thermodynamics. Registration-Enforced Prerequisite: PH 201. W

**PH 203:** Waves, sound, electricity and magnetism, light, and optics. Registration-Enforced Prerequisite: PH 202. S

*Recommended for pre-professional health care programs. Courses must be taken in sequence, or with consent of instructor. 4 lecture, 3 lab hrs/wk.*

### PH 211, 212, 213: General Physics w/Calculus (5,5,5)

Calculus-based physics including mechanics, gravitation, fluids, harmonic motion, electricity and magnetism, light and optics, and thermodynamics.

**PH 211:** Units, vectors, motion, dynamics, energy, and momentum. Registration-Enforced Prerequisite or Corequisite: MTH 251. F

**PH 212:** Rotation, rotational dynamics, equilibrium, elasticity, fluids, oscillations, and waves. Registration-Enforced Prerequisite: PH 211. Registration-Enforced Prerequisite or Corequisite: MTH 252. W

**PH 213:** Sound, electric forces and electric fields and potentials, capacitance, electronics, magnetism, light and optics, and thermal physics. Registration-Enforced Prerequisite: PH 212. S

*Note: PH 201-203 recommended for pre-professional health care programs. Courses must be taken in sequence, or with consent of instructor. 4 lecture, 3 lab hrs/wk.*

## PHL – PHILOSOPHY

### PHL 201: Intro to Philosophy (3)

The first course in a three-term sequence of courses. It addresses persistent problems in descriptive philosophy. Topics covered include metaphysics: What types of entities are there in existence? What is the underlying nature of reality?

Epistemology questions human knowledge and its reliability. How do we come to know reliably about the world around us? 3 lecture hrs/wk. F

### PHL 202: Ethics (3)

The second course in this series is devoted to the study of ethics, a prescriptive branch of philosophy that asks: How ought we to act? Major ethical theories studied are macro ethics, deontology, consequentialism, and an individual rights perspective that can also be used to answer the question: How ought I act? A major emphasis is the detailed application of the theories studied to dozens of examples of real life ethical problems. The examples may be drawn from: medical ethics, legal ethics, business ethics, taking human life, death with dignity, abortion, bioethics, truth telling, human sexuality, environmental ethics, and the treatment of animals. 3 lecture hrs/wk. W

### PHL 203: Intro to Philosophy (3)

An introduction to 20th century symbolic logic. Topics are: Sentential Logic, Truth Diagrams, Aristotelean Logic, Venn diagrams, Symbolizing English Sentences, Quantifiers, Introduction to Quantificational Logic, English Language Arguments. A person's critical thinking skills will be enhanced and developed as a result of having studied modern symbolic logic. 3 lecture hrs/wk. S

## PN – PRACTICAL NURSING

### PN 101: Introduction to Practical Nursing (9)

This course introduces the learner to the framework of the Practical Nursing curriculum. The emphasis is on health promotion across the life span, and includes learning about self-health as well as client health practices. To support self and client health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview clients in a culturally-sensitive manner, work as members of a multidisciplinary team giving and receiving feedback about performance, and use reflective thinking about their practice as nursing students. The course includes classroom and clinical Health, Nursing and Science Center (HNSC) learning experiences. 12 clinical /5 lecture hrs/wk. F

### PN 102: Foundations of Practical Nursing I (9)

This course introduces focused assessment and common interventions (including technical procedures) for clients with chronic illnesses common across the lifespan in major ethnic groups. The client and family's "lived experience" of the illness, coupled with clinical practice guidelines and research evidence is used to guide clinical judgment in care to the chronically ill. Roles of multidisciplinary team in care of the chronically ill and legal aspects of delegations are explored. Through case scenarios, cultural, ethical, health policy, and health care delivery system issues are explored in the context of chronic illness care. This course includes classroom, labHealth, Nursing and Science Center (HNSC) and clinical learning experiences. 5 lecture, 12 clinical hrs/wk. W

### PN 103: Foundations of Practical Nursing II(9)

This course introduces the learner to assessment and common interventions (including relevant technical procedures) for

care of clients across the life span who require acute care, including normal childbirth. Disease/illness trajectories and their translation into clinical practice guidelines and/or standard procedures are considered in relation to their impact on providing culturally sensitive, client-centered care. This course includes classrooms, lab/Health, Nursing and Science Center (HNSC) and clinical learning experiences. 4 lecture, 16 clinical hrs/wk. S

## PS – POLITICAL SCIENCE

### PS 201, 202, 203: U.S. Government (3,3,3)

A three-term course that includes the fundamental institutions vocabulary, theories, and analytical methods of political science. Students use the Internet to study national interest groups, U.S. Supreme Court cases, Oregon's state legislative process and more. The courses do not need to be taken in sequence.

**PS 201** focuses on the culture, values and political participation practices that sustain and continuously modify American politics. Topics include political ideologies and political parties. 3 lecture hrs/wk. F

**PS 202** focuses on the national policy-making process, especially the role of the judicial branch. Topics include civil rights and civil liberties. PS 201 and 202 should be taken in sequence. 3 lecture hrs/wk. W

**PS 203** concerns state and local governments and current policy issues. Guest speakers add experiential perspectives to the reading and Internet research. This course can be taken separately, without taking PS 201 or 202, or as the third course in the sequence. Successful completion of WR 121 is recommended prior to taking this course. 3 lecture hrs/wk. S

### PS 205: International Relations (3)

This course is a one-term survey of contemporary international political and economic issues in historical perspective. The course emphasizes reading, group discussion, short essays, and some Internet research. It is especially relevant to career preparation for business, political science, and secondary education majors, as well as for international relations majors. Students should not attempt to take this course until they have successfully completed WR 121, 122, and 123. 3 lecture hrs/wk. S (Not offered every year).

### PS 280: Cooperative Work Experience: Political Science (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## PSY – PSYCHOLOGY

### PSY 101: Psychology of Human Relations (3)

The purpose of this course is to enhance students' understanding of the variety and complexity of human interactions. The focus is on the practical application of psychology in everyday situations; topics include self-concept, perception, personality development, cultural diversity, conflict resolution, emotions, stress, interpersonal communication, workplace success, and behavioral change. 3 lecture hrs/wk. F, W, S, Su

### PSY 130: Understanding Children's Behavior (2)

An introduction to the basic principles of understanding child behavior using the psychology of Adler and Dreikurs as a reference. Discussion and practice of ideas presented including methods of discipline; effective communication; conflict resolution; sexuality; developing healthy self-concepts; and a more democratic approach to living. 2 lecture hrs/wk. S (Not offered every year)

### PSY 201: General Psychology (3)

Studies human behavior through the topics of genes, brain function, nervous and endocrine systems, body rhythms, consciousness, sensation, perception, and scientific methodology. Recommended Prerequisite: Placement by approved measure into WR 115. 3 lecture hrs/wk. F, W, S, Su

### PSY 202: General Psychology (3)

The study of human behavior through the topics of learning, memory, thinking, intelligence, motivation, emotion, and human development. May be taken concurrently with PSY 203. 3 lecture hrs/wk. W, S, Su

### PSY 203: General Psychology (3)

The study of human behavior through the topics of health and stress, personality, socio-cultural forces, psychological disorders, and approaches to treatment. May be taken concurrently with PSY 202. 3 lecture hrs/wk. S, Su

### PSY 211: Media Literacy (3)

Survey of news and opinion media, how the media functions, rights and responsibilities, problems, and criticism; effects of media on society; relation of advertising to media on society; relation of advertising to media; propaganda and the media. 3 lecture hrs/wk. (Cross-listed J 211. Not offered every year.)

### PSY 231: Human Sexuality (3)

Introduces the biological, social, and psychological components of human sexual functioning. Topics such as physiology, attitudes, emotions, and myths are considered, emphasizing relationship perspectives. The focus is on recognizing the range of human sexual behaviors over time, across cultures, and within groups. 3 lecture hrs/wk. S

### PSY 239: Abnormal Psychology (3)

This course bridges the gap between mental health concepts introduced in PSY 203, General Psychology, and the more in-depth analysis of psychopathology issues covered in the typical upper division psychology class. The following topics will be presented: defining "abnormal"; a brief historical and cross-cultural overview of abnormal behavior; basic data regarding the incidence and classification of emotionally disturbed persons; and an introduction to common treatments for psychological difficulties. Registration-Enforced Prerequisite: PSY 201, 202, and 203 or instructor permission. 3 lecture hrs/wk.

### PSY 280: Cooperative Work Experience: Psychology (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su



## R – RELIGION

### R 201, 202, 203: World Religions (3,3,3)

This course introduces the concept of academic study of religion. It explores various aspects of some of the major world religions including historical development, basic tenets, ethical principles, sacred practices, sacred texts, and sacred people within each tradition. Special attention is given to culturally diverse world views and how they affect everyday life. The nature of religious studies, Hinduism, Buddhism, Confucianism, Taoism, Islam, Judaism, Christianity, and indigenous religions will be explored throughout the year as well as special topics arising from class discussions. R 201: Fall term topics: Academics of religious studies, Hinduism, Buddhism. R 202: Confucianism, Taoism, Islam. R 203: Spring term topics: Judaism, Christianity, indigenous religions. Courses need not be taken in sequence. 3 lecture hrs/wk. F, W, S

## RD – READING

### RD 080: Basic Reading (3)

Basic Reading focuses on vocabulary and comprehension skills necessary for college reading. Students are introduced to strategies for vocabulary development as well as methods of finding the main idea and supporting details. Students are encouraged to expand their analytical thinking skills in the process. Writing is presented as a natural companion to reading. Registration-Enforced Prerequisite: Placement Test. Registration-Enforced Corequisite: Enrollment in Gateway to Success cohort. 3 lecture hrs/wk. F, W, S, Su

### RD 090: College Textbook Reading (3)

This course develops the analytical reading skills necessary for college-level work. Emphasis is on development of methods for analyzing and critically evaluating college material, development of college-level vocabulary, and development of personal, strategic methods of reading. Registration-Enforced Prerequisite: RD 080 or equivalent with a C or better or placement test. Registration-Enforced Corequisite: Enrollment in Practicing Success cohort. 3 lecture hrs/wk. F, W, S, Su

