



# SOUTHWESTERN

AN OREGON COMMUNITY COLLEGE



**2021-2022  
ACADEMIC  
CATALOG**

# TABLE OF CONTENTS

Southwestern Oregon Community College 2021-2022 .....	4	Computer Information Systems, Associate of Applied Science .....	59
Enrollment and Student Services .....	6	Computer Science, Associate of Science Oregon Transfer .....	61
Academic Information .....	7	Criminal Justice, Associate of Science .....	65
Admissions .....	9	Culinary Arts, Associate of Applied Science .....	67
Financial Aid .....	10	Culinary Arts, Certificate of Completion .....	68
Academic Policies .....	11	Culinary Management, Associate of Applied Science .....	69
Graduation .....	16	Data Center Technician, Certificate of Completion .....	71
Housing .....	17	Dental Assisting, Certificate of Completion .....	72
Special Programs .....	17	Electrical/Computer Engineering, Associate of Science .....	74
Student Services .....	19	Elementary Education, Associate of Arts Oregon Transfer .....	76
TRIO Student Support Services .....	19	Elementary Education, Associate of Science .....	78
Tuition and Fees .....	20	Environmental Engineering, Associate of Science .....	80
Veterans Information .....	21	Fire Science, Associate of Applied Science .....	82
Programs A-Z .....	23	Fire and Emergency Services Higher Education, Career Pathway Certificate of Completion .....	83
Accounting, Associate of Applied Science .....	24	Fire Science Level I, Career Pathway Certificate of Completion .....	83
Accounting Clerk, Certificate of Completion .....	25	Fire Science Level II, Career Pathway Certificate of Completion .....	84
Accounting Clerk, Entry-Level, Career Pathway Certificate of Completion .....	25	Fire Science Level III, Career Pathway Certificate of Completion .....	85
Associate of Arts Oregon Transfer (AAOT) .....	27	Fire Science Level IV, Career Pathway Certificate of Completion .....	85
Associate of General Studies (AGS) .....	31	Fire Science, Associate of Science .....	87
Associate of Science (AS) .....	34	Forest Engineering, Associate of Science .....	88
Baking and Pastry Arts, Associate of Applied Science .....	37	Forest Renewable Materials/Advanced Manufacturing, Associate of Science .....	90
Baking and Pastry Arts, Certificate of Completion .....	38	Forest Renewable Materials/Art and Design, Associate of Science .....	92
Baking Management, Associate of Applied Science .....	39	Forest Renewable Materials/Marketing and Management, Associate of Science .....	94
Business Management/Entrepreneurship, Associate of Applied Science .....	41	Forest Renewable Materials/Science and Engineering, Associate of Science .....	96
Marketing, Career Pathway Certificate of Completion .....	42	Forest Technology, Certificate of Completion .....	98
Supervision, Career Pathway Certificate of Completion .....	42	Forestry Management, Associate of Science .....	99
Business, Associate of Science Oregon Transfer .....	44	Forestry Management/Forest Restoration and Fire, Associate of Science .....	101
Chemical Engineering, Associate of Science .....	48	Forestry Management/Operations Management, Associate of Science .....	103
Chemistry, Associate of Science .....	49	Geographic Information Systems, Certificate of Completion .....	105
Childhood Education and Family Studies, Associate of Science .....	51	Infant and Toddler Development, Associate of Applied Science .....	106
CIS Cybersecurity, Associate of Applied Science .....	54	Marine Biology, Associate of Science .....	109
CIS Digital Design, Associate of Applied Science .....	56	Mechanical/Civil Engineering, Associate of Science .....	111
Digital Design, Certificate of Completion .....	57		
Digital Image Foundations, Career Pathway Certificate of Completion .....	57		
Digital Interactive Foundations, Career Pathway Certificate of Completion .....	58		

Medical Assistant, Associate of Applied Science .....	113	Art (ART) .....	153
Basic Allied Health Care, Career Pathway Certificate of Completion .....	114	Biology (BI) .....	156
Medical Assistant, Certificate of Completion .....	114	Business Administration (BA) .....	157
Natural Resources, Associate of Science .....	116	Chemistry (CHEM) .....	159
Nursing, Associate of Applied Science .....	118	Clinical Laboratory Assistant (CLA) .....	160
Oregon Transfer Module (OTM) .....	120	Computer Information Systems (CIS) .....	161
Paramedicine, Associate of Applied Science .....	124	Computer Science (CS) .....	163
Emergency Medical Services Technician I, Career Pathway Certificate of Completion .....	125	Criminal Justice (CJ) .....	164
Emergency Medical Technology, Career Pathway Certificate of Completion .....	125	Culinary Arts (CRT) .....	169
Pharmacy Technician, Certificate of Completion .....	127	Dental (DEN) .....	173
Physics, Associate of Science .....	128	Digital Design (DD) .....	175
Police Science, Associate of Applied Science .....	129	Drafting (DRFT) .....	175
Preschool Child Development, Associate of Applied Science .....	131	Early Childhood Education (ECE) .....	176
Childhood Education and Family Studies, Preschool Children, Education and Development I, Career Pathway Certificate of Completion .....	133	Economics (ECON) .....	179
Childhood Education and Family Studies, Preschool Children, Education and Development II, Certificate of Completion .....	134	Education (ED) .....	179
Parenting Educator and Early Childhood Home Visitor, Career Pathway Certificate of Completion .....	135	Emergency Management (EM) .....	181
Retail Management, Less Than One Year Certificate of Completion .....	137	Emergency Medical Technician (EMT) .....	181
Welding, Associate of Applied Science .....	138	Engineering (ENGR) .....	183
Pipe Fitting, Career Pathway Certificate of Completion .....	139	English (ENG) .....	184
Welding Assistant, Career Pathway Certificate of Completion .....	139	Environmental Technology (ENV) .....	185
Welding Technician, Career Pathway Certificate of Completion .....	140	Fire Science Technology (FS) .....	185
Welding, Certificate of Completion .....	141	Food and Nutrition (FN) .....	187
Programs, Degrees, Certificates and Pathways .....	143	Forest Resources Technology (F) .....	188
Articulated (Transfer) Degrees .....	143	General Science (GS) .....	188
Associate of Applied Science (AAS) General Education Requirements .....	144	Geography (GEOG) .....	189
Career Pathways .....	145	Geology (G) .....	189
Certificate of Completion .....	145	Health (HE) .....	191
General Education .....	146	Health Information Management (HIM) .....	191
Student Learning Outcomes .....	146	History (HST) .....	192
Course Descriptions .....	148	Honors Program (HON) .....	192
Allied Health (AH) .....	150	Human Development (HD) .....	193
American Sign Language (ASL) .....	151	Human Development and Family Studies (HDFS) .....	194
Anthropology (ANTH) .....	152	Human Services (HS) .....	195
		Humanities (HUM) .....	195
		Library Science (LIB) .....	195
		Machine Tool (MT) .....	196
		Manufacturing Technology (MFG) .....	196
		Mathematics (MTH) .....	197
		Music (MUS) .....	199
		Music Performance (MUP) .....	202

Natural Resources (NR) .....	204
Nursing (NRS) .....	205
Nursing - CNA (NUR) .....	207
Pharmacy Tech (PHAR) .....	207
Philosophy (PHL) .....	208
Physical Education (PE) .....	208
Physics (PH) .....	213
Political Science (PS) .....	213
Psychology (PSY) .....	214
Sociology (SOC) .....	215
Spanish (SPAN) .....	216
Speech (SP) .....	216
Welding (WLD) .....	217
Writing (WR) .....	219
Faculty & Staff .....	221
Administration .....	221
Faculty .....	222
Rights & Legal Notices .....	225
Catalog A-Z Index .....	226
Index .....	227

# SOUTHWESTERN OREGON COMMUNITY COLLEGE 2021-2022

## WELCOME TO SOUTHWESTERN!

At Southwestern Oregon Community College, we are extremely happy that Southwestern is your choice for education. We value the trust you've put in us.

College challenges people to improve their lives and that's what our faculty and staff strive to do every single day on our Coos and Curry campuses. We make sure no matter what your goals are, you are successful and you continue to learn throughout your life.

Patty M. Scott, Ed.D.

President

## SOUTHWESTERN MISSION STATEMENT MISSION STATEMENT

Southwestern Oregon Community College fulfills the educational and cultural needs of our diverse communities by providing equitable access to exceptional teaching and learning in a collaborative, engaging, sustainable environment, which supports innovation, lifelong enrichment, and contribution to global society.

*(Adopted December 7, 2020)*

## GUIDING PRINCIPLES

- Intentional Excellence
- Lifelong Learning
- Student Centeredness
- Collaborative Innovation

*(Adopted December 7, 2020)*

## VISION STATEMENT

Southwestern leads and inspires lifelong learning.

*(Adopted June 26, 2006)*

## SOUTHWESTERN HISTORY

Southwestern Oregon Community College is located within two miles of the Pacific Ocean in an area of scenic beauty and mild climate.

The 153-acre institution lies completely within the city of Coos Bay and is bordered on the north and east by the city of North Bend.

The College was formed in a tax district election in May 1961. It included Coos and western Douglas counties. On July 1, 1995, Curry County joined the College district. The district now encompasses 3,648 square miles with a population of more than 92,000. The College is the only public, post-secondary institution in the region.

Enrollment has grown from 266 students in 1961 to nearly 8,000 students annually. Staff has grown from 15 to more than 50 full-time faculty and from 11 to over 180 part-time instructors in undergraduate and

community education. Cultural and athletic events at the College attract over 20,000 men, women, and children each year.

During the early years, Southwestern held classes in surplus U.S. Naval facilities and in Coos Bay and North Bend school district buildings. Today's main campus is located on the shore of Upper Empire Lake in a natural tract of coastal pine.

Permanent campus construction began in 1963. A majority of the campus was built between 1965 and 1969. A second phase of construction, which began in 1979, provided new and remodeled shops and laboratories, and expanded facilities for several programs. The expansion included a student center with a cafeteria, student activity space, student government offices, and meeting rooms for school and community activities.

The College entered a new building phase in 1994 with the construction of a new student services and general classroom building. This was followed immediately by a comprehensive Student First Stop Center, a Family Center, student housing, a new baseball field, an indoor athletic practice facility and a state-of-the-art performing arts and conference center.

The residents of Curry County voted to annex themselves to the district in 1995; the College area nearly doubled in size, extending to the California border. A full range of college services are now offered in Curry County.

As a partner in the South Coast's economic development, Southwestern offers students and industrial partners education that meets their needs. Whether students enroll for a short course, a two-year transfer, or a two-year associate's degree, they are preparing for a rewarding future.

## ACCREDITATION

Southwestern Oregon Community College is accredited by the Northwest Commission on Colleges and Universities (NWCCU). 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, Washington 98052  
(425) 558-4224  
[www.nwccu.org](http://www.nwccu.org)

The Northwest Commission on Colleges and Universities is a nationally recognized regional accrediting agency by the U.S. Department of Education

Street NW, Suite 500, Washington DC 20005. (800) 424-2460 ext. 8007.  
www.naeyc.org The accreditation runs from July 2018 through July 2025.

Copies of the College's accreditation, self-study reports, approvals, and certifications are available for review by contacting the Accreditation Liaison Officer or requesting to review copies of reports which have been made available at the Library (not all reports are available at the Library at this time), located in Tioga Hall or posted on the Institutional Report Archives webpage. NWCCU accreditation status is granted as an institution; any program specialized accreditation or approvals are granted by other agencies.

## **SOUTHWESTERN PROGRAM ACCREDITATION**

### **OREGON COAST CULINARY INSTITUTE (OCCI) CULINARY AND BAKING & PASTRY PROGRAMS ACCREDITATION**

The Culinary Arts and the Baking & Pastry Programs were granted accreditation by the American Culinary Federation (ACF). This accreditation is the highest level available for initial accreditation by the ACF – the premier professional chefs' organization in North America, focusing its efforts on offering education, apprenticeship and industry certification. With the accreditation, OCCI's graduates will automatically gain the title of certified culinarian upon graduation, along with their associate's degrees.

### **NURSING PROGRAM APPROVAL**

The Oregon State Board of Nursing (OSBN) is the state agency responsible for overseeing the standards for approval of nursing programs in Oregon. Southwestern is an approved program having submitted the required self-study in fall 2006. The OSBN website provides the following information:

The Oregon State Board of Nursing monitors continuing compliance with the Standards for Approval. The standards address faculty approval, curriculum approval, and student standards and records as well as several other program specific approvals.

### **PARAMEDICINE PROGRAM ACCREDITATION**

The State of Oregon Office of Workforce Development, in partnership with the State's Emergency Medical Services Office, reviews programs every five years for each college offering Emergency Medical Services (EMS) training. The program approval encompasses all aspects of a training program, including administrative support, curriculum, facilities, funding, instructor credentials, and program management.

Southwestern began offering the two-year paramedic degree in fall 2008. The first on-site visit for program approval took place on May 28 and 29, 2009. To date, the program continues to meet program accreditation expectations.

### **CHILDHOOD EDUCATION AND FAMILY STUDIES PROGRAM ACCREDITATION**

The *A.S. Childhood Education and Family Studies* and *A.A.S. Preschool Child Development* at Southwestern are accredited by the Commission on the Accreditation of Early Childhood Higher Education Programs of the National Association for the Education of Young Children, 1313 L

# ENROLLMENT AND STUDENT SERVICES

**STUDENT FIRST STOP CENTER | DELLWOOD HALL | 541-888-7352 (COOS) | 541-813-1667 (CURRY)**  
**ADMISSIONS OFFICE | DELLWOOD HALL RM 4 | 541-888-7636 | 800-962-2838 EXT. 7636**

Southwestern has an open-door admission policy and welcomes students who wish to obtain a quality education. In general, students may enroll in classes if they meet any one of the following requirements and have the ability to benefit from instruction:

- Are 18 years of age or older;
- Have graduated from an accredited high school;
- Have completed a General Education Development (GED®) certificate or an Adult High School Diploma; or
- Were home schooled and have met state requirements for high school equivalency/completion.

*Si usted necesita mas ayuda, por favor, llame a Student Success Center (SSC) al teléfono 541-888-7407.*

The College Now program provides high school students the opportunity to earn college credits while fulfilling high school graduation requirements. **Students under the age of 18 who have not graduated from high school or earned a GED®** must fill out the "Underage Student Agreement" or "High School Partnership" form. Forms and information can be found on myLakerLink at <https://mylakerlink.socc.edu/ics>.

## STEPS TO BECOME A LAKER

### APPLY –

- Visit Southwestern's Admissions webpage at <https://mylakerlink.socc.edu/ICS/Admissions/> to submit the application.
- For assistance contact either Student First Stop Center location.

### TRANSFER STUDENTS – Submit your official grade transcripts and any test transcripts (CLEP, AP, etc) to:

Southwestern Oregon Community College  
C/O Transcript Evaluator  
1988 Newmark Ave.  
Coos Bay, OR 97420

### SECURE FINANCING –

- Apply for federal and state aid at <https://fafsa.gov>.
- Check your email linked to the FAFSA for supporting documents necessary for disbursement.
- Send outside funding information (scholarships, agency support, etc.) to Coos or Curry Student First Stop Center location.
- Veterans should contact the Veteran's Clerk at 541-888-7236 or visit the website at <https://www.socc.edu/getting-started/veterans/>.

### NEW STUDENT ORIENTATION – Requires a Southwestern ID number

- Complete the online New Student Orientation.
- Get to know your student portal ([mylakerlink.socc.edu](https://mylakerlink.socc.edu)) as well as your ID number and student email.
- Contact the Student First Stop Center if you need assistance with an ID number.

### SECURE HOUSING –

- First time out-of-district freshmen attending Coos Campus are required to live in student housing.
- Learn more and get an application by emailing [housing@socc.edu](mailto:housing@socc.edu) or call 541-888-7635.

### COMPLETE THE PLACEMENT PROCESS –

The purpose of the placement process is to determine student's entry-level in math, reading and writing. Multiple components are considered to place students initially into college courses.

- High school completion date and courses completed in high school
- High school overall GPA and/or content area grades
- Standardized test results (those the student has already completed) such as ACT, SAT, Smarter Balanced, to name a few. Applicants who have ACT/SAT scores should submit them to the Admissions Office in Dellwood Hall, Rm 4.
- Recent GED® test scores.
- Courses transferred from other colleges and universities. Send all transcripts to Transcript Evaluator, 1988 Newmark Avenue, Coos Bay, OR 97420.
- Placement testing, if required, is offered at all Southwestern sites.
  - Coos campus students should see an intake advisor in the Student Success Center (SSC) Office located in Stensland Hall between 8:30 a.m. - 4:00 p.m., Monday through Friday.
  - Intake advisors are available at the Curry Campus (Brookings site) between 9:00 a.m. - 4:00 p.m., Monday through Friday.
  - Intake advising at the Gold Beach Center or the Port Orford office is by appointment. Contact the Curry Student First Stop Center at 541-813-1667 for more information.

### MEET WITH AN ADVISOR –

- Visit or call Student Success Center (SSC) to make an initial advising appointment, Stensland Hall on Coos Campus at 541-888-7405 or our Curry location at 541-813-1669.
- Discuss your major, placement information, and prospective classes with an advisor.

### REGISTER VIA MYLAKERLINK –

- Get cleared by an advisor to register.
- Log on to myLakerLink, complete the Personal Info Update Form, if necessary, and add classes.
- For assistance contact the Student First Stop Center at [firststop@socc.edu](mailto:firststop@socc.edu).

### TEXTBOOKS –

- Visit the Southwestern Bookstore in Stensland Hall or [bookstore.socc.edu](https://bookstore.socc.edu) to purchase books and supplies.
- Call the Coos location at 541-888-7264 or the Curry location at 541-888-1667 with questions.

### FOLLOW-UP –

- If you need any help contact one of the Student First Stop Centers at 541-888-7352 (Coos) or 541-813-1667 (Curry).
- *Si usted necesita mas ayuda, por favor, llame a Student Success Center (SSC) al teléfono 541-888-7407.*

# ACADEMIC INFORMATION

## THESE PROCEDURES GOVERN REGISTRATION AND STUDENT RECORDS ADMINISTRATIVE WITHDRAWAL OF STUDENTS

In order to assure that all available class seats are filled with students - both registered students and students from the waitlist - Southwestern enforces an attendance policy.

Instructors **may** administratively withdraw students from classes if the students do not attend 100% of class sessions and associated labs during the first week of each term. Additionally, all instructors may administratively withdraw students from sub-term classes (those which do not span the entire term) if students do not attend the first class session. Students who are unable to attend the first class meeting must contact the instructor by phone, e-mail or in person prior to the first class meeting if they wish to avoid an administrative withdrawal. Southwestern Oregon Community College is not responsible for liabilities associated with the administrative withdrawal of students. Ultimately, students are responsible for dropping courses within the drop period to avoid being charged for the class or receiving a failing grade.

Any student whose behavior disrupts the educational process of a course can be administratively withdrawn from that course. It is the procedure of Southwestern Oregon Community College that an individual will be subject to involuntary administrative withdrawal from campus and related instruction if it is determined, by clear and convincing evidence, that the individual is suffering from a physical, emotional and/or behavioral disorder and as a result of the disorder engages or threatens to engage in behavior which:

- Poses a danger of causing physical harm to self or others;
- Could cause property damage; or
- Could directly and substantially impede the educational process and/or the lawful activities of others.

The College reserves the right to request, with good cause, a physical, psychological or psychiatric examination of a student any time the examinations may be in the best interest of the College and/or the student. The College shall pay for the examinations.

### ADD/DROPS

Students must receive Course Authorization via myLakerLink from their instructors to add courses after the first Wednesday of the term. Students may withdraw from a course or from the College through the end of the second Wednesday, 5:00 p.m., of the term or within the course's refund period without responsibility for a grade. Students may add courses with instructor consent through the end of the second Wednesday of the term at 5:00PM. Dropping after the refund period will result in "W" grades on transcripts. Students may withdraw until the Wednesday before finals week. Students are strongly encouraged to consult the instructor before dropping to ascertain their status in the course.

### AUDITING COURSES

Students who are interested in taking a class, but do not need the credit may choose to audit credit classes and pay only 50% of the regular tuition. Students auditing classes participate fully in the class, but are

not required to take tests and do not receive grades. To qualify for the audit discount, registration is required within the refund period. Fees and registration procedures are the same as when the students take the class for credit.

*\*Financial aid may be impacted by auditing a course; please check with the Financial Aid Office for details.*

\*Community members wishing to experience a college course or training should contact the Community Education Office at <https://www.socc.edu/for-the-community/community-education/>.

### CHANGE OF MAJOR OR SPECIALIZATION

To change a major or specialization, students must complete the Change of Major form on myLakerLink. Login to see the form here: [https://mylakerlink.socc.edu/ICS/Admissions/Program\\_Applications.jnz](https://mylakerlink.socc.edu/ICS/Admissions/Program_Applications.jnz). Changes to majors made by the second Wednesday of the term will apply to the current term. Changes made thereafter will apply to the following term. For graduation and class scheduling purposes, students need to use the catalog year in which they declare their major. Because changing majors may have an impact on financial aid eligibility, students are encouraged to consult with their academic advisor before making any changes.

### CLASSIFICATION

A student will be classified in Freshman/Sophomore status when they have earned the following credits:

- Freshman: 0-44.9 credits
- Sophomore: 45+ credits

### COURSES

Southwestern offers the following types of courses. If you are not sure what type your courses are, talk to you advisor or the instructor of the course.

**FACE-TO-FACE** - This course will be offered entirely in a face-to-face format. Students will attend class at specified times and at a specified location.

**HYBRID** - This class will have some of the course material delivered remotely. Students will also attend class at specified times and at a specified location.

**REMOTE** - This class will have all course material delivered remotely. Students will be required to attend class sessions virtually at a specified time.

**ONLINE** - This class will have all course material delivered remotely with no requirements for a student to attend class at a specified time.

### COURSE PREREQUISITES

A course that must be completed prior to another course is a prerequisite. Course prerequisites must be passed with a "C" or better. Many courses have prerequisites that can only be waived with instructor consent. Instructors waive prerequisites with a Course Authorization via myLakerLink. Students may be withdrawn from courses if they have not completed the prerequisites from the prior term. Students may request that the prerequisites be waived if they have the knowledge and skills to succeed in the courses. Online students contact the Student Success Center (SSC) at 541-888-7405 or 800-962-2838, ext. 7405 for assistance.

## **INSTRUCTOR CONSENT**

Students planning to register for a course that requires instructor consent must be cleared by the instructor with a Course Authorization via myLakerLink, or by submitting a completed and signed add/drop slip.

## **MULTIPLE DEGREES**

Students applying for multiple degrees must meet the degree requirements as listed for each degree. For each additional degree, students must complete at least 15 unique SWOCC credits that are different from those used for the other degree(s) and are applicable to the specific degree requirements.

## **WAITLISTED COURSES**

When students register for courses that are full, they are placed on waitlists. Students in waitlisted courses will be notified through their college email when seats are available and they have permission to register via myLakerLink or at a Student First Stop Center. Students must then actively click the add/move button within 36 hours to be added to the waitlist. The waitlist ends the Thursday prior to the first week of classes. After the waitlist period ends, students may register in the waitlisted courses with instructor consent.

## **STATUTE OF LIMITATIONS ON AA/OT, AS, AGS, AND AAS DEGREES AND CERTIFICATES**

To earn an Associate's degree or Certificate of Completion, students must meet the requirements in the catalog year in which they declared their major at Southwestern. Students who are not enrolled in at least one course toward their degree for more than one year will lose the right to complete the degree under the original catalog requirements. Students must then meet the requirements in the catalog from the year they re-enroll at Southwestern.