### RD 115: Critical Reading Strategies (3)

This course is designed to develop Critical Reading Skills for success in reading College level textbooks. Some of the skills covered are vocabulary, synthesizing long readings, inference, and analyzing arguments. Students will apply these critical reading skills to successfully comprehend and evaluate college level textbooks and the internet. Registration-Enforced Prerequisite: RD 090 with a grade of C or better or placement test. 3 lecture hrs/wk. F, W, S

## SDP – SUPERVISION

### SDP 109: Elements of Supervision (3)

An introductory course dealing with the problems and skills of the first-level supervisor. Attention is given to management communications, motivating employees, effective leadership styles, training, and organizing and decision-making techniques. 3 lecture hrs/wk. F, S

### SDP 113: Human Relations for Supervisors (3)

This course analyzes the mutual relationships of organizational employees, customers, and other outside persons. Studies and provides critical thinking about teamwork, coaching, counseling, and mutual respect, personal integrity, and acceptance of others. Students will gain insight into the human and organizational factors that influence the workplace beyond the traditionally measured outcomes of performance, production, and profitability. 3 lecture hrs/wk. F

### SDP 201: Coaching in the Workplace (3)

This course is designed to help supervisors and other team leaders define the effective coach, build a coaching foundation, and plan a coaching strategy. Employee personality types, trust building, and healthy coach-employee relationships will be addressed. Effective questioning strategies as information-gathering tools will also be addressed. 3 lecture hrs/wk. S

### SDP 204: Labor and Management Relations (3)

This course provides students with the history of labor and management relations as a way to understand the current collective bargaining process. The role of collective bargaining is examined in order to understand how the strategic goals of both labor and management influence the process. The history of collective bargaining, the role of each participant,

and critical thinking skills related to modern labor and management roles are emphasized. 3 lecture hrs/wk. W.

### SDP 205: Management and Leadership Dynamics (3)

This is a course designed to provide students with current supervisory, leadership and management information using actual companies and hiring managers. Using business cases studies, classroom lectures from actual business owners and managers, along with current workplace analysis, students will gain insights and understanding for the dynamic nature of supervision and management. Students will have the opportunity to study, understand, and consider the various styles of workplace leadership which exist and from whom they may seek future job opportunities. 3 lecture hrs/wk. S (offered every other year) S

### SDP 208: Human Resources for Supervisors (3)

This course prepares students for real issues and current challenges in human resource management. Problem-solving and decision-making skills are developed and emphasized. 3 lecture hrs/wk. W

### SDP 215: Equal Employment Opportunity (3)

This course reviews the United States Equal Employment Opportunity (EEO) laws, regulations, and guidelines that affect first-line supervisors. Beginning with a Title VII of the 1964 Civil Rights Act and moving through to the 2008 Genetic Information Nondiscrimination Act, the course covers all eight federal non-discrimination laws. The role of the U.S. Equal Employment Opportunity Commission (EEOC) is reviewed along with the EEOC website. Case studies provide context to the laws and guidelines. Students achieve the knowledge necessary to maintain an EEO compliant workplace. 3 lecture hrs/wk.W.

### SDP 223: Employee Development and Performance Management (3)

This course will examine the modern role of employee performance management that has replaced the historical concept of employee reviews and job-based measurement standards. Students will analyze the supervisor's role in the total employee development process. An emphasis is placed on the use of employee development within the organizational strategic plan, performance measurement, along with a study of reward systems and legal issues. Upon



completion of the course, students will be prepared to construct an employee development plan. 3 lecture hrs/wk. S.

## SOC – SOCIOLOGY

### SOC 204: Introduction to Sociology (3)

Sociological theories and theorists, as well as research and scientific methods, are examined along with the problem of how societies teach their children to become members of the group, and how adults cope with life's passage. Social structure, social patterns, deviance and social control, and the impact and meaning of culture, are also explored. While the primary focus of the course is our own society, several other societies are studied for comparison. The first term of a three-term sequence; each may be taken independently. 3 lecture hrs/wk. F, W

### SOC 205: Institutions and Social Change (3)

An analysis of the major institutions in society including family, religion, law and politics, and economics is offered during this term. The focus is on modern American society, but other societies will be explored and used for comparison. 3 lecture hrs/wk. F, S

### SOC 206: Social Problems and Issues (3)

Social issues and social problems are explored using a critical thinking approach. Examples are from sociologists and journalists, and include problems such as poverty, drugs, crime, urban affairs, public health, gender issues. 3 lecture hrs/wk. F, S

### SOC 207: Juvenile Delinquency (3)

The concepts and theories of delinquency: childhood development, delinquency, and status offenses, the nature and extent of delinquency, and individual, sociological, and developmental views of delinquency. The social, community, and environmental influences on delinquency. Effect of the family, peers, schools and drug use on delinquency. The juvenile system: history and development of juvenile justice, police work with juveniles, the juvenile court process, and juvenile corrections. Primary, secondary, and tertiary delinquency prevention efforts also will be defined. NOTE: This course is enhanced with online components. Students will need regular access to an Internet-connected computer. 3 lecture hrs/wk. W

### SOC 213: Race, Class, & Ethnicity (3)

Ways societies tend to divide themselves into ranks of more and less privileged members. Includes racial and ethnic groups, aging in our own and other societies, and sex and gender roles in their contemporary and historical contexts. Prerequisite: SOC 204 or 205 recommended. 3 lecture hrs/wk. F, W, S

### SOC 225: Social Aspects of Addiction (3)

This course examines specific problems related to the social implications of addiction. The basic facts and effects on individuals, their families, and society are explored. Personal pathologies that are precursors to drug and alcohol addiction will be reviewed including mental illness, abusive background, and suicidal ideations. 3 lecture hrs/wk. S

### SOC 280: Cooperative Work Experience: Sociology (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33. F, W, S, Su

## SOIL – SOIL SCIENCE

### SOIL 205: Soil Science (3)

This course will provide information and experience in soil development, physical properties of soil, soil organisms, naming of soils, and how land management practices affect soil quality and sustainability. 3 lecture hrs/wk. S

### SOIL 206: Soil Science Lab (1)

Laboratory exercises and field trips designed to develop student competency in soil processes, description, analysis, and assessment with a particular emphasis on the role of soils in managed and unmanaged forest ecosystems. Registration-Enforced Prerequisite/Corequisite: SOIL 205. 3 lab hrs/wk. S

## SP – SPEECH

### SP 105: Listening (3)

Because listening is important in our personal as well as professional relationships, students find this course particularly interesting and relevant. In this course, students will examine the effects of listening style on personal relationships and public interactions. Both theoretical and applied perspectives will be examined. However, the emphasis will be on skill application. Through exercises and assignments, students will also have an opportunity to assess their own listening strengths and weaknesses with opportunities to improve proficiency. Recommended Prerequisites: WR 095 with a grade of C or better or placement scores of 70 or above in writing; AND RD 090 with a grade of C or better or placement scores of 85 or above in reading. 3 lecture hrs/wk. W, S, Su

### SP 111: Fundamentals of Public Speaking (4)

Preparation and delivery of effective extemporaneous communications. Primary emphasis on content, organization, audience adaptation, delivery, and listening. Recommended Prerequisites: WR 095 with a grade of C or better or placement by approved measures; AND RD 090 with a grade of C or better or placement by approved measure. 4 lecture hrs/wk. F, W, S, Su

### SP 112: Persuasive Speech (3)

Study of theories and practices of persuasion. Includes preparation and delivery of persuasive messages to individuals and groups. Emphasis on becoming a responsible persuader and a critical consumer of persuasion. Recommended Prerequisites: WR 095 with a grade of C or better or placement by approved measure; AND RD 090 with a grade of C or better or placement by approved measure. 3 lecture hrs/wk. W, S

### SP 218: Interpersonal Communication (3)

An investigation of the theory and practice of interpersonal communication through participation in group discussions, readings, and written exercises. Attention to perception, language, sharing, listening, decision making, conflict, non-verbal, and male/female communication. Emphasis is on developing attitudes and skills applicable to work, social, civic and intercultural situations. Registration-Enforced Prerequisites: WR 095 with a grade of C or better or placement by approved measure; AND RD 090 with a grade of C or better or placement by approved measure. 3 lecture hrs/wk. W, S

**SP 219: Small Group Discussion (3)**

Study of theory and practice of small group communication by participation in group discussions, readings, and written exercises. Attention to organization and conduct of problem-solving groups and learning. Emphasis is on: (1) learning how to enhance group communication, to deal effectively with conflict and to apply problem-solving techniques to a task-oriented group setting, and (2) developing attitudes and skills applicable to leadership and participation in work and civic committees. Recommended Prerequisites: WR 095 with a grade of C or better or placement scores of 70 or above in writing; AND RD 090 with a grade of C or better or placement by approved measure. 3 lecture hrs/wk. W, S

**SP 237: Gender Communication (3)**

An examination of similarities and differences in male and female communication styles and patterns. Particular attention given to the implications of gender as social construct upon perception, values, stereotyping, language use, nonverbal communication, and power and conflict in human relationships. Discussion of influence of mass communication upon shaping and constructing male and female sex roles. Course fulfills block transfer and cultural diversity requirements and is transferable to state four-year university. 3 lecture hrs/wk. F

**SP 280: Cooperative Work Experience: Speech (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

**SPAN – SPANISH**

**SPAN 101- First Year Spanish (4)**

Students will begin to build the basic skills of listening, speaking, reading and writing in Spanish, with a special focus on communicating. Students will be introduced to the diversity of the Spanish-speaking world. Registration-Enforced Prerequisite: WR 115 with a grade of C or better. 4 lecture hrs/wk. F

**SPAN 102: First-Year Spanish (4)**

Students will further develop the basic skills of speaking, listening, reading and writing. The course emphasizes oral communication and listening comprehension within a culturally authentic context. Students will deepen their awareness of the Spanish-speaking world. Registration-Enforced Prerequisite: WR 115 and SPAN 101 with a grade of C or better. 4 lecture hrs/wk. W

**SPAN 103: First-Year Spanish (4)**

Students will practice active communication while strengthening speaking, reading, writing, and listening skills within a culturally authentic context. Through the study of literature and other media, students will deepen their awareness of the Spanish-speaking world. Registration-Enforced Prerequisite: WR 115 and SPAN 102 with a grade of C or better. 4 lecture hrs/wk. S

**SPAN 111: Conversational Spanish (2)**

An intensive conversational Spanish, with reading and written exercises designed to help students acquire an accurate and fluent use of Spanish. Registration-Enforced Prerequisite: WR 115 and SPAN 101 or equivalent. 2 lecture hrs/wk. W

**SPAN 120: Spanish in the Workplace: (4)**

These courses offer introductory Spanish language skills and cross-cultural communication as applied to several workplace environments. Issues pertinent to the workplace such as health, safety, problem-solving and teamwork are emphasized. 4 lecture hrs/wk.