The application of existing coursework will be evaluated on an individual basis by the Transcript Evaluator and the appropriate instructors. Modifications or exceptions may be made in certain circumstances by approval from the Academic Standards Committee. For example, if the student has been employed in the skill area and has thus been able to keep up with developments in the field or if the time lapse is marginally outside accepted limits. All exceptions will be made with the knowledge and consent of the appropriate instructors.

An edition of the catalog is valid for five academic years. For example, a catalog that takes effect in summer of 2017 is valid only through spring of 2022.

Students should regularly consult an advisor in their major field. Failure to complete the requirements within that time frame will require students to move to the current catalog year or to petition the Academic Standards Committee, using the Academic Standards Committee Petition form, for an exception to the policy. Students taking more than five years to complete their degree program must have coursework evaluated by the Transcript Evaluator and the program faculty before graduation. Students may have to retake courses or take additional coursework in order to graduate.

## **STUDENT RECORDS PROCEDURE**

The Student First Stop Centers maintain all official academic records of students including Applications for Admission, transcripts, registration forms, and transfer credit and degree evaluations. The Financial Aid Office maintains all records of student aid and scholarship records.

FERPA: The Family Education Rights and Privacy Act (FERPA or Buckley amendment) and Oregon Administrative Rules (OARs) protect the confidentiality of student records and student access to those records. Under the provisions of the FERPA and OARs, the educational institution must designate the information it will release without the written consent of the student as directory information, and protect the confidentiality of all other student records. By being FERPA compliant, the College in turn maintains Gramm-Leach-Bliley (GLB) compliance.

It is the intent of Southwestern to designate the following data as directory information: Student's full name; the fact that the student is or has been enrolled in the College; local and permanent addresses and telephone number(s); e-mail address; date and place of birth; participation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance; class level; major field of study; number of credit hours (not grades or GPA); degrees and awards received; the most recent educational institution attended by the student; job title(s) and dates of employment for student employees who have been or are paid from college administered funds.

Students may prohibit the release of any or all of this directory information by filling out the Restrict or Release form at either Student First Stop Center. Requests to withhold this information will remain in effect until the Student First Stop Center receives written instructions from the student to remove the hold.

Directory information and other personally identifiable information may be released to college officials who have a legitimate educational interest, or to comply with a judicial order or lawfully issued subpoena. The President of the College may release personally identifiable student information to appropriate persons in connection with an emergency if knowledge of such information is necessary to protect the health or safety of persons and/or safety of property.

Students have the right, by pre-scheduled appointment with the Registrar, to access their educational records as defined in OAR 582-41-410, as well as to challenge the correctness of those records, to request amendment of those records and, in case of dispute, to obtain a hearing (OAR 581-41-450). Students may not request a hearing under this policy to challenge a grade, only the accuracy of its recording. Students who wish to inspect their records must schedule an appointment with the College Registrar. If students request a copy of any document in the records, a copy charge will be assessed. This does not include transcripts, which can be obtained from either Student First Stop Center. Students may forfeit the right to receive an official transcript if they have an outstanding balance with the College, or have been notified that their transcript may be withheld.

## **RECORDS DISCLOSURE**

OAR 581-41-460 authorizes Southwestern Oregon Community College to ask you to provide your social security number. The College will use your number for reporting, research, and record keeping. Your number will also be provided by the College to the Data for Analysis (D4A) Oregon colleges reporting system. All students are assigned a student identification number separate from their social security number. D4A is a reporting system designed for secondary and postsecondary educational institutions to report data required by the Oregon Higher Education Coordinating Commission (HECC). The system stores 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.

D4A or the College may provide your social security number to agencies or match it with records from the following systems:

- State and private universities, colleges, and vocational schools to find out how many community college students further their education and also 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 obtain the best jobs available.
- The Oregon Department of Education provides 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. Funding for community colleges is based on this information.
- 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.
- Where applicable (i.e., at colleges which use the ASSET/Compass placement test): The American College Testing Service, if you take the placement test, for educational research purposes.
- The Internal Revenue Service, which is required to be reported for tax credit eligibility determination.

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

*OAR (Reglamento Administrativo de Oregon) 581.41.460 autoriza al colegio comunitario Southwestern Oregon Community College que solicite su numero social. El numero sera utilizado por el colegio para la preparacion de reportes, agregados, investigaciones, y para guardar su expediente academico. Su numero tambien sera proporcionado por la universidad al sistema de informes de universidades de Data for Analysis (D4A) de Oregon. A todos los estudiantes se les asigna un numero de identificacion del estudiante separado de su numero de seguro social. D4A es un sistema de informes disenado para instituciones educativas secundarias y postsecundarias para reportar los datos requeridos por la Comision de Coordinacion de Educacion Superior de Oregon (HECC). El sistema incluye informacion sobre los estudiantes y programas para cumplir con los requisitos de reportes federales y estatales. Tambien ayuda a la los colegios en su planificacion, investigacion, y para el desarrollo de programas. Esta informacion ayuda a los colegios a mantener el progreso de los estudiantes y sus exitos en el lugar de trabajo y en otros programas de educacion.*

*D4A o el colegio se pueden proporcionar su numero social a las siguientes agencias o conseguirlo o igualarlo con los archivos de los siguientes sistemas: o Los colegios estatales, universidades privadas, colegios, y colegios vocacionales, para averiguar cuantos estudiantes que asistieron a los colegios comunitarios continuaron con su educacion y para averiguar si los cursos son una buena base para la educacion adicional.*

- *El Departamento de Empleo de Oregon, que colecciona informacion para ayudar a las agencias estatales y locales en la planificacion de los servicios educacionales y servicios de entrenamiento para ayudar a la poblacion de Oregon a conseguir los mejores trabajos posibles.*
- *El Departamento de Educacion de Oregon, para proveer reportes al gobierno estatal y federal. Esta informacion se usa para aprender sobre la*

*educacion, el entrenamiento, y la direccion que van tomando los trabajos para planificacion, investigacion, y mejoramiento de los programas. Los fondos que los colegios comunitarios reciben es basada en esta informacion.*

- *El Departamento de Fiscal de Oregon y las agencias de coleccion con el proposito de procesar deudas y solamente si se el extiende credito a la persona por el colegio.*
- *DONDE SEA APLICABLE (por ejemplo en los colegios que usan la prueba ASSET): El Servicio de Pruebas de Colegio Americanos, si usted toma la prueba ASSET Placement Test, para el proposito de investigacion.*
- *De ustedes el numero de seguro social es requerida y se informe a la IRS (rentas internas) para determinacion de aceptablemente credito. Su numero se usara solo para los propósitos enlistados arriba. Las leyes estatales y federales protegen su informacion privada. Si necesita mas ayuda, llama EPSE por telefono 541-888-7405; 800-962-2838, ext. 7405.*

## CREDIT FOR COURSEWORK

The regular college year is divided into three quarters of approximately 11 weeks each. One credit is generally allowed for each discussion or laboratory period per week. The discussion period consists of 50 minutes of lecture or discussion; the laboratory period may consist of two or more clock hours.

Summer session usually include terms of eight weeks, with class periods proportionately extended.

For each period of lecture or discussion, students are expected to spend at least two hours on outside preparation (studying).

An average course load of 15 credits of college-level coursework per quarter will normally give a student sufficient hours of credit to graduate in two years. Courses should be chosen according to an organized curriculum.

Students may take more than 18 hours per quarter with advisor approval. Advisors may allow an overload through myLakerLink or signing a registration form located at the Student First Stop Center.

## ADMISSIONS

### First-Time Students

Students taking 12 or more credits in a term, pursuing a degree or certificate and/or receiving financial aid are required to submit an Application for Admission online.

Students attending for personal interest only, taking fewer than 12 credits in a term, and not receiving federal student aid need to complete a New Student Record Form.

Once the required information is submitted, please allow three working days to receive your user ID and password by email.

### Community Education:

Non degree seeking students taking classes for personal enrichment do not need to complete an application for admission. You will need to complete a New Student Record Form to obtain a SWOCC ID and obtain access to mylakerlink.

Please visit <https://www.socc.edu/for-the-community/community-education/> for more information.

### International Student Admission

International students must meet federal immigration and college requirements before being admitted to Southwestern. International students who present Test of English as a Foreign Language (TOEFL) scores with a minimum score of 450 may be admitted to Southwestern. Other tests accepted are listed online.

Students must complete the International Application for Admission form at <https://mylakerlink.socc.edu/ICS/Admissions/> and submit it along with TOEFL scores and a financial statement to the Coordinator of International Student Programs before the I-20 and acceptance letter are issued. Students are also required to send any international transcripts to a third party evaluator for translation.

Southwestern provides a comprehensive array of services. Aside from the special orientation process designed specifically to familiarize our international students with the College and community, we offer TOEFL preparation, personal and academic counseling, special tutoring services to help students progress in their courses, a mentor program that brings international students together with American conversation partners, and a bridge course (Writing 60: College Writing for International Students) designed to provide international students with writing practice in most disciplines. In addition, there is housing assistance, advice about immigration regulations, and activities and field trips which are periodically organized to acquaint our students with the recreational opportunities available in this scenic area. For additional information visit the International Student Program website at <https://www.socc.edu/getting-started/admissions/isp/>.

### Southwestern Fact

International transcripts must be mailed to a third party evaluator. A fee is charged for this service. World Education Services Inc. - ask for a "Course by Course Report." WES Inc., P.O. Box 26879, San Francisco, CA 94126, 800-414-0147.

OR

Academic Evaluation Institute Inc. - Ask for a "Comprehensive Report." ACEI Inc., P.O. Box 6908, Beverly Hills, CA 90212, 310-275-3530.

### Special Admissions Programs

There are additional admission processes for restricted-entry courses, programs, and training opportunities which require a separate application:

- Baking and Pastry or Culinary Arts
- Emergency Medical Technician/Paramedic
- Nursing and Nursing Assistant

For the specific application processes visit or call the Admissions Office in Dellwood Hall, Rm 4, 541-888-7636.

### Transfer Students

Transfer students who plan to complete a degree and/or receive financial assistance must complete the application process and have official transcripts sent to Southwestern. Course credits transferred from other accredited colleges or universities are evaluated in terms of equivalency

to Southwestern courses and/or applicability to Southwestern programs. All credits used to calculate the cumulative Grade Point Average (GPA) are transferred; however, some of the credits may not apply to a student's Southwestern program.

Southwestern Oregon Community College does not provide students copies of transcripts from other institutions they have attended. Students must contact their prior institutions to obtain copies of their transcripts. Once received by the College, students may view the transcripts from their other institutions at any time by submitting a written request to the Student First Stop Center.

Send all official transcripts to Southwestern Oregon Community College, ATTN: Transcript Evaluator, 1988 Newmark Ave., Coos Bay, OR 97420. Coursework from accredited colleges and universities will be accepted in accordance with college policies.

## FINANCIAL AID

**FINANCIAL AID OFFICE | DELLWOOD HALL RM 22 | 541-888-7352**  
APPLY ONLINE [WWW.FAFSA.GOV](http://WWW.FAFSA.GOV) | SOUTHWESTERN SCHOOL CODE: 003220

Southwestern Oregon Community College offers a number of financial aid programs in the form of grants, loans, tuition scholarships, and employment. Students interested in financial aid must apply online at [fafsa.gov](http://fafsa.gov). Contact the Financial Aid Office for information. Funds are limited and students should apply early.

Term of Enrollment	Priority Deadline for Submission of Required Paperwork
Summer Term 2021-2022	April 2, 2021 - Contact our office if attending <sup>1</sup>
Fall Term 2021-2022	June 4, 2021 <sup>1</sup>
Winter Term 2021-2022	November 5, 2021 <sup>1</sup>
Spring Term 2021-2022	February 4, 2022 <sup>1</sup>

<sup>1</sup> Dates subject to change.

- Paperwork submitted OR postmarked after the deadline dates will be processed as quickly as possible.
- Be aware that late paperwork may not be processed before the term begins.
- Plan on at least 6 to 12 weeks processing time from the time you turn in your last piece of paperwork. During peak times, especially August through October, the wait could be up to 16 weeks.
- You will need to make payment arrangements with either Student First Stop Center if you have not received your official award letter by the payment deadline date.

Financial aid funds are disbursed by Electronic Funds Transfer (EFT) or by mail after the student accounts have been credited. Disbursement begins Friday of the third week of each term. Further disbursements are processed by each Friday thereafter. Students receiving financial aid are to have all add/drops, bookstore charges and required paperwork processed by Wednesday of the second week of the term in order to have an accurate disbursement. Students are responsible for paying all tuition and fees in excess of financial aid funding by the payment/withdrawal deadline date listed in the academic calendar.

To be awarded federal student loans, or to begin working under Federal Work-Study, students need to have completed all the necessary paperwork and workshops.

Bookstore charges are available for all financial aid students who qualify starting the Monday before the term begins. For information contact one of the Student First Stop Centers at 541-888-7352 (Coos) or 541-813-1667 (Curry).

If students are placed on Aid Suspension Status, a request/appeal needs to be submitted to the Financial Aid Office, or alternative payment arrangements made with the Student First Stop Center by 4:00 p.m. on the second Wednesday of the term. Students who are on Aid Suspension Status and have submitted a request/appeal should continue attending all courses pending a review by the Financial Aid Director. The second Wednesday of the term will be considered the actual date of withdrawal should a request/appeal be denied and the students choose to withdraw. This will result in a 100% refund. Students are responsible for all bookstore charges. A refund may be available at the bookstore during the first week of the term if items are returned in the condition that they were purchased.

Consumer information is available online at <https://www.socc.edu/getting-started/paying-for-college/consumer-information/> and several offices on campus including policies and procedures, application processes, and disbursement information.

## ACADEMIC POLICIES

### TRANSFER CREDITS

#### TRANSFERRING FROM SOUTHWESTERN

Transfer students are responsible for determining the requirements of the institution and program to which they plan to transfer. Official Southwestern transcripts can be ordered and delivered by contacting Student First Stop Center.

#### TRANSFERRING TO SOUTHWESTERN

Southwestern Oregon Community College accepts college level credits earned in academic certificate and degree programs from colleges and universities accredited by one of the following regional Associations of Colleges and Schools – Middle States, North Central, New England, Northwest, Southern or Western.

Official transcripts are processed after the students have been formally accepted to the college. Send official transcripts to the Student First Stop Center. Send placement test scores to the Student Success Center (SSC).

### PLACEMENT INFORMATION

Southwestern strives to place students into math and writing courses appropriate to their academic development. This is typically done through standardized testing (ACT, SAT, Accuplacer, GED). Alternatively, students may be placed into appropriate coursework using a Multiple Measures placement process. During this process intake advisors will look at previous coursework taken, how long it has been since your last class, and other relevant factors.

The below charts are used by college staff to navigate your placement process. Questions? Call an advisor at 541-888-7405 or email [sss@socc.edu](mailto:sss@socc.edu).

#### Math Placement Chart

Placement	Accuplacer Next Generation	SAT	ACT	Multiple Measures (prior to Fall 2020)	Multiple Measures Placement (Fall 2020)	GED (test w/in last 5 yrs)
MTH251	Gen Math: 276+	N/A	N/A	College math equivalent: MTH251	251	N/A
MTH112	Gen Math: 263-275	N/A	N/A	College math equivalent: MTH112	112	N/A

## FINANCIAL AID ON THE WEB

[fafsa.gov](http://fafsa.gov)

Southwestern's School Code: 003220

Step 1 – Fill out and submit the FAFSA with Southwestern's school code online at [fafsa.gov](http://fafsa.gov).

You'll need the following to fill out the form:

- Social security number
- Federal income tax and W-2 forms along with any other records of money earned
- Driver's license (if any)
- Parents' income tax return (if a dependent)
- Current bank statements
- Current mortgage and investment records (if any)
- Alien registration card (if not a U.S. citizen)

Step 2 – Log into your FAFSA and review your Student Aid Report (SAR) after your FAFSA has been processed. Review it carefully. When you file electronically, your SAR should be available immediately.

MTH105/111/ 211/243	Gen Math: 245-262	561+	23+	College math equivalent: MTH105, MTH111, or MTH243	MTH105, MTH111	175+
MTH95	Gen Math: 228-24	N/A	N/A	Competency Stripe MTH95: 1	95	165-174
MTH65	Gen Math: 211-227 Or Gen Algebra: 258-275	521-560	21-22	Competency Stripe - MTH65, 86: 1	65	146-164
MTH60/98 Or CTE MTH80/81/82	Gen Algebra: 239-257	440-520	17-20	C.S.- MTH60,98,80,81,82: 1	60	<145

### Writing Placement Chart

Placement	Accuplacer Next Generation	SAT	ACT	Multiple Measures (prior to Fall 2020)	Multiple Measures Placement (Fall 2020)	GED (test w/in last 5 yrs)
WR121	256-300	501+	18+	WR90R, 121/95, 121 -#: 121	121	121
WR121 w/ WR95	241-255	N/A	N/A	WR90R, 121/95, 121 -#: 121	95	155-164
WR90R	<241	<501	<18	WR90R, 121/95, 121 -#: 90	90	<155

### TESTING INFORMATION

College credit may be awarded for successful completion of Advanced Placement tests. Required scores for credit and equivalent college course are listed in the chart below. The below charts are used by college staff to navigate your placement process. Questions? Call an advisor at 541-888-7405 or email [sss@socc.edu](mailto:sss@socc.edu).

### Testing Chart

AP Test Taken	Score	Quarter Hours	Equivalent Courses
Art History	4+	8	ART204, ART205, ART000
Art Studio	4+	4	ART000
Computer Science/Information Systems	4+	4	CIS120
English Language and Comp	3+	3	WR121
English Literature and Comp	3+	3	ENG104
Chinese Language and Culture	3+	12	CHN000
French Language and Culture	3+	12	FR000
German Language and Culture	3+	12	GER101, GER102, GER103
Japanese Language and Culture	3+	12	JPN000
Spanish Language and Culture	3+	12	SPAN201, SPAN202, SPAN203
Spanish Literature	3+	4	SPAN000
Music Theory	4+	8	MUS000
European History	3	3	HST101
European History	4+	6	HST101, HST102
U.S. History	3	3	HST201
U.S. History	4+	6	HST201, HST202
World History	4+	6	HST000
United States Government and Politics	3	3	PS201
Macroeconomics	3+	4	ECON202
Microeconomics	3+	4	ECON201
Psychology	3+	4	PSY201, PSY000
Biology	4+	12	BI101, BI102, BI103
Chemistry	4+	15	CHEM221, CHEM222, CHEM223

Environmental Science	3+	4	ENV000
Physics B	4+	12	PH201, PH202, PH000
Physics C: Electricity & Magnetism	4+	4	PH000
Mechanics	4+	4	PH000
Calculus AB	3	4	MTH251
Calculus AB	4+	8	MTH251, MTH252
Calculus BC	3	8	MTH251, MTH252
Calculus BC	4+	12	MTH251, MTH252, MTH253
Statistics	4+	4	MTH243
Human Geography	3+	4	GEOG000

CLEP Test Taken	Credits	Quarter Hours	Equivalent Courses
Financial Accounting	9		BA211, BA212, AND BA000 1crd
Business Law, Introductory	4.5		BA230 and BA000 .5crd
Management, Principles of	4.5		BA206
Marketing, Principles of	4.5		BA223 and BA000 .5crd
Information Systems & Computer Apps	4.5		CIS120 and CS000 .5crd
College Composition	8		WR121,122,
College Composition Modular	8		WR121,122
American Literature	9		ENG253, 254, 255
Analyzing and Interpreting Lit.	9		ENG000*
English Literature	9		ENG104, 105, 106
Humanities	9		HUM204, 205, 206
French Language Level 1	9		FR101, 102, and FR000 1crd
French Language Level 2	18		FR103, 201, 202, 203 and FR000 2crd*
German Language Level 1	9		GER101,102, and GER000 2crd
German Language Level 2	18		GER103, 201, 202, 203 and GER000 2crd*
Spanish Language Level 1	9		SPAN101, 102 and SPAN000 1crd
Spanish Language Level 2	18		SPAN103, 201, 202, 203, and SPAN000 2 crd*
Western Civilization Thru 1648	4.5		HST101 3crd and HST000 1.5crd*
Western Civilization Thru Present	4.5		HST102 3crd and HST000 1.5CRD*
Western Civ Tests (both)	9		HST101, 102, 103
History of the U.S. Thru 1877	4.5		HST201 3crd and HST000 1.5crd*
History of the U.S. Thru Present	4.5		HST202 3crd and HST000 1.5crd*
U.S. History Test (both)	9		HST201, 202, 203
Social Sciences and History	9		SOC000, HST000, PSY000 3crd each*
American Government	4.5		PS201 and PS000 1.5crd*
Macroeconomics, Principles of	4.5		ECON201 and ECON .5crd*
Microeconomics, Principles of	4.5		ECON202 and ECON .5crd*
Educational Psychology, Introductory	4.5		PSY201 AND PSY000 1.5 crd*
Psychology, Introductory	4.5		PSY201 AND PSY000 1.5 crd*
Human Growth & Development	3		PSY237
Sociology, Introductory	4.5		SOC204 and SOC000 1.5 crd*
Biology	9		BI000 **
Chemistry	9		CHEM000 **
Natural Sciences	9		GS000 **
Calculus	4.5		MTH251 and MTH000 .5 crd*
College Algebra	4.5		MTH111 and MTH000 .5 crd*
Precalculus	4.5		MTH112 and MTH000 crd *
College Mathematics	9		MTH95, MTH105, and MTH000 1 crd*

- \* Can be used for distribution requirements
- \*\* Non lab can be used to fulfill distribution requirements

## CREDIT FOR PRIOR LEARNING (CPL)

Courses considered Credit for Prior Learning include challenge exams, Credit for Industry Certification (CIC), and Prior Learning Assessment via portfolios (PLA). Students pay a per credit fee for credits earned through any of these methods.

Students can obtain no more than 25 percent of the overall credits for a degree through credit for Prior Learning Assessment via Portfolio (PLA). In order to initiate the CPL process, students must meet with the instructor and negotiate an agreement. The form and agreement are then forwarded to the dean of that specific area for approval. The student then pays the appropriate fee at Student First Stop. Courses will then be added to the student's transcript. Southwestern personnel will make no assurances as to the number of credits to be awarded prior to the completion of the institution's review process.

## ADVANCED PLACEMENT PROGRAM (APP)

High school seniors who participate in the College Entrance Examination Board's Advanced Placement Program may seek advanced placement in a variety of disciplines. Entering freshman who have taken the APP tests should have the results sent to the Student First Stop Center. Advanced placement and/or college credit may be granted upon recommendation of the appropriate party. Credit may be granted only if students are working towards a degree/certificate and enroll and complete a minimum of three credits at Southwestern during the quarter. The Student First Stop Center and the Student Success Center can provide interested students with procedures.

## COLLEGE LEVEL ENTRANCE EXAMINATION PROGRAM (CLEP)

Students enrolled at Southwestern may receive credit for certain college courses by submitting official scores from the College Level Entrance Examination Program (CLEP). Successful CLEP exam results in grade and credit on the Southwestern permanent record identified as CLEP. The Student First Stop Center and the Student Success Center can provide interested students with procedures. Click here to learn more about specific tests, credits and equivalent scores.

## OTHER ALTERNATIVE CREDIT

Southwestern will evaluate any of the following learning experiences for credit depending on test and score: Advanced Placement Program (APP), College-level Entrance Examination Program (CLEP), and International Baccalaureate (IB). Military Service Credit, (AARTS, CCAF, CGI, and SMART) is considered for transfer evaluation based on American Council on Education (ACE) recommendation. Southwestern does not accept non-military ACE recommendations. A military Veteran will be granted three credits of PE applicable to all PE/Health degree requirements upon the submission of a DD214 with basic training completion.

## MINIMUM GRADUATION REQUIREMENT

To meet requirements for a degree or certificate, a student must complete a minimum of 24 credits at Southwestern in addition to any credits transferred in from another institution or earned through alternative credit methods. Alternative credits must not duplicate other credit awarded.