**SPAN 121: Spanish in the Workplace for Viticulture (4)**

This course will introduce students to basic grammar concepts and vocabulary pertinent to the field of Viticulture and Enology. Topics will be presented and discussed in a culturally authentic context exploring the realities of the industry in the United States today. Through active classroom participation, students will practice basic Spanish phrases needed to explain the purpose, procedures, and evaluation of planting, harvesting, and pruning. In addition, students will learn vineyard specific vocabulary and phrases to effectively carry out safe protocols. 4 lecture hrs/wk. W

**SPAN 122: Spanish in the Workplace for Safety and**

**Emergency Personnel (4)**

This course will introduce students to basic Spanish grammar concepts and vocabulary pertinent to Safety and Emergency Personnel. Topics will be presented and discussed in an authentic context exploring the cultural interactions within these occupations. Great emphasis will be placed on understanding cultural differences between the Hispanic and the non-Hispanic community. 4 lecture hrs/wk.

**SPAN 201: Second-Year Spanish (4)**

This course promotes intensive development of oral and written Spanish language skills. Students will review and expand on first-year structural patterns and vocabulary by integrating listening, speaking, reading, and writing skills. In-depth exploration of cultures is offered through the use of authentic materials from the Spanish-speaking world. Conducted in Spanish. Registration-Enforced Prerequisite: SPAN 103 with a grade of C or better. 4 lecture hrs/wk. F

**SPAN 202: Second-Year Spanish (4)**

This course continues an in-depth development of oral and written Spanish language skills with further emphasis on vocabulary and complex grammatical concepts. In-depth exploration of cultures is offered through the use of authentic materials from the Spanish-speaking world. Conducted in Spanish. Registration-Enforced Prerequisite: SPAN 201 with a grade of C or better. 4 lecture hrs/wk. W

**SPAN 203: Second-Year Spanish (4)**

This course promotes continued development of Spanish language skills through in-depth oral activities and discussion of themes, analysis of current events relating to the Spanish-speaking world; and the use of written materials as a means of communication. In-depth exploration of cultures is offered through use of authentic materials from the Spanish-speaking world. Conducted in Spanish. Registration-Enforced Prerequisite: SPAN 202 with a grade of C or better. 4 lecture hrs/wk. S

**SPAN 211: Conversational Spanish (2)**

This course provides students with an opportunity for intensive speaking and listening practice to improve oral/aural communication skills in Spanish. Students will learn new vocabulary and expressions through reading and listening activities from culturally authentic sources representative of

the Hispanic world. Students will apply these concepts to communicate in conversations, interviews, and role-play skits with other students. 2 lecture hrs/wk. F, W, S

## SUR – SURVEYING

### SUR 161: Surveying I (4)

Course includes the fundamental concepts of plane surveying including the theory of measurements; systematic and random errors; distance and angle measurement using total stations and differential leveling. Course also includes calculation of bearings, azimuths, coordinates, area, and traverse adjustments with an introduction to horizontal and vertical curve computations. Registration-Enforced Corequisite: MTH 112, with grade of C or better or instructor approval. 2 lecture, 4 lecture/lab hrs/wk. S

### SUR 162: Plane Surveying II (4)

Digital theodolites and data collectors, instrument testing and observational error analysis. Theory of leveling. Solar observation and computation. E.D.M. use and calibration. Field labs including solar observations, traversing, leveling, and horizontal curve layout. Introduction to COGO software. Registration-Enforced Prerequisite: SUR 161, with grade of C or better. 2 lecture, 6 lab hrs/wk. F

### SUR 163: Route Surveying (4)

Laboratory intensive project overview including horizontal and vertical control for preliminary location and construction surveys for a secondary road. Instruction in basic elements of horizontal and vertical route alignment and layout. Determination of earth work quantities. CAD drafting of plan, profile and cross-sections. Registration-Enforced Prerequisite: SUR 162 with a grade of C or better. 2 lecture, 6 lab hrs/wk. W

### SUR 209: Photogrammetry and Intro to Remote Sensing (4)

Management and conservation of natural resources with the fundamentals of spatial data acquisition from airborne and spaceborne sensors. Introduction to theory of spectral reflectance properties of vegetation, the principles of photographic analysis and aerial photo-interpretation and new advances such as LIDAR. Registration-Enforced Corequisite/Prerequisite: MTH 112. 3 lecture, 3 lab hrs/wk.

### SUR 242: Land Descriptions & Cadastre (3)

Real property descriptions and land record systems. Emphasis on interpreting and writing land descriptions, research in I and records and multi-purpose cadastre. Registration-Enforced Prerequisite: SUR 161 with a grade of C or better. 3 lecture hrs/wk. S

### SUR 280: Cooperative Work Experience: Surveying (1-13)

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of the various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year, except for students taking Occupational Skills Training (OST), which has a limit of 24 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## TA – THEATRE ARTS

See page 27 for program information

### TA 141: Acting 1 (3)

Acting 1 focuses on developing an actor's repertoire of warming up the body, mind, and voice and providing the actor with the tools to analyze a script, audition for a role, rehearse and then present a personalized performance. By articulating the actor's critical voice through production reviews and exploring the actor's own connection to characters, the inexperienced student emerges from Acting 1 with the confidence and basic skills needed to audition for and take part in a show. 3 lecture hrs/wk. F

### TA 142: Acting 2 (3)

Acting 2 continues the beginning acting series with further development of an actor's repertoire of using the body, mind, and voice to create dramatic characterization. Text structure and dialogue analysis are cultivated in the actor to assist characterization rooted in the given circumstances of the story within a variety of theatre styles. Emotional connection to circumstances and subtext explorations bring the actor to more truthful performances. The actor continues to develop a critical voice by reviewing productions. Required for theatre major transfers and open to non-majors. Registration-Enforced Prerequisite: TA 141. 3 lecture hrs/wk. W

### TA 143: Acting 3 (3)

Acting 3 continues the beginning acting series with further development of an actor's resources of using the body, mind, and voice to create dramatic characterization by exploring the Stanislavski method. With a focus on the inner life of a character and the technique involved to replicate a performance time and again, this course polishes the process for a characterization and bridges into more complex scene work with multiple scene partners. The actor continues to develop a critical voice by reviewing productions. Required for theatre major transfers and open to non-majors. Registration-Enforced Prerequisite: TA 142. 3 lecture hrs/wk. S

### TA 211: Introduction to Set Design (3)

An introduction to the principles and practices of scenic design. With an emphasis on conceptual ideas, students conduct research for shows in various historical periods and develop the techniques involved to make perspective drawings, renderings, and model buildings. Students prepare set designs that effectively communicate their artistic concepts and practical applications. 2 lecture, 3 lab hrs/wk. S

### TA 213: Introduction to Lighting Design (3)

An introduction to the principles and practices of lighting design. With an emphasis on conceptual ideas, students conduct research for shows in various historical periods and develop the techniques involved with basic stage lighting. Students learn about lighting instruments, how color affects the audience and players, and how to effectively communicate their designs. 2 lecture, 3 lab hrs/wk. W (offered every other year)

### TA 241: Advanced Acting-Classics (3)

Advanced Acting-Classics explores acting in classical styles, from ancient Greek works to Moliere and Shakespeare. Textual analysis and research of the time periods. Develop connections to the material that cultivate a truthful performance with complex psychology and appropriate physically. The actor continues to develop a critical voice to reviewing productions. Open to non-majors. Registration-Enforced Prerequisites: TA 141, 142, and 143. 3 lecture hrs/wk. F



**TA 242: Advanced Acting-Clowning (3)**

Advanced Acting-Clowning explores the art of performance through physical expression. Actors find their inner comedian through clown exercises, makeup use, and skits. By developing their sense of play through improvisation, situational comedy, and spontaneity, students will emerge with a strong sense of playfulness and confidence. Open to non-majors. 3 lecture hrs/wk. W

**TA 243: Advanced Acting-Community Based Drama (3)**

Advanced Acting-Community Based Drama cultivates actors who are active in their communities by exploring issues that need public awareness. By interviewing people in the area who relate to a chosen topic for the term, actors develop their own performance pieces through a process that involves writing, interpreting, exploring text, and crafting a presentation for the public. Students learn about American theatre companies who specialize in this type of theatre. Open to non-majors. 3 lecture hrs/wk. S

**TA 253: Performance (2)**

Rehearsal and performance in a UCC theatre production. Students engage in a staged theatrical process, from auditions to rehearsing to performing the show. Students gain insight on professional standards in theatre, as well as the expectations from the current performance industry. Students must audition at the beginning of the quarter to be approved for this course. Prerequisite: Instructor approval. 6 lab hrs/wk. F, W, S

**TA 256: Musical Theatre Workshop (3)**

A studio course introducing the techniques used in contemporary American musical theatre to tell a story with a song. Students work on songs from the standard musical theatre repertoire and engage in workshops that focus on communicating the story, character motivation, finding intention in the music, and freeing the sound from the body with relaxation. Open to non-majors; previous singing experience not required. 3 lecture hrs/wk. W

**TA 257: Musical Theatre Dance (3)**

A theatre course introducing the techniques and basic moves used in musical theatre dance. Students work on songs from standard musical theatre repertoire, learning signature dance moves from musical theatre choreographers. Students engage in workshops that focus on communicating a story physically, character motivation as an individual and within a group dance, finding intention in the music, flexibility and toning of the body, and presence on stage. 3 lecture hrs/wk. S

**TA 261: Introduction to Costume Design (3)**

An introduction to the principles and practices of costume design. With an emphasis on conceptual ideas, students conduct research for shows in various historical periods and develop the techniques involved to make perspective drawings, renderings, and costume plots. Students prepare costume designs that effectively communicate their artistic concepts and practical applications. 2 lecture/3 lab hrs/wk. F

**TA 265: Production (1-2)**

Participate as a technical or production team member for a UCC theatre production. Students explore appropriate positions such as stage manager, production assistant, lighting crew, costume or set construction, stage crew, or design assistants. Positions are selected by the Director of Theatre; students must submit interest before the end of Week 1 of each quarter. Required for all Theatre Arts majors, to be repeated up to three times for transfer credits. 3-6 lab hrs/wk. F, W, S

**TA 271: Introduction to Theatre (4)**

An examination of theatre arts, how it has evolved, and its value to communities. The course explores theatre's evolution with society and the effects it has in contemporary settings. From script to performance, the course dissects the many elements of theatre artistry, process and production. 4 lecture hrs/wk. F

**TA 272: Movement (3)**

A studio course introducing physical expression and storytelling with the body. Actors develop physical dexterity, strength and control while exploring various techniques used in contemporary theatre. Studies include styles from Laban, Grotowski, Decroux, and Loui. Actors work through presentations of movement pieces that culminate in a performance at the end of the term. Required for students taking Stage Combat in Winter. 3 lecture hrs/wk. F



**TA 273: Stage Combat (3)**

A studio course introducing the techniques used in stage combat. Various exercises in hand-to-hand combat and weapon use are covered with details in safety and performance style. 3 lecture hrs/wk. W

## **TA 280: Cooperative Work Experience: Theatre (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **TTEN – AUTOMOTIVE T-TEN**

### **TTEN 100: Intro to Toyota (5)**

Introduction to Toyota is required for all students entering UCC T-TEN program. Students will be accepted into the program based on successful completion of UCC's T-TEN application process. User name and passwords will be issued needed for automotive classes. Shop and environmental safety course will be assigned to be completed before students are able to work in the auto shop lab. The policies and procedures needed for the student's dealer internships will be covered. Instructor approval required. 11 lecture, 22 lab hrs/wk. (3-week course) F

### **TTEN 150: Suspension and Alignment - Toyota (5)**

A study of automotive suspension and steering systems including diagnosis and repair. Fundamentals of front and rear suspension, steering geometry, diagnosing suspension and steering problems, and overhaul techniques are covered in this course. Rebuilding and repair of the different types of front and rear suspensions including strut types are practiced. This course provides a detailed study of wheel balancing including radial force variation, computer controls for steering and suspension systems including inputs, logic, and actuators, and four wheel alignment. Wheel alignment factors and procedures, Steering and Handling concerns and diagnostics are also covered in detail. Instructor approval required. 11.5 lecture, 23 lab hrs/wk. (3-week course) F

### **TTEN 151: Internal Combustion Engines – Toyota (6)**

The operating principles and function of each of the major parts of the reciprocating piston internal combustion engine are presented and discussed. Service, overhaul, and troubleshooting techniques as they relate to each component

are also covered. Diagnosis and service of engine cooling and lubrication systems are covered. Diagnostic procedures for engine concerns are practiced. Instructor approval required. 11 lecture, 22 lab hrs/wk. (4-week course) S

### **TTEN 155: Automotive Brakes - Toyota (6)**

A course designed to teach students the principles of automotive brakes. Basic concepts and terminology, fundamental principles, diagnosis and overhaul techniques are an integral part of this course. Special emphasis is placed on the study, diagnosis and repair of braking systems found on late model vehicles. The student should acquire knowledge of brake systems and trouble-shooting procedures for disc and drum brakes. Students will be taught to properly use industry standard equipment to service disk and drum brake components and systems to manufacture standards. Diagnosis and service of computer controlled systems integrated into the automotive brake system will be studied. Instructor approval required. 13 lecture, 27 lab hrs/wk. (3-week course) S

### **TTEN 168: Automotive Electricity I - Toyota (6)**

This is the first of two courses focusing on electrical and electronic systems for T-TEN students. Electrical theory, circuits, and devices such as batteries, starters, alternators and test meters will be covered. All concepts discussed in the classroom will be reinforced in lab. The integration of applied mathematics, chemistry, physics, and other scientific concepts is a large portion of this course. Practical skills established include: component identification, wiring techniques, test equipment usage, safety practices, and appropriate work habits. Instructor approval required. 11 lecture, 22 lab hrs/wk. (4-week course) F

### **TTEN 169: Automotive Electricity II - Toyota (6)**

In part one of this sequence the topic of study was centered on basic electrical principles. The identification of different types of circuits and how they work, including the application of Ohm's law to demonstrate the relationship between current, voltage and resistance was also covered. A continuance of the battery and starting systems will carry over briefly as a review and will be discussed when the topics applied to the concepts at hand. In this course we will take those concepts one-step further and apply them directly to the work that you'll do anytime you diagnose an electrical problem. Drawing from your prior learning in part one of this

sequence, you will apply that knowledge in detail toward the diagnosis of electrical systems utilizing all resources available. Instructor approval required. 11 lecture, 22 lab hrs/wk. (4-week course) F

### **TTEN 259: Electronic Engine Controls I - Toyota (6)**

Electronic Engine Controls I is the first course of a two part engine performance series for T-TEN students. The series is designed to provide the training to meet the requirements of NATEF for ASE certification area A8. Toyota curriculum is infused to meet the requirements of T-TEN course 852. The course will consist of six instructional units; Basic Engine Operation, Engine Controls Basics, Air Induction Systems, Ignition Systems, Fuel Systems, Fuel Trim. Approximately one fourth of the class will be classroom and three fourths will consist of lecture/lab activities. Instructor approval required. 11 lecture, 22 lab hrs/wk. (4-week course) F

### **TTEN 260: Electronic Engine Controls II - Toyota (6)**

Electronic Engine Controls II is the second course of a two part engine performance series for T-TEN students. The series is designed to provide the training to meet the requirements of NATEF for ASE certification area A8. Toyota curriculum is infused to meet the requirements of T-TEN course 852. Toyota course 874 curriculum is also infused in the series. The course will consist of four instructional units; No Start Diagnosis, OBDII Systems and Misfire, Engine Control System Diagnosis, and Emissions Systems. Approximately one fourth of the class will be classroom and three fourths will consist of lecture/lab activities. Instructor approval required. 11 lecture, 22 lab hrs/wk. (5-week course) Su

### **TTEN 261: Power Trains - Toyota (5)**

Power Trains details the theory, operation, diagnosis and service of modern Toyota drive train components. This includes information on the latest clutches, manual transmissions and transaxles, solid and independent rear axle assemblies, drive shafts, drive axles, U-joints, CV joints and four wheel drive systems. Basic drive train components such as gears, bearings and seals are identified and explained. This course also includes detailed explanations of the operation of electronically controlled systems. Scan tool use and code retrieval to aid in diagnosis are also covered. Instructor approval required. 11 lecture, 22 lab hrs/wk. (3-week course) W



### **TTEN 263: Automatic Transmissions - Toyota (6)**

Provides a comprehensive introduction to automatic transmission theory, service, and diagnostics; including electronic control, hydraulic circuits, torque converters, holding devices, and planetary gear systems. Practical hands-on labs reinforce theories. Students practice component disassembly and reassembly with a variety of Toyota automatic transmissions and transaxles. Students complete all NATEF required tasks related to Automatic Transmission & Transaxles (A2). Instructor approval required. 11 lecture, 22 lab hrs/wk. (4-week course) W

### **TTEN 286: Climate Control - Toyota (5)**

This course covers Toyota's heating, ventilation, and air conditioning systems and the engine cooling system. Lecture sessions are devoted to the purpose, operational theory, and diagnostic processes common to each of the above areas. Lab sessions are provided to develop student skills in servicing, trouble-shooting, and repairing each component within the specific system. Students will work on both components and complete vehicles as part of the learning process. Instructor approval required. 11 lecture, 22 lab hrs/wk. (3-week course) W

## **TTL – TRUCK DRIVING**

### **TTL 101: Introduction to Professional Truck Driving and Logistics (4)**

This course is part of the statewide Professional Truck Driver Certificate program. Introduction to logistics and commercial vehicle operation, covering control systems, coupling procedures, cargo handling and pre-trip inspections. Covers regulations and requirements for CDL, speed management, road conditions, and accident scene management.

Safety is a key component. Prerequisite: Although applicants can take the class at age eighteen, however, drivers must be 21 to cross state lines. All applicants must have a clear driving record for the past five years; complete and pass a DOT physical and Drug Screen. 40 lecture hrs/wk. 1 week course.

### **TTL 121: Practical Applications in Professional Truck Driving and Logistics (6)**

This course is part of the statewide Professional Truck Driver Certification program. Demonstration of skill development related to safe commercial vehicle operation. In-depth

coverage of logistics business processes and communication skills development. Covers delivery basics, including backing, visual search, shifting, turning, space and speed management. 40 lecture/lab hrs/wk. (3 week course.)

### **TTL 141: Transportation and Logistics Customer Service Skills (1-3)**

This course is part of the statewide Professional Truck Driver Certification program. Focusing on building the necessary skills for outstanding customer service, effective listening, conflict resolution and communication, identifying internal and external customers, learning how to reduce/eliminate potentially unproductive interactions, and create positive experiences for all customers. 10 - 30 lecture hrs/wk. 1 week course.

### **TTL 281: CWE: Transportation (6)**

The Transportation Cooperative Work Experience (CWE) ensures that additional truck driving experience necessary for excellent and reliable driving skills is completed. This workshop covers work processes and procedures at the specific company site where a driver is employed. This course requires students to complete a 16-hour seminar, drive on the road for at least 100 hours with a driver trainer and pass all assessments distributed throughout the session with at least a 95% passing rate.

## **VC – VISUAL COMMUNICATIONS**

### **VC 114: Introduction to InDesign (3)**

This course is an introduction to using InDesign, the graphic design industry standard for publication design. InDesign is a very complex application and contains many different tools, some of which are quite difficult to use. Students will become familiar with the features of this program, and gain a basic understanding of how InDesign interfaces with the entire Adobe design software platform. This class is a foundation course for all Visual Communications studies. 2 lecture, 3 lecture/lab hrs/wk. F.