## GRADE POINT AVERAGE

Code	Description
A	Excellent: 4 grade points
B	Above Average: 3 grade points
C	Average: 2 grade points
D	Below Average: 1 grade point
F	Failing: 0 grade points
Z	Grades were not received from the instructor. Grades will be entered and available via myLakerLink once they are received.

- Southwestern computes GPA using the 4-point system and by dividing the total grade points by the total quality credits.
- Grades are assigned based on work completed at the end of the scheduled class time. Additional work or make-up after the ending date of the class is not justified unless an Incomplete was assigned.
- Grades and/or records found to be fraudulent will be changed.
- **Grades are not mailed; they are available via myLakerLink.**

## INCOMPLETE GRADES

Code	Description
I	Incomplete: 0 points per credit hour – 'I' grade is given for work that could not be completed during the finals week for the term because of circumstances beyond the student's control. 'I' grades require the student's current earned letter grade to be attached to the 'I' grade and the date when the Incomplete contract is to expire. If the student does not fulfill her/his contract within the designated time, the grade will automatically revert to the given grade.
IB	Incomplete 'B' earned: 3 grade points
IC	Incomplete 'C' earned: 2 grade points
ID	Incomplete 'D' earned: 1 grade point
IF	Incomplete 'F' earned: 0 grade points
IU	Incomplete Unsatisfactory earned: 0 grade points

## PASS-FAIL GRADING OPTION

Certain courses offer students an option to receive a grade of S (satisfactory) or U (unsatisfactory) instead of letter grade (A, B, C, D, or F). This option must be exercised at the time of registration. Courses required for your degree program must be taken for a letter grade.

S Grade: For evaluation and transferability purposes, the 'S' grade is equivalent to a grade of C or better.

## AUDIT OPTION

Students electing to audit a class (no grade, no credit) must choose this option at the time of registration or no later than the end of the sixth week of instruction for standard term-length classes. Check with the Student First Stop Center for last day to change grading status for nonstandard-length classes. Auditing students pay in accordance with the tuition schedule and participate to a degree determined by them and the instructors. Audited courses at time of registration are not eligible for financial aid.

## COURSE REPEAT AND ABILITY TO BENEFIT POLICY

For academic purposes, the ability to benefit from instruction is defined as the ability to achieve the skill level or knowledge to apply the subject matter in an academic or practical situation. This is defined as at least an S or C grade.

A student may repeat a course once to improve a grade. A second repeat may only be attempted with the recommendation of a counselor, and a third repeat requires the approval of the Vice President of Instruction.

Refer to the Financial Aid Satisfactory Academic Progress Policy available online.

All course attempts will remain on the transcript. Only the highest grade will be reflected in the cumulative grade point average (GPA) calculated for Southwestern cumulative GPA. Financial aid is required by Federal regulations to calculate the cumulative grade point average using the historical transcript of *all* actual grades earned.

Some courses may be taken more than once for credit (e.g., PE 185 Sport/Activity courses). In these cases, the grades of the repeated courses will reflect in the cumulative GPA.

## ACADEMIC NOTIFICATION SYSTEM

To help students be successful, the Academic Notification System has been developed to monitor the academic progress of students.

The Academic Notification System is a three-step process designed to alert students to potential lack of progress during their academic career.

**Step 1 – Academic Notification:** This status results when a student's term grade point average (GPA) is below satisfactory progress (2.0).

**Step 2 – Academic Probation:** If the student has received Academic Notification Status and the term GPA is *again* below 2.0, the student is placed on academic probation. The student will continue on probation until the cumulative GPA is 2.0 or higher.

**Step 3 – Academic Suspension:** If, during any term while on probation or previous suspension, the student does not make satisfactory progress, the student will be suspended. This status results when the term GPA and cumulative GPA are below 2.0.

Appeals for reinstatement to Southwestern Oregon Community College after academic suspension are found at Student First Stop or on myLakerLink. Appeals for reinstatement are reviewed by the Academic Standards Committee.

Students receiving financial aid must complete an additional appeal process (FA appeal for reinstatement) following an academic or financial aid suspension.

Students who are academically suspended, but have been absent from Southwestern for five or more years, will be automatically reinstated.

## **THE PURPOSE OF THE ACADEMIC NOTIFICATION SYSTEM**

To assist each student with accomplishing his/her educational goal by:

- Alerting the student and the college of academic difficulties or deficiencies.
- Providing an opportunity for the college to be of assistance to the student in setting and achieving academic goals.
- Assisting the student in utilizing the facilities and personnel of the college.
- Creating an atmosphere in which the student may be successful in his/her pursuit of an education.

## **ACADEMIC EXCELLENCE**

Achieve a term grade point average of 4.0 for the quarter with a minimum of 12 credit hours will be listed on the Academic Excellence Roll for that quarter.

## **HONOR ROLL**

Achieve a term grade point average of 3.5 to 3.99 inclusive with a minimum of 12 credit hours will be listed on the Honor Roll for that quarter.

## **DEAN'S LIST**

Achieve a term grade point average of 3.0 and 3.49 with a minimum of 12 credit hours will be listed on the Dean's List for that quarter.

## **SOUTHWESTERN SCHOLAR**

Appear on the Honor Roll or achieve Academic Excellence for the entire academic year (Fall, Winter, and Spring terms).

## **PHI THETA KAPPA**

Phi Theta Kappa is the international honor society for two-year colleges. Alpha Kappa Phi is the Southwestern chapter of Phi Theta Kappa. To join Alpha Kappa Phi, a student must have accumulated a total of 12 college-level credits at Southwestern toward an associate's degree and must have a 3.5 cumulative GPA or higher. All members must also maintain at least a 3.5 cumulative GPA.

# **GRADUATION**

## **STUDENTS MUST COMPLETE THE GRADUATION APPLICATION PROCESS ONE TERM PRIOR TO THE TERM OF COMPLETION (E.G., SPRING TERM GRADUATES MUST APPLY DURING WINTER TERM).**

The Graduation Application is available at <https://www.socc.edu/graduation/>. Official transcripts from accredited colleges and universities previously attended that apply toward a Southwestern degree or certificate must be on file with the transcript evaluator. All coursework from other colleges will be included in the cumulative GPA regardless of applicability to current coursework. The cumulative GPA, including transfer work, is used to determine eligibility for graduation honors. Final approval of the Graduation Application is given only after grades have been posted for the last term's work. Diplomas and one-year certificates are mailed to the students following this process and may take 4-6 weeks to receive.

Advisors are available to assist students in selecting coursework that applies to the degree or certificate, but students have final responsibility for satisfying graduation requirements.

The graduation ceremony (commencement) is held annually in June. The process above must be completed to be eligible to participate in the commencement ceremony.

A valedictorian will be chosen for the commencement ceremony. To be considered, a student must meet the following criteria:

- Meet the requirements for graduation with an associate's degree;
- Participate in commencement;
- Have the highest GPA for the students graduating with an associate's degree; and
- Should more than one student meet the criteria, the following procedure will be used: Students meet with the executive director of enrollment management who will choose one student to deliver the commencement message at the graduation ceremony. In the event a decision is not reached, a committee will be assembled by the Executive Director of Enrollment Management to hear a short speech prepared by each candidate. A majority vote will be considered final.

# HOUSING

## STUDENT HOUSING

### LIGHTHOUSE DEPOT | 541-888-7635

Southwestern Oregon Community College is one of only a few community colleges in the state of Oregon to provide, for one price, housing and meal plans for students. Our 18 buildings offer apartment-style accommodations and quality living/ learning opportunities that are sure to be an integral part of your college experience. We're all about better grades, convenience, security, delicious meals, savings, and friends for a lifetime. For more information visit our website <https://www.socc.edu/why-swocc/student-housing/> or give us a call at 541.888.7635. We look forward to seeing you!

## STUDENT HOUSING ELIGIBILITY

1. All out-of-district/out-of-state first-time freshman students choosing to attend Southwestern must live in Student Housing during their freshman year unless:
  - a. You have a dependent or are married.
  - b. You are a veteran.
  - c. You are 21 years of age prior to the first day of class.
  - d. Student Housing is filled.
  - e. You have passed 45 credit hours of college courses. Credits taken during High School do not count toward this total.
  - f. You are approved to enroll in a specific 100% online degree program.
2. Students must be 18 years old before December 15 of the school year they are attending.
3. Students must be enrolled full-time to remain in Student Housing.

Policy exceptions must be requested in writing to the Student Housing Office via email at [housing@socc.edu](mailto:housing@socc.edu).

## APPLICATION PROCESS

The list below is provided to help you complete the application process. The deposit is refundable according to the "Room and Board Rates and Deadlines" policy. There is no deadline to apply, however, room assignments are based on the date all materials are received and subject to room availability. For this reason it is to your advantage to submit everything as early as possible.

1. Read the complete packet of housing information available at Student Housing Office or online at <https://www.socc.edu/why-swocc/student-housing/>.
2. Complete the online application and pay the \$250 housing deposit at myLakerLink.
3. Submit copies of MMR Immunization records to Admissions or Student Housing.
4. Submit your Financial Aid paperwork by the deadline listed in the Financial Aid section of this catalog.
5. Receive an official Financial Aid award letter if you are approved.
6. Make payment arrangements on any balance not covered by Financial Aid prior to arrival.
7. If you are applying for a student loan, please contact the Financial Aid office.

# SPECIAL PROGRAMS

## ADULT & PRE-COLLEGE EDUCATION

### Laker Learning Commons | TIOGA HALL 3RD FLOOR | 541-888-1593

<https://www.socc.edu/for-the-community/adult-pre-college-education/>  
The Adult & Pre-College Education program is for students and community members who are ready to make a positive change in their lives! We provide information, practice skills, and resources to help participants earn their GED®, improve their English language abilities, and brush up on reading, writing, and math skills.

We prepare students for success in their families and communities, the workforce, and future education programs. Classes for Adult Basic Education (ABE), GED®, and English as a Second Language (ESL) are offered every quarter. Services are also provided at our Curry campus in Brookings for those who live outside of Coos County.

## ADULT BASIC EDUCATION (ABE)

If you have a high school diploma or GED® and need some extra help in reading, writing, or math, the Adult Basic Education faculty and staff can help. ABE classes can help you improve your reading and writing skills, improve math comprehension, enhance your job skills, learn to write a resume, and learn computer skills. Contact the Adult & Pre-College Education staff at 541-888-1593 for cost information.

## GED®

GED® is an exam that is equivalent to a high school diploma. The purpose of GED® classes is to improve basic skills in reading, writing, and math to prepare students to take the GED® exam. The GED® exam consists of four individual tests - Social Studies, Science, Reasoning through Language Arts, and Mathematical Reasoning. Day and evening classes are available on both Coos and Curry County campuses and provide large group, small group, and individualized instruction. **Classes are free for all students.**

A GED® can be earned by anyone who has not completed high school and who is at least 16 years old. Students who are 16 or 17 must obtain an official release from the last school district they last attended before they are permitted to take the GED® exam. Home schooled students must obtain an official release from the Educational Service District before they are permitted to take the GED® exam.

GED® testing is available on the Southwestern campus. Contact [GED.com](http://GED.com) for more information and to schedule testing. A fee still applies for testing. Contact the program for fee assistance information at 541-888-1593.

## ENGLISH AS A SECOND LANGUAGE (ESL)

If your native language is not English and you wish to learn English, Southwestern offers beginning and intermediate level ESL classes. Students will receive instruction in speaking, reading, writing, and listening English in a fun, safe classroom atmosphere and through experiential field trips.

## COLLEGE NOW

541-888-7271

Southwestern's College Now program provides high school students the opportunity to earn college credits while fulfilling high school graduation requirements. College Now programs include: Dual Credit, Expanded Options, Enhanced Options, and Alternative Options.

Dual Credit: This program provides students the opportunity to take college level coursework while still in the high school leading to a smooth, clear transition to the higher education setting. Student success in the program helps to define educational and career goals.

Expanded Options: The Expanded Options program provides eligible high school students early entry into post-secondary education. It also emphasizes specific provisions and priorities for at-risk students. The program's goal is to create a seamless education path for students enrolled in grades 11 and 12 to:

- Have additional options to continue or complete their education;
- Earn concurrent high school and college credits; and
- Gain early entry into post-secondary education.

Enhanced Options: Enhanced Options are college courses taught by a Southwestern faculty on the high school campus through a partnership between a local high school and Southwestern. There is no tuition cost to the student for participating. A school district may or may not cover the cost of textbooks or other fees. This program promotes a seamless education for 11th and 12th grade students. It provides them with additional options to continue or complete their education, earn concurrent high school and college credits, and gain early entry into post-secondary education.

Alternative Options: Home School students are eligible to earn college credits too - possibly through your sponsoring district or on a self-pay basis. Contact the College Now office for more information about your options. It's easier than you think! Southwestern currently offers classes through service area high schools in allied health, business, culinary, information technology, manufacturing and nursing. These courses are dual credit as students receive both high school and college credit. Courses offered vary by high school.

Earned credit will be on students' Southwestern transcripts. Earning Southwestern credit at a high school does not automatically enroll a student into a Southwestern certificate or degree program. Southwestern admissions procedures and requirements must still be met. Credit transfer acceptability is at the discretion of the receiving institution.

For more information, and a listing of courses offered in a specific high school contact Southwestern's In-District High School Relations Coordinator at 541-888-7271. Also contact the high school counseling office. Courses can be limited to high school juniors and seniors.

## ELEARNING

TIOGA HALL 3RD FLOOR | 541-888-1504

<https://www.socc.edu/why-swoccc/distance-learning/>

The eLearning program offers a variety of online credit courses for students who are unable to attend traditional, on-campus courses due to time constraints and/or distance from the campus. Online courses allow students to obtain lectures, complete assignments, take quizzes,

and work cooperatively with other students on class projects via the Web. Some classes, referred to as hybrid courses, combine online and face-to-face classroom work.

**To take an online or hybrid class, students must have access to a computer, Internet Service Provider, and web browser.** Students must be able to use the Internet, check e-mail, and be able to upload and download files. Our online and hybrid credit courses are transferable and can be taken in combination with traditional, on-campus courses. For complete information, please visit our website.

## SOUTHWESTERN SMALL BUSINESS DEVELOPMENT CENTER

2110 Newmark Avenue, Coos Bay, OR 97420 | 541-888-7182

The Small Business Development Center provides practical information and services for business success. We provide specialty assistance to both rapid growth businesses and start-ups.

The Center can design training tailored to meet the needs of your business or organization. No matter the size of your operation, training can be provided that will enable you and your employees to learn or improve skills and learn new technologies. We are here to help you make your business a success!

## SOUTHWESTERN FOUNDATION

TIOGA HALL 5TH FLOOR | 541-888-7211 | [foundation@socc.edu](mailto:foundation@socc.edu)

The Southwestern Oregon Community College Foundation is a non-profit organization established in 1962 to receive, hold, and disburse private funds in support of the educational programs and students of the college. The direction of the Foundation is vested in its board of directors, composed of citizens from a broad spectrum of the community. Working in small groups and committees, Foundation members assist in forming, developing, and promoting a number of worthwhile objectives, such as scholarships, equipment purchases, and support for faculty development projects.

## COURSE PLACEMENT

The placement process assesses academic skills and helps place you into the right level of courses and also allows students to meet program/course prerequisites. More information about Southwestern's placement process can be found by contacting the Student Success Center (SSC) in Stensland Hall at 541-888-7371.

## TUTORING & WRITING CENTERS

TIOGA HALL 3RD FLOOR | 541-888-1593 | [llcinfo@socc.edu](mailto:llcinfo@socc.edu)

The Laker Learning Commons houses the Tutoring & Writing Centers and offers qualified student tutors and professional writing tutors to assist with all general course needs. Tutoring is a free service for enrolled students in credit or non-credit programs. Zoom online tutoring is available for distance learners. For more information, please call the Commons at 541-888-1593.

# STUDENT SERVICES

## BOOKSTORE

**STENSLAND HALL | 541-888-7264**

The Southwestern Bookstore has all the books and supplies you need to start classes. It also carries snacks, beverages, clothing, backpacks, study aids, greeting cards, computer software, Southwestern memorabilia, and gifts. The Bookstore offers extended hours the first two weeks of fall, winter, and spring terms.

Coos students can visit the Coos Bay campus bookstore.

## LIBRARY

**COOS CAMPUS | TIOGA HALL 201 | 541-888-7270**  
**CURRY CAMPUS | CHETCO PUBLIC LIBRARY 405 ALDER ST | 541-469-7738**

<https://www.socc.edu/library/>

We are happy to help with your research needs face-to-face, over the phone, or via email, open Monday through Friday 8:30 a.m. - 7:00 p.m.

SWOCC library provides physical and digital research materials to students, employees, and the public. These resources include books, films, periodicals, maps, and electronic databases with scholarly articles, eBooks, and other academic content.

You can access these databases off-campus by logging in with your 7-digit student ID number. If your ID number is 6-digits or shorter, please add zeroes to the front until it contains 7-digits. The library also offer computers, scanning/copying, and wireless internet. Printing is available at the cost of 5 cents per side in black and white and 10 cents per side in color.

A Coastline Library card is needed to check out all physical materials. Students can apply for a card at SWOCC Library or any other Coastline Library in Coos and Curry Counties. Likewise, library materials can be ordered for pick-up and returned at any Coastline Library location. Please contact SWOCC Library if you have further questions.

**Curry Students:** The closest Coastline Library to the Curry Campus is Chetco Community Public Library at 405 Alder Street. You have access to SWOCC Library's physical collection through the Coastline online catalog, and you can order SWOCC Library items for pick-up at Chetco.

Additionally, you also have access to the SWOCC Library databases mentioned above. Please email the librarian at [noelle.ebert@socc.edu](mailto:noelle.ebert@socc.edu) for any questions or comments. We would love to hear from you and learn how we can better support our Curry students!

## MEDIA SERVICES

**RANDOLPH HALL RM 7 | 541-888-1531**

Students may access Media Services equipment for use in class projects and demonstrations on a limited basis. Media Services also houses the Teleconferencing Center.

## RECREATION CENTER

**REC CENTER | 541-888-7714**

The Southwestern Oregon Community College Recreation Center is a recreational and entertainment masterpiece for both students and community patrons. Our facility offers a state-of-the-art Fitness Center

with a wide range of Precor/Life Fitness cardio equipment, Life Fitness circuit weight machines, Hammer Strength weight machines, and modern free weight machines, barbells, and dumbbells. The Recreation Center is also home to a collegiate-sized basketball court, indoor rock climbing wall, racquetball court, activity room, dance room, game room, day-use locker rooms, and more!

Students registered for a credit class can enjoy the facility for free. Those not currently taking a credit class, can still register to use the facility at the Rec Center Front Desk.

## STUDENT GOVERNMENT, STUDENT CLUBS, AND CO-CURRICULAR ACTIVITIES

**EMPIRE HALL LAKEVIEW G | MEETINGS MONDAYS @ 5:15 PM | [kcroy@socc.edu](mailto:kcroy@socc.edu)**

There are several official clubs at Southwestern and new clubs are created each year to meet the changing needs of students. The **Associated Student Government** of Southwestern Oregon Community College (ASG) is a recognized platform for student governance and the development of leadership. Students elect the ASG Class President each spring. ASG charters clubs and organizations on campus and organize campus activities.

## DENNIS BEETHAM LEARNING HUB

**TIOGA HALL 4TH FLOOR**

The Learning Hub provides self-paced, interactive computer programs to help students develop skills for success in college-level classes. The Math Learning Center is located in this space. The Learning Hub is located on the fourth floor of Tioga Hall, on the Coos campus.

## TRIO STUDENT SUPPORT SERVICES

**RANDOLPH HALL RM 6 | 541-888-7419 | [sss@socc.edu](mailto:sss@socc.edu)**

The Student Support Services (SSS) program provides academic support for low income and first-generation college students. The focus of the program is to improve the graduation and transfer rates of first-generation and low-income students, and students with disabilities at Southwestern. Services include regular one-on-one academic and career advising, tutoring, student success workshops, assistance with financial aid and scholarship applications, transfer planning, peer mentoring, and cultural enrichment.

To be eligible for the program a student must be a US citizen or permanent resident and meet at least one of the following eligibility criteria:

- Parents do not have a four-year (bachelor's) degree;
- Meet federal low income guidelines; or
- Have a documented disability.

The Southwestern TRIO-SSS program is funded by the US Department of Education at \$335,106 annually and serves 160 students each year. Applications are available on myLakerLink at ([https://mylakerlink.socc.edu/ICS/Admissions/Program\\_Applications.jnz](https://mylakerlink.socc.edu/ICS/Admissions/Program_Applications.jnz)) and in Randolph Hall, Rm 6.

# TUITION AND FEES

## STUDENT CONSUMER INFORMATION AND STUDENT RIGHT TO KNOW

In accordance with 34 CFR Part 668, students have the right to know certain information about Southwestern Oregon Community College including a variety of academic information, financial assistance information, institutional information, institutional security policies and crime statistics, information on completion or graduation rates, and athletic program participation rates and financial support data. To view this data go to Student Consumer Information at <https://www.socc.edu/getting-started/paying-for-college/consumer-information/>. This page provides links to information about Southwestern Oregon Community College in accordance with the Higher Education Act's disclosure requirements.

## TUITION AND FEES

Tuition and fees are subject to change. Please go to <https://www.socc.edu/getting-started/paying-for-college/tuition-fees/> to see our current tuition and fees.

All courses carry a per course registration fee and a per credit incidental fee. All distance education courses carry a per course fee. These fees allow students access to campus services without additional cost such as:

- Computer labs
- Southwestern's distance learning courses
- Lab courses
- Student Recreation Center
- Student activities

Some courses are offered as self-support and carry a fee amount that is required for course delivery and materials.

All students are charged fees regardless of service utilization. The College reserves the right to change tuition and fees at any time. This does not affect the right of the College President to levy special charges at any time should conditions make this necessary. A late fee may be assessed for original registrations processed after the start of the term. Registrations received after the end of the term may be assessed a \$250 late registration fee.

## RESPONSIBILITY FOR PAYMENT

Tuition and fees are assessed when students register. Students are ultimately responsible for enrolled courses or dropping them within the time required.

Students are responsible for payment arrangements at the time of registration. Southwestern mails reminder letters with account balances monthly. As a courtesy, account balance statements are emailed monthly. Account balances under \$500 require payment in full or students may be withdrawn if payment is not received within five days of registration. Payments may be made by cash, check, money order, VISA, MasterCard or Discover Card. Please make checks payable to Southwestern Oregon Community College or pay on myLakerLink. Tuition and fees may be billed

to an employer or an agency if the College has received the appropriate authorization.

Students have the option to set up a payment plan with monthly payments. A non-refundable fee of \$32 per term is charged for the payment plans. Students who are under 18 years of age, must have the payment plan made in the parent's or guardian's name. For payment options, please visit the Student First Stop Center in Dellwood Hall or call 541-888-7352 or the Curry Campus at 541-813-1667.

## EDUCATIONAL PAYMENT PLAN OPTIONS

Plan Type	Monthly Payments	Fee
Term	3	\$32
Pay in full	At time of registration	none

Accounts with balances greater than \$500 after the term begins will be set up on a payment plan and charged a \$32 payment plan fee. Monthly payments are due on the 10<sup>th</sup> of each month. Students who receive any form of financial aid during the Academic Year will have the funds applied to their outstanding balance.

Students are responsible for all financial obligations upon registration regardless of receiving a billing statement.

Students who do not meet their financial obligations may be subject to, but not limited to:

- Administratively withdrawn from course(s) including loss of any tuition and fees paid and the permanent loss of all credits and/or grades for the term in which the withdrawal occurs;
- Withholding of unofficial or official transcripts/grades;
- Withholding a certificate, diploma, or degree; and
- Prohibiting subsequent registrations until debt is paid in full.