### **VC 130: Introduction to Photoshop (3)**

Adobe Photoshop is an indispensable image editing software application. This course is an introduction to using Photoshop for image creating and editing. This course provides an introduction to basic image editing. It is a foundation level

course for the Visual Communications Certificate program. 2 lecture, 3 lab hrs/wk. W

### **VC 134: Introduction to Dreamweaver (3)**

Adobe Dreamweaver is the leading software in the industry for professional web development, and is an essential tool for any web designer. In this class students will learn the basics of this software as well as essential practices for professional web design and site development. This course will cover how to use Dreamweaver to manage site files, insert text and images, link pages together, and incorporate and apply basic CSS (Cascading Style Sheets) to font elements. Students will utilize Dreamweaver's built in CSS Layouts for positioning elements within web pages. Use of tables for laying out tabular data will be covered. Emphasis will be placed on creating intuitive web structures on a basic level. 2 lecture, 3 lab hrs/wk

### **VC 139: Introduction to Illustrator (3)**

This course is designed for the beginning student who wants to learn how to use the popular digital drawing program Adobe Illustrator. This class will be taught bi-platform (Mac OS and Windows) and will focus on learning the nuts and bolts of the software, not on artistic design. Students will learn basic Illustrator skills - how to use the toolbox, the panels, and the menus; how to create simple shapes, work with objects, use layers, work with type, and the use of paths, special effects, color, and fills. This class is a prerequisite for ART 221, Illustration for Designers. 2 lecture, 3 lab hours/wk. S

## **VE – VITICULTURE & ENOLOGY**

### **VE 101: Introduction to the Wine Industry (1)**

Current and historical importance of the grape and wine industry in Oregon and throughout the world as it applies to the development of a vineyard for wine production, including career opportunities and college-transfer opportunities. 1 lecture hr/wk. F, W, S, Su

### **VE 102: Integrated Pest Control for Grapes (4)**

Theory and practice of integrated pest control in grape growing, including biology of diseases and common insects, rodents, birds, and animals. 3 lecture, 3 lab hrs/wk. S

### **VE 103: Vineyard Soils, Plant Nutrition & Irrigation (4)**

Basic principles of soil science, mineral nutrition and plant/water relationships for grape production. 3 lecture, 3 lab hrs/wk. Su

### **VE 110: Vineyard Practices I (4)**

Vineyard practices for the fall season, including ripening patterns of different grape varieties and pruning vines. Emphasis on practical application of viticulture theory. 3 lecture, 3 lab hrs/wk. F

### **VE 111: Vineyard Practices II (4)**

Vineyard practices for winter season, including growth cycles, frost damage, field trials, sales contracts, labor relations and the relationship of pruning to wine quality. Emphasis on practical applications of viticulture theory. 3 lecture, 3 lab hrs/wk. W

### **VE 112: Vineyard Practices III (4)**

Vineyard practices for the spring and summer seasons, including mildew control, grape sampling and advanced pruning. Emphasis on practical applications of viticulture theory. 3 lecture, 3 lab hrs/wk. S

### **VE 201: Winemaking for Viticulturists (3)**

The science of winemaking from the vineyard to the winery. Students will produce their own wine. Students must be at least 18 years of age. Laboratory materials fee. 2 lecture, 2 lecture/lab hrs/wk. F

### **VE 202: Sensory Evaluation of Wine (4)**

Introduction to wine sensory evaluation, including statistical analysis of trials; study of wine styles; sensory testing techniques; identification of wine traits. Sensory evaluation of representative wines. Laboratory materials fee. Must be at least 18 years of age. 3 lecture, 2 lecture/lab hrs/wk. W

### **VE 203: Wines of Europe (3)**

This course is an overview of the wines of Europe, whose history is a major influence in modern winemaking practices. Students will become familiar with the major wine producing countries; the regions within those countries; their laws, traditions, and wine styles; as well as the grape varieties, soils, and climate conditions that make each region and the wine it produces unique in the world marketplace. While a stand-alone class, this course is the first of the VE 203, VE 204, VE 205 series, designed to give students a full understanding

of the current global wine industry. The class includes sensory evaluation of representative samples from the regions covered. Students must be at least 18 years of age. 2 lecture, 2 lecture/lab hrs/wk. F

### **VE 204: Wines of the Southern Hemisphere (3)**

This course is an overview of the wines of the southern hemisphere, including Chile, Argentina, Australia, New Zealand, and South Africa. Students will become familiar with the major wine producing countries; the regions within those countries; their laws, traditions, and wine styles; as well as the grape varieties, soils, and climate conditions that make each region and the wine it produces unique in the world marketplace. Students will also examine the contribution each country has made to modern global winemaking practices and the current global wine market. While a stand-alone class, this course is the second of the VE 203, VE 204, VE 205 series, designed to give students a full understanding of the current global wine industry. The class includes sensory evaluation of representative samples from the regions covered. Students must be at least 18 years of age. 2 lecture, 2 lecture/lab hrs/wk. W

### **VE 205: Wines of North America (3)**

This course is an overview of the wines of North America, including the United States, Canada, and Mexico. Students will become familiar with the major wine producing regions within those countries; their laws, traditions, and wine styles; as well as the grape varieties, soils, and climate conditions that make each region and the wine it produces unique in the world marketplace. Students will also examine the contribution each region has made to modern global winemaking practices and the current global wine market. While a stand-alone class, this course is the culmination of the VE 203, VE 204, VE 205 series, designed to give students a full understanding of the current global wine industry, as well as a full understanding of the domestic industry in which they would currently work. The class includes sensory evaluation of representative samples from the regions covered. Students must be at least 18 years of age. 2 lecture, 2 lecture/lab hrs/wk. S

### **VE 209: Laboratory Analysis of Musts and Wines (4)**

Winery laboratory practices, including basic principles, techniques and common methods of analysis for musts and wines. Laboratory methods used to determine when to add

amendments to wines and how to stabilize and clarify wines. Laboratory materials fee. 3 lecture, 3 lab hrs/wk. F

### **VE 210: Science of Winemaking I (5)**

Wine production theory and hands-on practice of harvest activities including: winery materials, safety, equipment sanitation, crushing, pressing and fermentation. 4 lecture, 3 lab hrs/wk. F

### **VE 211: Science of Winemaking II (5)**

Wine production theory and hands-on practice of basic cellar activities including: racking, fining, filtration, oak science, barrel management, and barrel alternatives. 4 lecture, 3 lab hrs/wk. W

### **VE 212: Science of Winemaking III (5)**

Wine production theory and hands-on practice of cellar finishing and bottling activities including: additions, filtration, blending, bottling equipment, bottling materials, bottling sanitation and quality control, evaluation of wine flavor and aroma, and regulatory compliance. Students must be at least 18 years of age. 4 lecture, 3 lab hrs/wk. S

### **VE 223: Wine Marketing (3)**

Wine marketing methods, including packaging, distribution, advertising and promotion. 3 lecture hrs/wk. S

### **VE 280: Cooperative Work Experience: Viticulture/Enology (1-13)**

Course content is dependent upon the nature of the job position and season. Acceptable practicum activities include vineyard and winery operations, tasting room operations, winery sanitation, racking, bottling, chemical analyses, marketing, hospitality and tourism. 33 hours = 1 credit. Prerequisite: instructor approval. F, W, S, Su

## **WLD – WELDING**

### **WLD 100A: Metals and Welding Intro Course-A (3)**

Covers general metal working, welding and cutting processes, safety, equipment, and sheet metal work. This is an outcome-based course utilizing a lecture/lab format. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. This course is designed for High School Connections. 6 lecture/lab hrs/wk.

**WLD 100B: Metals and Welding Intro Course-B (3)**

Further development of knowledge in general metal working and safety. This course also covers SMAW and GMAW welding, OFC and PAC cutting processes, equipment, and essential variables of operation. This is an outcome based course utilizing a lecture/lab format. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. This course is designed for High School Connections. Registration-Enforced Prerequisite: WLD 100 A or instructor approval. 6 lecture/lab hrs./wk.

**WLD 100C: Metals and Welding Intro Course-C (3)**

Further development of knowledge in general metal working and safety. This course also covers FCAW and GTAW welding, OFC and PAC cutting processes, equipment, and essential variables of operation. This is an outcome based course utilizing a lecture/lab format. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. This course is designed for High School Connections. Registration-Enforced Prerequisite: WLD 100 B or instructor approval. 6 lecture/lab hrs./wk.

**WLD 101: Welding Processes and Applications (4)**

Covers welding processes, safety, equipment, and essential variables of operation. This is an outcome based course utilizing a lecture/lab format. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. 8 lecture/lab hrs/wk.

**WLD 111: Shielded Metal Arc Welding (4)**

Covers uses, safety, nomenclature, equipment operation, set-up and shutdown procedures and welding-related math and science for S.M.A.W. and O.A.C. This is an outcome-based course utilizing a lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Registration-Enforced Prerequisite/ Corequisite: WLD 101. 8 lecture/lab hrs/wk.

**WLD 112: Shielded Metal Arc Welding: Mild Steel I (3)**

Develops knowledge and manipulative skills in the use of E7018 mild steel electrodes when performing various welds in

flat and horizontal positions. This is an outcome-based course utilizing a lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Registration-Enforced Prerequisite/ Corequisite: WLD 101. 1 lecture, 4 lecture/ lab hrs/wk.

**WLD 113: Shielded Metal Arc Welding: Mild Steel II (3)**

Develops knowledge and manipulative skills in the use of E7018 mild steel electrodes when performing various welds in vertical and overhead positions. This is an outcome-based course utilizing a lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Instructor-Enforced Prerequisite: Welder Continuity Log. Registration-Enforced Prerequisite/ Corequisite: WLD 101. 1 lecture/4 lecture/ lab hrs/wk.

**WLD 114: Shielded Metal Arc Welding: Mild Steel III (3)**

Develops knowledge and manipulative skills in the use of E6011 mild steel electrodes when performing various welds in flat, horizontal, and vertical positions. This is an outcome-based course utilizing a lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Registration-Enforced Prerequisite/Corequisite: WLD 101. 1 lecture/4 lecture/ lab hrs/wk.

**WLD 121: Gas Metal Arc Welding (3)**

Develops knowledge and manipulative skills welding with solid wire on ferrous and non-ferrous materials using short circuit globular, and spray transfer modes in flat, horizontal, vertical, and overhead positions. This is an outcome-based course utilizing a lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Registration-Enforced Prerequisite/Corequisite: WLD 101. 1 lecture/4 lecture/lab hrs/wk.

**WLD 122: Gas Metal Arc Welding-Pulse (3)**

Develops knowledge and manipulative skills using the Gas Metal Arc Welding- Pulse transfer process on common mild steel and aluminum joints in all positions. Covers safety, users, nomenclature, equipment operation and set up and shut down procedures. This is an outcome based course utilizing a

lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Registration-Enforced Prerequisite/ Corequisite: WLD 101. 1 lecture/4 lecture/lab hrs/wk.

**WLD 123: Advanced Welding III (3)**

Designed to provide the advanced welding student additional lab time to develop welding skills and techniques. The use of shop prints will be encouraged. Registration-Enforced Prerequisite: WLD 142. Instructor approval. 9 lab hrs/wk. F, W, S

**WLD 124: Advanced Welding IV (3)**

Designed to provide the advanced welding student additional lab time to develop welding skills and techniques. The use of shop prints will be encouraged. Registration-Enforced Prerequisite: WLD 142. Instructor approval. 9 lab hrs/wk. F, W, S

**WLD 131: Basic Metallurgy (3)**

Covers the principles related to metals, their structure and physical properties. The testing of various metals, their uses and the results of heat treating are explored. Laboratory time is provided for experiments and demonstrations to correlate with classroom activities. 2 lecture, 3 lab hrs/wk. F

**WLD 140: Blueprint Reading and Sketching (3)**

A basic course in sketching and reading of shop drawings. A study is made of three-view drawings, pictorial drawings, dimensioning, tolerancing, lines, note and symbol interpretation. 3 lecture hrs/wk. W

**WLD 141: Flux-Cored Arc Welding I (Gas Shielded) (3)**

Develops knowledge and manipulative skills in the gas shielded flux-cored arc welding process in flat, vertical, horizontal, and overhead positions. Covers safety, users, nomenclature, equipment operation and set-up and shut-down procedures. This is an outcome-based course utilizing a lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Registration-Enforced Prerequisite/ Corequisite: WLD 101. 1 lecture/4 lecture/lab hrs/wk.

## **WLD 142: Flux-Cored Arc Welding II (Self Shielding) (3)**

Develops knowledge and manipulative skills in the self-shielding arc welding process in flat, vertical, horizontal, and overhead positions. This is an outcome-based course utilizing a lecture/lab format. This course includes classroom discussions, videotapes, and lab demonstrations of technical skills. Registration-Enforced Prerequisite/ Corequisite: WLD 101. 1 lecture/4 lecture/lab hrs/wk.

## **WLD 150: GTAW I - Gas Tungsten Arc Welding I (3)**

Develops knowledge and manipulative skills using the Gas Tungsten Arc Welding process on mild steel, stainless steel, and aluminum. This class will cover AWS code requirements for structural and mechanical type joint configurations. This class will cover all joint configurations and all positions, as well as, cover safety, users, nomenclature, equipment, operation, setup, and shut down procedures. This is an outcome based course utilizing a lecture/lab format. This course includes classroom discussions, video, and lab demonstrations in the development of technical skills. Registration-Enforced Prerequisite: WLD 101. 1 lecture, 4 lecture/lab hrs/wk. S

## **WLD 160: Aluminum Arc Welding & Fabrication I (3)**

Develops knowledge and manipulative skills in the use of layout techniques, material handling, and identification of Aluminum and Aluminum alloys. Develops knowledge and skills in electrode selection and application when performing various welds in the flat and horizontal positions. This is an outcome based course utilizing a lecture/ lab format. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. Registration-Enforced Prerequisite/ Co-requisite: WLD 101 1 lecture/4 lab hrs./wk. S

## **WLD 161: Welding Problems (4)**

A review and application of the welding, layout, and fabrication processes covered during the year. A study and practice of production welding methods, electrode consumption, and method selection is included. Fabrication and assembly projects are selected to present typical and pattern development in fabrication and production problems.

Prerequisite: Satisfactory completion of first and second terms. 1 lecture, 9 lab hrs/wk. F, W, S

## **WLD 222: Pipe Welding and Fitting I (3)**

Develops knowledge and manipulative skills utilizing multiple welding processes and electrodes on mild steel, stainless steel and aluminum. This class is designed to better prepare the entry level welder for pipe welding. This class will cover API 1104 and ASME Section IX Pipe welding standards and code requirements for high pressure vessel type joint configurations. Weld manipulation and techniques will cover all positions on both pipe and plate applications. This course will build upon topics covered in the first year of welding instruction. This is an outcome based course utilizing the lecture/lab format. The course includes classroom discussions, video and lab demonstrations in the development of technical skills. Registration-Enforced Prerequisite: WLD 142. 1 lecture hr/4 lecture/lab hrs/wk. W

## **WLD 223: Pipe Welding and Fitting II (3)**

Develops knowledge and manipulative skills utilizing multiple welding processes and electrodes on mild steel, stainless steel and aluminum. This class is designed to better prepare the entry level welder for pipe welding. This class will cover API 1104 and ASME Section IX Pipe welding standards and code requirements for high pressure vessel type joint configurations. Weld manipulation and techniques will cover all positions on both pipe and plate applications. This course will build upon topics covered in the first year of welding instruction. This is an outcome based course utilizing the lecture/lab format. The course includes classroom discussions, video and lab demonstrations in the development of technical skills. Registration-Enforced Prerequisite: WLD 222. 1 lecture, 4 lecture/lab hrs/wk. S

## **WLD 240: Blueprint Reading - II (3)**

Develops knowledge and manipulative skills utilizing advanced print reading and sketching. Reading and interpretation of shop drawings, piping, hydraulic and numeric lines, valves, gates and electrical symbols will be studied as will as welding symbols, line types and notation. This class will cover API 1104 and ASME Section IX Pipe welding standards and code requirements for high pressure vessels. This is an outcome based course utilizing the lecture/lab format. The course includes

classroom discussions, video and lab demonstrations in the development of technical skills. Registration-Enforced Prerequisite: WLD 140. 1 lecture, 4 lecture/lab hrs/wk.

## **WLD 251: Gas Tungsten Arc Welding, GTAW II (3)**

Develops knowledge and manipulative skills using the Gas Tungsten Arc Welding process on mild steel, stainless steel and aluminum. This class will cover API 1104 and ASME Section IX Pipe welding standards and code requirements for high pressure vessel type joint configurations. Weld manipulation and techniques will cover all positions on both pipe and plate applications. This is an outcome based course utilizing the lecture/lab format. The course includes classroom discussions, video and lab demonstrations in the development of technical skills. Registration-Enforced Prerequisite: WLD 150. 1 lecture, 4 lecture/lab hrs/wk.

## **WLD 252: Gas Tungsten Arc Welding, GTAW III (3)**

Develops knowledge and manipulative skills using the Gas Tungsten Arc Welding process on mild steel, stainless steel and aluminum. This class will cover API 1104 and ASME Section IX Boiler and Pressure Vessel Code requirements and joint configurations. Weld manipulation and techniques will cover all positions on both pipe and plate applications. This is an outcome based course utilizing the lecture/lab format. The course includes classroom discussions, video and lab demonstrations in the development of technical skills. Registration-Enforced Prerequisite: WLD 251. 1 lecture, 4 lecture/lab hrs/wk. W

## **WLD 261: Aluminum Arc Welding & Fabrication II (3)**

Develops knowledge and manipulative skills in the use of traditional and advanced welding techniques for Aluminum and Aluminum alloys. Develops knowledge and skills in electrode selection and application when performing various welds in the Horizontal, Vertical and Over Head positions. This is an outcome based course utilizing a lecture/ lab format. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. Registration-Enforced Prerequisite/Corequisite: WLD 160 1 lecture/4 lab hrs./wk. F



### **WLD 262: Aluminum Arc Welding & Fabrication III (3)**

Develops knowledge and manipulative skills in the use traditional and advanced welding techniques for Aluminum and Aluminum alloys. This class is designed to better prepare the entry level welder for Aluminum welding. This class will cover AWS D1.2 Structural welding code standards for aluminum welding code requirements. Weld manipulation and techniques will cover all positions on both pipe and plate applications. This is an outcome based course utilizing a lecture/ lab format. This course includes, but is not limited to: classroom discussions, multimedia presentations, and lab demonstrations covering technical skills. Registration Enforced Prerequisite/Co-requisite: WLD 261 1 lecture/ 4 lab hrs./wk. W

### **WLD 280: Cooperative Work Experience: Welding (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **WQT – WATER/WASTEWATER QUALITY**

### **WQT 227: Wastewater Treatment (3)**

This course covers the fundamentals of wastewater treatment facilities, including operation and maintenance of facilities. Course will help students prepare for the Level I Wastewater Treatment Operator Certification exam. Registration-Enforced Prerequisite: MTH 052. 3 lecture hrs/wk. W

### **WQT 228: Wastewater Collection (3)**

Course introduces the basics of design, operation, and maintenance of wastewater systems. Course includes pipe sizing, pipe slopes and flow velocities, general system components, and installation, inspection, testing and repair techniques. Field trips may be made to existing facilities and work under construction. Registration-Enforced Prerequisite: MTH 052. 3 lecture hrs/wk. W

### **WQT 260: Water Treatment (3)**

This course covers the fundamentals of water treatment facilities, including operation and maintenance of facilities. Registration-Enforced Prerequisite: MTH 052. 3 lecture hrs/wk. S

### **WQT 261: Water Distribution (4)**

This course covers the fluid mechanics for pressure systems and operation and maintenance of water distribution systems. The fundamental properties of fluids, hydrostatic pressure, fluid flow and energy distribution are covered for closed systems. The solution of practical, applied problems is emphasized. Operators and engineering technicians learn to analyze and solve problems when they occur and perform mathematical calculations commonly associated with operating a distribution system. Registration-Enforced Prerequisite: MTH 052. 4 lecture hrs/wk. F