There is a charge for returned checks per college procedure. All past due accounts will be charged a \$30 per billing cycle (monthly) late fee. Delinquent accounts will accrue interest at the rate of 18% per annum. Delinquent accounts over 90 days may be sent to a collection agency. Students will pay all attorney's fees, collection costs, and any other charges necessary for the collection of any monies owed to Southwestern

Students who are continuously delinquent or whose account was settled with a collection agency will be required to pay at the time of registration.

## REFUNDS

Students who stop attending their courses during the term must formally withdraw by either dropping their courses through myLakerLink or by submitting a drop form with the Student First Stop Center. Refunds are computed from the date of the formal withdrawal, not from the date the student stopped attending.

## REFUND DEADLINE

Course Length	Refund Deadline
5 weeks or longer	Second Wednesday of the term at 5:00 p.m.

1 week to less than 5 weeks	Second day of the first week
1 week or less	Day before course first meets

For courses five weeks or longer, a 100% refund is given if the formal withdrawal is completed by 5:00 p.m. of the second Wednesday of the term.

For courses that are scheduled to meet more than one week and less than five weeks, a 100% refund will be given if the formal withdrawal is completed by the end of the second day of the first week the course is scheduled to meet.

For courses that are one week or less in duration, a 100% refund will be given if the formal withdrawal is completed by the end of the day before the first meeting. This applies to courses that start on the first day of the regular term (summer, fall, winter, spring) or at some other time during the term; it is possible that a student would have to withdraw from a course before the course actually meets to receive a full refund.

Students who feel that their circumstances are extraordinary and warrant exception from this process may appeal with documentation to the Student First Stop Center by completing a Request for Refund and Exception to Procedure form. Requests must be submitted within the current term with appropriate documentation.

The refund process begins the third week of the term in which the students are enrolled. Students who receive financial aid funds will receive a refund after any funds owed to the College or the U.S. Department of Education are deducted. When the refund amount is less than \$5, students will be notified by mail to come to a Student First Stop Center to receive a cash disbursement.

Students withdrawing from courses after the refund period are responsible to pay the balance due on any federal student loans, payment plans and accounts receivable.

## VETERANS INFORMATION

**VETERANS SERVICES | DELLWOOD HALL 19 | 541-888-7236 | vets@socc.edu (p. 4)**

Veterans Administration (VA) Mission Statement:

To assist our nation's veterans and their eligible dependents in accessing their VA education benefits, while safeguarding the G.I. Bill® resources available for those educational programs. Provide consistent service, share knowledge, promote individual growth and support opportunities to access higher education.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at <http://www.benefits.va.gov/gibill>.

Under Title 38 U.S.C. 3679(c) Veterans Access, Choice, and Accountability Act of 2014, the following individuals shall be charged a rate of tuition not to exceed the in-state rate for tuition and fees purposes:

- A Veteran using educational assistance under either Chapter 30 (Montgomery G.I. Bill® – Active Duty Program) or Chapter 33 (Post-9/11 G.I. Bill®), of Title 38, United States Code, who lives in Oregon while attending a school located in Oregon (regardless of his/

her formal state of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.

- Anyone using transferred Post-9/11 G.I. Bill® benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active duty service of 90 days or more.
- Anyone described above while he/she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge or release as described above and must be using educational benefits under either Chapter 30 or Chapter 33, of Title 38, United States Code.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence).
- Anyone using transferred Post-9/11 G.I. Bill® benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.
- Any individual using educational assistance under either Chapter 33 (Post-9/11 G.I. Bill®) or Chapter 31 (Veterans Vocational Rehabilitation and Employment) who attends or participates in a course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 (a "certificate of eligibility" can also include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for chapter 31 authorization purposes) and ending on the earlier of the following dates:
  - The date on which payment from VA is made to the institution.
  - 90 days after the date the institution certified tuition and fees following the receipt of the certificate of eligibility.
- The policy shall be read to be amended as necessary to be compliant with the requirements of 38 U.S.C. 3679(c) as amended.

## SUCCESSFUL ENROLLMENT AT SOUTHWESTERN

The following steps are provided as a guide to ensure veterans have a smooth transition into the academic life here at Southwestern.

- Fill out an online application for veterans benefits: <http://www.benefits.va.gov/gibill> and bring a printed copy to the Southwestern Oregon Community College Veterans Office along with a copy of your DD-214 (Member 4) and Disability letter (only for Chapter 31 benefits).
- Apply for admission at <https://mylakerlink.socc.edu/ICS/Admissions/>
- Any student receiving G.I. Bill® education benefits while attending Southwestern Oregon Community College is required to obtain transcripts from military training and all previously attended schools and submit them to the school for evaluation of prior credit and shortening of the program proportionately.

- Talk with the Veteran's/Financial Aid staff located in Dellwood Hall, or email, to receive all necessary applications and paperwork for processing your financial aid requests.
- Go to Student Success Center (SSC) in Stensland Hall, to the Curry Campus, or to the Gold Beach Center to complete the placement process and meet with a veterans counselor to schedule your classes.
- Once registered for classes, return to the Veterans Office with a printed schedule so your registration can be verified in the Veterans education database.

## **AGENCY BILLING**

The College charges a fee for agencies that ask to be billed for tuition, fees, and/or Bookstore charges and to defer the receipt of payments. The fee is variable with a maximum charge of 10% of the total deferred charges. The agency fee is in accordance with Administrative Policy/ Procedure (APP) 9.028(A) - Fee Schedule. For further information call the Business Office at 541-888-7440 or 800-962-2838, ext. 7440.

## **SATISFACTORY ACADEMIC PROGRESS**

Federal regulations require approved schools to have written standards of academic progress for students receiving VA educational benefits. The following are standards for the Southwestern Oregon Community College "Satisfactory Academic Policy," which is defined as maintaining a minimum 2.0 term GPA. Students who fail to meet the criteria for two quarters will go on "Aid Withheld Status" and failure to meet the criteria for three quarters will result in being placed on "Aid Suspension Status."

### **AID WITHHELD STATUS**

If a student has an Aid Withheld Status, they must come to the Veterans Office in person, after the fourth week of the term, to receive a Blue Book for documenting progress in current classes. Students must have instructors sign and document their current grades before returning it to the Veterans Office. If students have a 'C' or better in all classes, the student may be retroactively certified to receive benefits.

### **AID SUSPENSION STATUS**

Students will only be retroactively certified to receive veterans education benefits after grades are released at the end of the term and have successfully passed all classes with a term GPA of 2.0 or better. Upon successfully passing three or more continuous terms, students may request to return to the standard certification process. Blue books are not applicable if students are on Aid Suspension Status.

### **DROPPED CLASS POLICY**

Students receiving VA education benefits must assume responsibility for notifying the Veterans Office of any changes in their schedule. Students are cautioned that a reduction in credits during the term may result in a reduction of benefit payments and possible debt to the student.

Students must have instructors' signatures on add/drop forms or instructor authorizations on myLakerLink to add courses after the first Wednesday of the term. Students may withdraw from a course or from all courses through the end of the second Wednesday of the term or within the course's refund period without responsibility for a grade. Dropping after the refund period will result in "W" grades on transcripts. Students may drop courses until the Wednesday before finals week. Students are strongly encouraged to consult the instructor before dropping to ascertain their status in the course.

### **TRAINING TIME MANAGEMENT**

Full Time – (12 or More Credits)

Three Quarter Time – (9-11 Credits)

Half Time – (6-8 Credits)

Less than Half Time – (6 Credits or Less)

# PROGRAMS A-Z

---

- Accounting, Associate of Applied Science (p. 24)
  - Accounting Clerk, Certificate of Completion (p. 25)
  - Accounting Clerk, Entry-Level, Career Pathway Certificate of Completion (p. 25)
- Associate of Arts Oregon Transfer (AAOT) (p. 27)
- Associate of General Studies (AGS) (p. 31)
- Associate of Science (AS) (p. 34)
- Baking and Pastry Arts, Associate of Applied Science (p. 37)
  - Baking and Pastry Arts, Certificate of Completion (p. 38)
- Baking Management, Associate of Applied Science (p. 39)
- Business Management/Entrepreneurship, Associate of Applied Science (p. 41)
  - Marketing, Career Pathway Certificate of Completion (p. 42)
  - Supervision, Career Pathway Certificate of Completion (p. 42)
- Business, Associate of Science Oregon Transfer (p. 44)
- Chemical Engineering, Associate of Science (p. 48)
- Chemistry, Associate of Science (p. 49)
- Childhood Education and Family Studies, Associate of Science (p. 51)
- CIS Cybersecurity, Associate of Applied Science (p. 54)
- CIS Digital Design, Associate of Applied Science (p. 56)
  - Digital Design, Certificate of Completion (p. 57)
  - Digital Image Foundations, Career Pathway Certificate of Completion (p. 57)
  - Digital Interactive Foundations, Career Pathway Certificate of Completion (p. 58)
- Computer Information Systems, Associate of Applied Science (p. 59)
- Computer Science, Associate of Science Oregon Transfer (p. 61)
- Criminal Justice, Associate of Science (p. 65)
- Culinary Arts, Associate of Applied Science (p. 67)
  - Culinary Arts, Certificate of Completion (p. 68)
- Culinary Management, Associate of Applied Science (p. 69)
- Data Center Technician, Certificate of Completion (p. 71)
- Dental Assisting, Certificate of Completion (p. 72)
- Electrical/Computer Engineering, Associate of Science (p. 74)
- Elementary Education, Associate of Arts Oregon Transfer (p. 76)
- Elementary Education, Associate of Science (p. 78)
- Environmental Engineering, Associate of Science (p. 80)
- Fire Science, Associate of Applied Science (p. 82)
  - Fire and Emergency Services Higher Education, Career Pathway Certificate of Completion (p. 83)
  - Fire Science Level I, Career Pathway Certificate of Completion (p. 83)
  - Fire Science Level II, Career Pathway Certificate of Completion (p. 84)
  - Fire Science Level III, Career Pathway Certificate of Completion (p. 85)
  - Fire Science Level IV, Career Pathway Certificate of Completion (p. 85)
- Fire Science, Associate of Science (p. 87)
- Forest Engineering, Associate of Science (p. 88)
- Forest Renewable Materials/Advanced Manufacturing, Associate of Science (p. 90)
- Forest Renewable Materials/Art and Design, Associate of Science (p. 92)
- Forest Renewable Materials/Marketing and Management, Associate of Science (p. 94)
- Forest Renewable Materials/Science and Engineering, Associate of Science (p. 96)
- Forest Technology, Certificate of Completion (p. 98)
- Forestry Management, Associate of Science (p. 99)
- Forestry Management/Forest Restoration and Fire, Associate of Science (p. 101)
- Forestry Management/Operations Management, Associate of Science (p. 103)
- Geographic Information Systems, Certificate of Completion (p. 105)
- Infant and Toddler Development, Associate of Applied Science (p. 106)
- Marine Biology, Associate of Science (p. 109)
- Mechanical/Civil Engineering, Associate of Science (p. 111)
- Medical Assistant, Associate of Applied Science (p. 113)
  - Basic Allied Health Care, Career Pathway Certificate of Completion (p. 114)
  - Medical Assistant, Certificate of Completion (p. 114)
- Natural Resources, Associate of Science (p. 116)
- Nursing, Associate of Applied Science (p. 118)
- Oregon Transfer Module (OTM) (p. 120)
- Paramedicine, Associate of Applied Science (p. 124)
  - Emergency Medical Services Technician I, Career Pathway Certificate of Completion (p. 125)
  - Emergency Medical Technology, Career Pathway Certificate of Completion (p. 125)
- Pharmacy Technician, Certificate of Completion (p. 127)
- Physics, Associate of Science (p. 128)
- Police Science, Associate of Applied Science (p. 129)
- Preschool Child Development, Associate of Applied Science (p. 131)
  - Childhood Education and Family Studies, Preschool Children, Education and Development I, Career Pathway Certificate of Completion (p. 133)
  - Childhood Education and Family Studies, Preschool Children, Education and Development II, Certificate of Completion (p. 134)
  - Parenting Educator and Early Childhood Home Visitor, Career Pathway Certificate of Completion (p. 135)
- Retail Management, Less Than One Year Certificate of Completion (p. 137)
- Welding, Associate of Applied Science (p. 138)
  - Pipe Fitting, Career Pathway Certificate of Completion (p. 139)
  - Welding Assistant, Career Pathway Certificate of Completion (p. 139)
  - Welding Technician, Career Pathway Certificate of Completion (p. 140)
  - Welding, Certificate of Completion (p. 141)

# ACCOUNTING, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Accounting degree is designed to prepare students for entry-level positions in a variety of accounting-related positions in small businesses, governmental agencies and public accounting firms. The program offers students the opportunity to gain a combination of knowledge and practical hands-on experience in accounting. The program includes accounting and business-specific classes as well as a range of supporting courses designed to strengthen the students' self-assurance and leadership qualities.