### **WQT 280: Cooperative Work Experience: Water Quality Treatment (1-13)**

Qualified students work at training sites that provide experience appropriate to their major. These experiences will provide the opportunity for students to gain knowledge of various tasks performed in their career field. A student may take any number of CWE credits per term, not to exceed 13 credits per year, except for students taking Occupational Skills Training (OST), which has a limit of 24 credits per year. Registration-Enforced Prerequisite: Instructor approval. 1 credit = 33 hours of lab. F, W, S, Su

## **WR – WRITING**

### **WR 080, 081, 082: Writing Skills Lab (1)**

This course offers supplementary instruction to students enrolled in UCC courses requiring written assignments at, or above, the WR 115 level. Tutorial and practice software and one-on-one tutoring will be used for individual skill development. Upon completion of WR 080 students may repeat the course two times by registering for WR 081 and WR 082. Registration-Enforced Corequisite: WR 115 or above. F, W, S

### **WR 090: Writing Skills (3)**

Students will strengthen their current writing skills and discover new ways to express thoughts, opinions, and

experiences through the process of writing. In that process, they will learn how to come up with ideas and how to organize them in paragraphs. They will also develop and practice essential sentence skills, including sentence construction and proper word choice. Word processing for drafting and revising papers will be introduced. Successful completion of this course prepares a student for WR 095. Registration-Enforced Prerequisite: Placement Test. Registration-Enforced Corequisite: Enrollment in Gateway to Success Learning Community. 3 lecture hrs/wk. F, W, S, Su

### **WR 095: College Writing Fundamentals (3)**

Students will apply the steps in the process of writing, including pre-writing, composing, and revising, to develop paragraphs and essays. They will also improve sentence skills necessary for communicating their ideas most fully and flexibly. Students will use the word processor as a writing tool. Successful completion of this course prepares a student for WR 115. Registration-Enforced Prerequisite: WR 090 or equivalent with a grade of C or better or placement test. This course is required for all students in the Practicing Success cohort or Mainstream Writing cohort. 3 lecture hrs/wk. F, W, S, Su

### **WR 115: Introduction to Expository Writing (4)**

Designed for students who need improvement in writing skills. Special emphasis will be placed on sentence construction, grammar, usage, spelling, vocabulary, and paragraph and essay development. Students will write essays based on selected rhetorical modes, including a selection of the following: narrative description, definition/concept, comparison/contrast, process analysis, classification/division, and cause/effect. The final essay in WR 115 is a persuasive essay that introduces students to the basics of argumentation and academic discourse. Students will also learn the basics of MLA format and documentation. Registration-Enforced Prerequisite: WR 095 with a grade of C or better or placement by approved measure; RD 080 with a grade of C or better or placement by approved measure. In addition, basic knowledge of how to use a computer for word processing is necessary for success in this course. 4 lecture hrs/wk. F, W, S, Su

### **WR 121: Academic Composition (4)**

Writing 121 focuses on rhetorical reading, thinking, and



writing as means of inquiry. Students will gain fluency with key rhetorical concepts and utilize these in a flexible and collaborative writing process, reflecting on their writing process with the goal of developing metacognitive awareness. They will employ conventions, including formal citations, appropriate for a given writing task, attending to the constraints of audience, purpose, genre, and discourse community. Students will compose in two or more genres, with a focus on argumentation. They will produce at least 3,000 to 3,500 words of revised, final draft copy. Students will produce at least one essay that integrates research and demonstrates an understanding of the role of an enthymeme in an academic essay of at least 1,000 words. Registration-Enforced Prerequisite: WR 115, RD 90 each with a grade of C or better, or appropriate placement test scores or placement by multiple measures; and basic computer word processing skills. 4 lecture hrs/wk. F, W, S, Su

### **WR 122: Argument, Research, and Multimodal Composition (4)**

WR 122 continues the focus of WR 121 in its review of rhetorical concepts and vocabulary, in the development of reading, thinking, and writing skills, along with metacognitive competencies understood through the lens of a rhetorical vocabulary. Specifically, students will identify, evaluate, and construct chains of reasoning, a process that includes an ability to distinguish assertion from evidence, recognize and evaluate assumptions, and select sources appropriate for a rhetorical task. Students will employ a flexible, collaborative, and appropriate composing process, working in multiple genres, and utilizing at least two modalities. They will produce 3500-4500 words of revised, final draft copy. Students will produce at least two argumentative essays, demonstrating competence in both research and academic argumentation. Registration-Enforced Prerequisite: WR 121 with a grade of C or better. 4 lecture hrs/wk. F, W, S, Su

### **WR 123: English Composition: Research (4)**

WR 123 stresses the research process and the formulation of a thesis which results in a cogent, well-developed, and documented research paper; it includes extensive library research techniques, bibliographic practice, and exercises in documentation. Registration-Enforced Prerequisite: WR 122 with a grade of C or better. 4 lecture hrs/wk. F, W, S, Su

### **WR 227: Technical Report Writing (4)**

This course stresses principles of writing clear, concise, effective workplace report writing. Students learn to analyze workplace audience needs, gather information, problem solve, interpret data, draft and rewrite material into informal and formal technical reports. Writing faculty strongly encourages students to complete WR 122 before enrolling in WR 227; however, the Registration-Enforced Prerequisite is the successful completion of WR 121 (4 credits) with a grade of C or better. 4 lecture hrs/wk. F, W, S, Su

### **WR 241: Creative Writing: Short Fiction (4)**

WR 241 is a creative writing course that requires students to write and revise a body of original short fiction. The elements of fiction writing [theme, characterization, setting, point of view, symbolism and figurative language] are introduced, and students gain a working knowledge of terminology and techniques associated with creative writing. Class activities will include writing exercises, lectures [by guest writers when available], reading discussions, writing workshops and review of publications. Registration-Enforced Prerequisite: WR 121. 4 lecture hrs/wk. F (odd numbered years)

### **WR 242: Creative Writing: Poetry (4)**

In WR 242, students compose and revise a portfolio of original poetry. This creative writing course introduces students to the craft of poetry [including the concepts of theme, style, tone, metaphor/allusion, point of view, symbolism and figurative language], and students gain a working knowledge of terminology and techniques associated with creative writing. Class activities include writing exercises, lectures [by guest writers when available], reading discussions, writing workshops and review of publications. Registration-Enforced Prerequisite: WR 121. 4 lecture hrs/wk. W (even numbered years).

### **WR 243: Creative Writing: Mixed Genre (4)**

WR 243 is a creative writing course that requires students to write and revise a body of creative work, to research potential markets for that work, (including anthologies, literary journals, and web-based venues), and submit creative work to several markets. Students may choose to focus on creating poetry or prose in this course. The elements of writing [theme, characterization, setting, point of view, symbolism and figurative language] are reinforced, and preparing creative work for potential publication (formatting and revision) will be detailed. Class activities will include writing exercises, lectures

[by guest writers when available], reading discussions, writing workshops and review of publications. Registration-Enforced Prerequisite: WR 121. 4 lecture hrs/wk. S (even numbered years)

## **WS – WOMEN'S STUDIES**

### **WS 101: Introduction to Women's Studies (4)**

Introduction to Gender and Women's Studies examines gender as a socially constructed category that shapes personal identities, beliefs, opportunities, experiences, and behaviors. The course also introduces students to past and present achievements of women and analyzes problems and challenges women face today. Registration-Enforced prerequisite/co-requisite: test into WR 115 and RD 090. 4 lecture hrs/wk. WW







# CONTACTS

## BOARD OF TRUSTEES

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**Doris Lathrop**  
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**Guy Kennerly**  
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**Connie Williamson**

**Susan Taylor**

Executive Director, UCC Foundation

**Ellen Brown**

Director of Operations, UCC Foundation

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# UCC

UMPQUA COMMUNITY COLLEGE

## CAMPUS MAP

### LEGEND

<b>ADM</b>	Del Blanchard Administration Building
<b>CC</b>	LaVerne Murphy Student Center
<b>ESB</b>	Educational Skills Building
<b>FFC</b>	Ford Childhood Enrichment Center
<b>HNSC</b>	Bonnie J Ford Health, Nursing and Science Center
<b>JH</b>	Jackson Hall
<b>JAC</b>	Jacoby Auditorium
<b>LANG/SOWI</b>	Lang Teaching, Learning & Event Center/ Southern Oregon Wine Institute
<b>LH</b>	Lockwood Hall
<b>LIB</b>	Sue Shaffer Learning Commons & Library
<b>PE/GYM</b>	PE Complex & Tom Keel Fitness Center
<b>PMO</b>	Paul Morgan Observatory
<b>SCI</b>	Science Building
<b>SWAN</b>	Swanson Amphitheatre
<b>TAP</b>	Tap'oyt'a' Hall
<b>TC</b>	Technology Center
<b>TOWER</b>	Tower Building
<b>WCH</b>	Wayne Crooch Hall
<b>WFA</b>	Whipple Fine Arts Center
<b>WHSE</b>	Warehouse

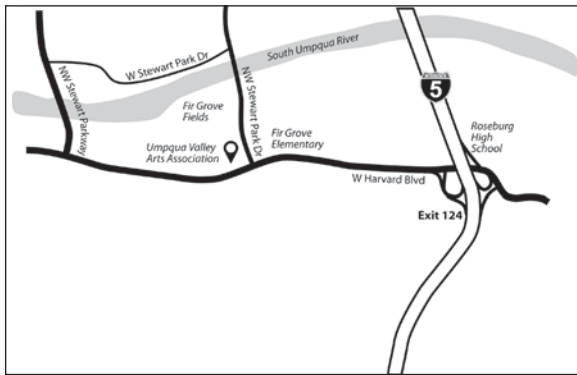
  

	Information		Bus Stop
	Smoking Area		Emergency Phone
	Disabled Parking		

Open Parking except where designated.  
Visitor Parking in front of the Del Blanchard Administration Building (ADM).



OFF CAMPUS LOCATIONS

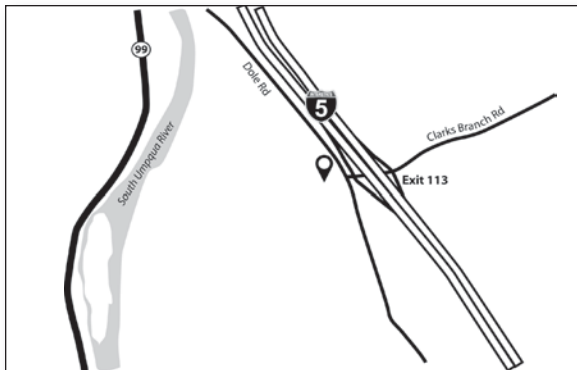


**H. Wooley Adult Basic Education Center**  
1634 W. Harvard, Roseburg

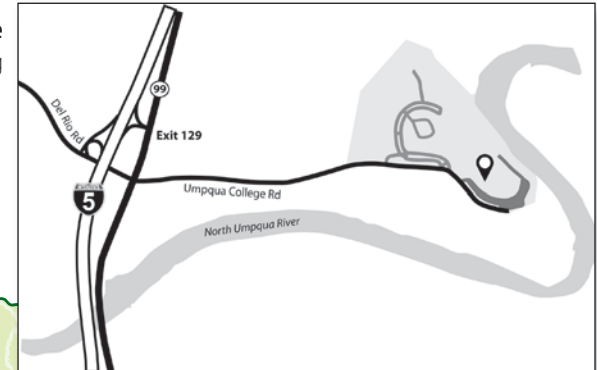
**Small Business Development Center  
Umpqua Business Center**  
522 SE Washington Ave., Roseburg



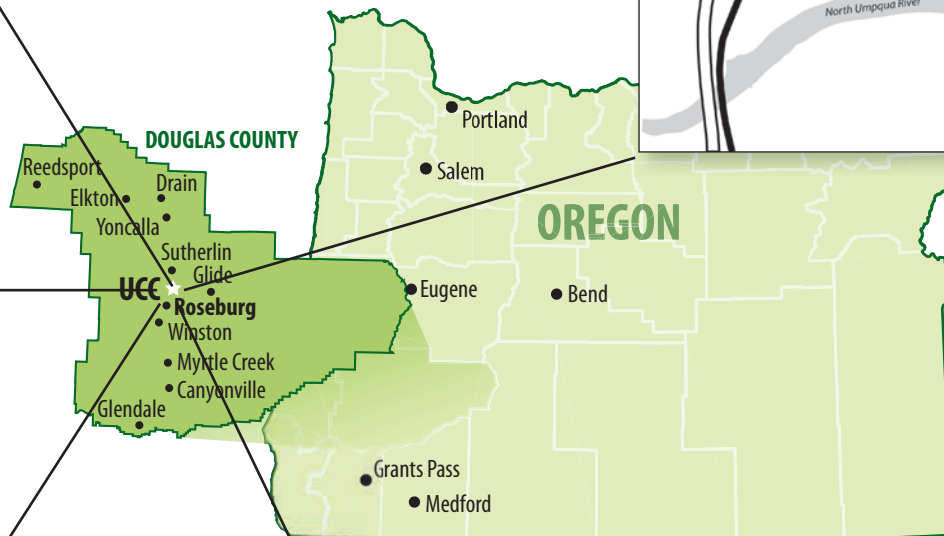
**Commercial Truck Driving Center**  
6482 Dole Road, Myrtle Creek  
(I-5 exit 113, Round Prairie)



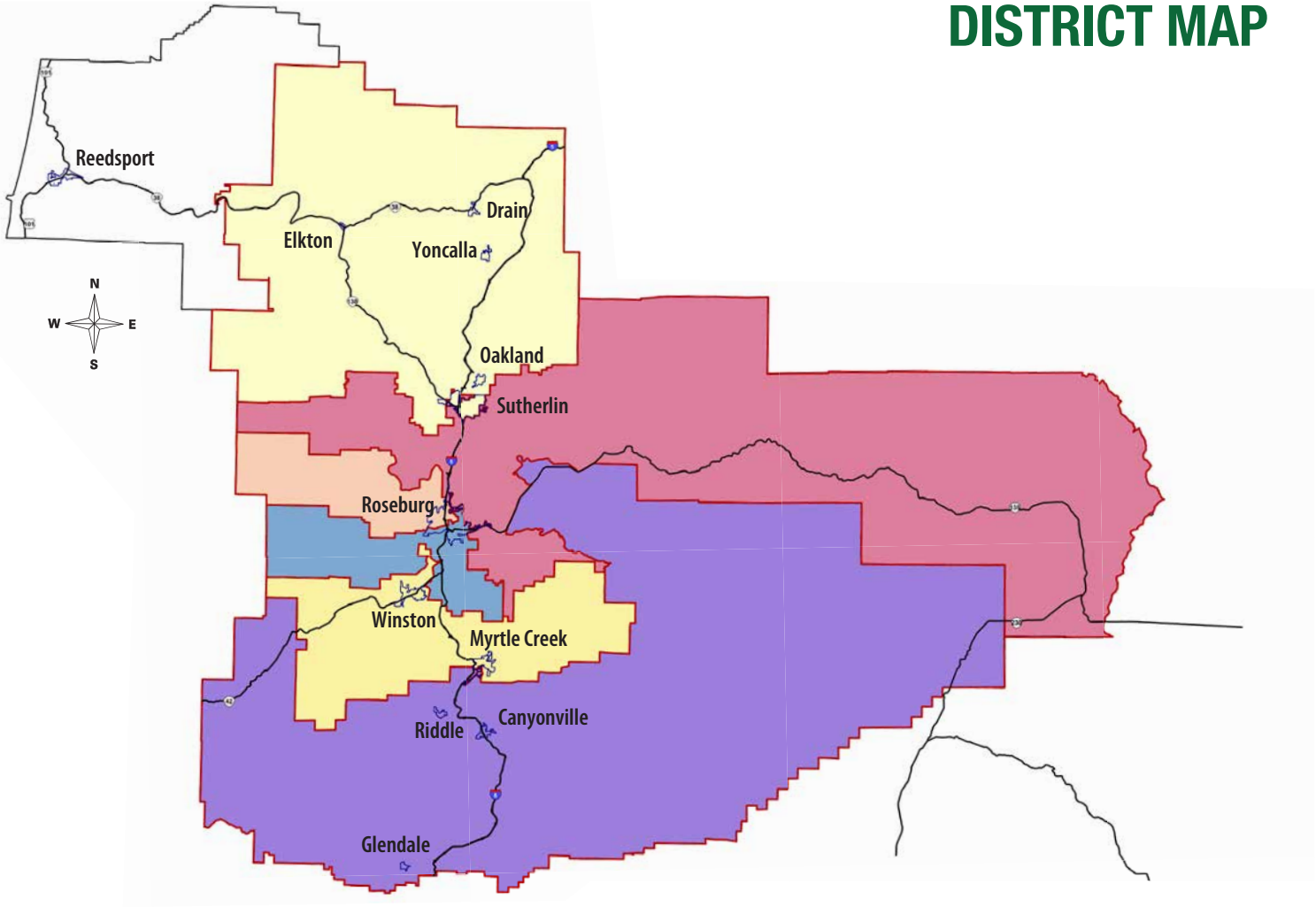
**UCC South County Campus**  
560 SW Chadwick, Myrtle Creek  
(I-5 exit 103, Tri-City/Myrtle Creek)



**Umpqua Community College**  
1140 College Road, Roseburg



# DISTRICT MAP



UCC Zones 2014

Legend

- Zone 1  
Betty Tamm
- Zone 2  
Doris Lathrop
- Zone 3  
Wendy Weikum
- Zone 4  
David Littlejohn
- Zone 5  
Guy Kennerly
- Zone 6  
Joelle McGrorty
- Zone 7  
Steve Loosley



## HOW TO GET TO UCC

Easy I-5 access. Take exit 129. If coming from the south, at first light merge right, at next light turn left onto Umpqua College Road. If coming from the north, turn left at the stop sign. Continue traveling east on Umpqua College Road. Umpqua Community College is about one mile.

### Parking

UCC provides more than 1,400 parking spaces conveniently located near all campus buildings. Of these, about 170 are assigned to college faculty and staff.

All employees are given a yearly parking permit. Designated parking spots for employees are marked by green lines, curbs and signs. Designated parking spots for students are marked by yellow lines, curbs and signs. All white marked lines and curbs are regarded as open parking. These spots are available to everyone. There are 14 parking spots clearly designated for the college Motor Pool and are off-limits to general parking. Red zones are usually fire related areas and are considered restricted lanes; no parking is allowed at any time.

Visitor Parking — Visitor parking is clearly divided into two separate areas. One area is 30 minute visitor only and the other is Visitor Day parking only. All areas are designated by purple curbs, lines, and signs. The 30 minute only is for non-student activities and strictly enforced. The Visitor Day parking is for specific day use only. Permits are available in advance through the UCC Security Department.

Disabled Person Parking — Special stickers are required for parking in clearly marked Disabled Parking spaces. These stickers are issued at the Oregon Division of Motor Vehicles.

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# 2018-2019

## COURSE CATALOG



### ON THE COVER:

On Friday, March 23, 2018, Umpqua Community College formally dedicated its newest academic building Tap<sup>h</sup>òyt<sup>h</sup>a' Hall. The name, which followed months of consideration that included campus, community, and tribal feedback, is derived from a Takelma language word that means "to be blessed and to prosper."

The College wanted to use a Native American word to recognize the area's history, and to honor the Cow Creek Band of the Umpqua Tribe of Indians, one of the College's most significant supporters. After considering multiple words, the use of Tap<sup>h</sup>òyt<sup>h</sup>a' (pronounced duh-poi'-tuh) was authorized by the Tribal Board of Directors, and later approved by the UCC Board of Education.

In addition to approving the new building's name, the UCC Board also approved reassigning the Ralph I. Snyder name to the campus' nearby circular fountain. Mr. Snyder, one of UCC's original administrators, was known for his unwavering student support. UCC students felt strongly about honoring Mr. Snyder's legacy by placing his name on the campus fountain, which is an uplifting symbol of opportunity and joy.



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