Students completing the AAS Accounting will be prepared to maintain the accounting records of a business, analyze financial reports, or may be responsible for specific areas such as budgeting, accounts payable, payroll, or accounts receivable. This degree also prepares students for occupations such as full-charge bookkeeper, GS8 Accountant I, data entry clerk, financial staff accountant, cost accountant, and general office clerk.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 94 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Communicate effectively in oral and written forms in a business environment.
- Practice within the legal and ethical frameworks of a given business or industry.
- Participate in learning opportunities that contribute to personal and professional growth.
- Adequately identify and record business transactions.
- Verify accuracy of accounting data.
- Make basic decisions regarding accounting functions.
- Produce basic financial statements (e.g. balance sheets, income statements, cash flows).
- Prepare budgets, payroll, and other quarterly tax reports.
- Communicate effectively with tax and accounting professionals.
- Effectively and efficiently use current and emerging technologies and software to solve workplace problems.
- Interact effectively with coworkers in ways that contribute to the organization's goals and your advancement in business opportunities

## AWARD MAP

### Pathway Option

Career Pathway Certificate of Completion: Accounting Clerk

Certificate of Completion: Accounting Clerk

Associate: Accounting AAS

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
BA101	Introduction to Business	4
CIS120	Concepts of Computing	4
MTH82	Business Mathematics <sup>3</sup>	4
SP111	Fundamentals of Public Speaking <sup>4</sup>	3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CIS125S	Spreadsheet Applications	3
BA205	Solving Communication Problems With Technology	4
WR115	Fundamentals of Report Writing <sup>1</sup>	4
BA211	Principles of Accounting I	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BA206	Management Fundamentals	4
BA213	Principles of Accounting III	4
BA217	Accounting Process	3
BA240	Fund Accounting	3
<b>Credits</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
BA230	Business Law	4
ECON201	Microeconomics	4
CIS125W	Word Processing Applications Microsoft	3
Specific Elective <sup>5</sup>		3
<b>Credits</b>		<b>14</b>
<b>Winter</b>		
BA220	Tax Accounting: Personal Income Tax	3
BA285	Human Relations in Organizations <sup>2</sup>	3
ECON202	Macroeconomics	4
BA222	Finance	3
Specific Elective <sup>5</sup>		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
BA177	Payroll Records and Accounting	3

BA277 or PHL102	Business Ethics or Ethics	3
PE231	Wellness for Life <sup>6</sup>	3
BA280	CWE: Business Admin <sup>7</sup>	4
BA292	Entrepreneurship Capstone	3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>90</b>

- <sup>1</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.
- <sup>2</sup> BA285, BA110, BA120, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.
- <sup>3</sup> MTH60, MTH65, MTH95 or higher, excluding MTH211, may be substituted for MTH82.
- <sup>4</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- <sup>5</sup> Specific Electives: Any AC, BA, CS/CIS, course not required for the degree; OA121, OA124, OA220; MTH65, MTH95, or higher; WR227.
- <sup>6</sup> PE231, HE250, or (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>7</sup> Call 541-888-7405 to schedule with Internship Coordinator one month prior to term.
- \* All Honors courses may substitute for their equivalent requirements.

## ACCOUNTING CLERK, CERTIFICATE OF COMPLETION

The Certificate of Completion Accounting Clerk is designed to prepare students to complete typical accounting clerk responsibilities such as journalizing, posting, assisting with tax, audit and other accounting procedures, preparing reports, communicating results and general office responsibilities.

Career opportunities include accounts payable clerk, accounts receivable clerk and data entry clerk for small and medium-sized service businesses.

### GRADUATION REQUIREMENTS

Students must complete a minimum of 50 credit hours with a minimum cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be passed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion Accounting Clerk is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

### PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate an ability to organize workloads to meet reporting deadlines.
- Analyze and record transactions including general accounting transactions and payroll accounting.

- Prepare financial reports using select small business computerized accounting software and spreadsheet programs.
- Communicate effectively in a professional accounting workplace environment.
- Identify and appraise situations in professional accounting where the applications of ethical judgments are required.

## PROGRAM GUIDE

Course	Title	Credits
<b>Fall</b>		
BA101	Introduction to Business	4
BA211	Principles of Accounting I	4
CIS120	Concepts of Computing	4
MTH82	Business Mathematics <sup>3</sup>	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
BA120	Leadership Development <sup>2</sup>	3
BA212	Principles of Accounting II	4
BA222	Finance	3
CIS125S	Spreadsheet Applications	3
WR115	Fundamentals of Report Writing <sup>1</sup>	4
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
BA206	Management Fundamentals	4
BA213	Principles of Accounting III	4
BA217	Accounting Process	3
BA240	Fund Accounting	3
SP219	Small Group Discussion <sup>4</sup>	3
<b>Credits</b>		<b>17</b>
<b>Total Credits</b>		<b>50</b>

- <sup>1</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.
- <sup>2</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203, will satisfy this requirement.
- <sup>3</sup> MTH60, MTH65, MTH95 or higher, excluding MTH211, may be substituted for MTH82.
- <sup>4</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- \* All Honors courses may substitute for their equivalent requirements.

## ACCOUNTING CLERK, ENTRY-LEVEL, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Entry-Level Accounting Clerk provides students with a basic understanding of accounting principles and procedures, computers and accounting software. Upon completion of this certificate, a student will be able to successfully complete on-the-job training for business positions requiring basic accounting clerk responsibilities such as journalizing, posting, assisting

with taxes, audit, and other accounting procedures, preparing reports, communicating results and general office responsibilities.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 14 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Accounting Clerk Entry-Level is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Analyze and record transactions including general accounting transactions and payroll accounting.
- Prepare financial reports using select small business computerized accounting software and spreadsheet programs.
- Communicate effectively in a professional accounting workplace environment.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
BA101	Introduction to Business	4
BA211	Principles of Accounting I	4
<b>Credits</b>		<b>8</b>
<b>Winter</b>		
CIS125S	Spreadsheet Applications	3
<b>Credits</b>		<b>3</b>
<b>Spring</b>		
BA217	Accounting Process	3
<b>Credits</b>		<b>3</b>
<b>Total Credits</b>		<b>14</b>

# ASSOCIATE OF ARTS OREGON TRANSFER (AAOT)

The Associate of Arts/Oregon Transfer (AAOT) degree is a program of study that community college students can follow to fulfill all their lower division general education requirements for a bachelor's degree at Oregon public universities. Completion of the AAOT degree can lead to junior standing, for registration purposes, for any student admitted to a public university in Oregon (University of Oregon, Oregon State University, Portland State University, Western Oregon University, Southern Oregon University, Oregon Institute of Technology and Eastern Oregon University).

The AAOT does not necessarily meet specific institutional, departmental, or major requirements with regard to courses or grade point average. Students may transfer between 90 and 124 community college credits to four-year Oregon public institutions. Students should plan carefully with the four-year institution to which they plan to transfer in order to meet individual institutional requirements. Students considering transfer to private and out-of-state institutions will find the AAOT to be excellent preparation for upper division study. Please contact the your advisor for specific transfer requirements.

Upon enrolling at Southwestern, students need to be ready for college-level mathematics, writing and science in order to complete the AAOT in two years. If students lack the necessary skills, Southwestern offers excellent developmental courses and tutorial assistance to help them get on track quickly.

The AAOT degree is designed for students planning to transfer into a bachelor's degree program at an Oregon public university. These universities accept the AAOT as a "block transfer," enabling a student to enter with junior standing having all of the transfer school's lower division general education requirements met. The AAOT 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 AAOT. These include Concordia University, Pacific University, Warner Pacific College, George Fox 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 the AAOT 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.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours, distributed across general education categories listed below. All courses must be completed with a grade of 'C' or better. Students must have a cumulative GPA of 2.0 at the time the AAOT is awarded. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Students must successfully complete the following courses from the list of approved general education courses for the AAOT degree and a number of elective credits.

Students may take any college-level course that would bring total credits to 90 quarter hours, including up to 12 credits of college-designated career and technical education (CTE) courses. Note: Some courses are considered career technical courses and have limitations within this degree, they are designated with "CTE" in the Course Description area of this catalog. A maximum of nine (9) credits of PE185 sport/activity courses may be applied to the AAOT degree. All Honors courses may substitute for their equivalent requirements.

Courses that are developmental in nature (designed to prepare students for college transfer courses) are not applicable to this degree.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## STUDENT LEARNING OUTCOMES

Student learning outcomes for this degree can be found by clicking here (p. 146).

## FOUNDATIONAL REQUIREMENTS

All courses must be completed with a grade of 'C' or better. All Honors courses may substitute for their equivalent requirements.

### WRITING

**Eight (8) credits** of writing are required, so choose **two (2) courses** from below. Information Literacy will be included in the writing requirement:

Code	Title	Credits
WR121	English Composition	4
WR122 or WR227	English Composition Report Writing	4

### MATHEMATICS

**One (1) course from:**

Math course may be MTH105 or higher, excluding MTH211.

Code	Title	Credits
MTH105	Math in Society (or higher, excluding MTH211)	4

### COMMUNICATION

**One (1) course from:**

Code	Title	Credits
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3

### HEALTH, WELLNESS, AND FITNESS

**Three (3) credits** of PE185 sport/activity courses or HE250 Personal Health or PE231 Wellness for Life.

## DISCIPLINE STUDIES REQUIREMENTS

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

## ARTS AND LETTERS

Three (3) courses chosen from two (2) or more disciplines:

Code	Title	Credits
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART116	Basic Design II, Color Theory	4
ART117	Basic Design III, Intro to 3D Desgn	4
ART131	Introduction to Drawing I	3
ART132	Introduction to Drawing II	3
ART133	Introduction to Drawing III	3
ART191	Beginning Sculpture	3
ART192	Beginning Sculpture	3
ART204	History of Western Art: Introduction to Art History	3
ART205	History of Western Art: Introduction to Art History	3
ART206	History of Western Art: Introduction to Art History	3
ART225	Computer Art I	3
ART244	Bronze Casting	3
ART253	Ceramics I	3
ART256	Ceramics II	3
ART281	Painting I Beginning	3
ART282	Painting II Beginning	3
ART283	Painting III Beginning	3
ART284	Painting I Intermediate	3
ART285	Painting II Intermediate	3
ART286	Painting III Intermediate	3
ASL201	2nd Yr American Sign Language I	4
ASL202	2nd Yr American Sign Language II	4
ASL203	2nd Yr American Sign Language III	4
ENG104	Introduction to Literature Fiction	3
ENG105	Introduction to Literature Drama	3
ENG106	Introduction to Literature Poetry	3
ENG107	World Literature	3
ENG108	World Literature	3
ENG109	World Literature	3
ENG201	Shakespeare	3
ENG204	Survey of English Literature	3
ENG205	Survey of English Literature	3
ENG206	Survey of English Literature	3
ENG253	Survey of American Literature	3
ENG254	Survey of American Literature	3
ENG255	Survey of American Literature	3
HUM204	World Mythology & Religion	3
HUM205	World Mythology & Religion	3
HUM206	World Mythology & Religion	3
MUS101	Music Fundamentals	3
MUS111	Music Theory I	3
MUS112	Music Theory II	3
MUS113	Music Theory III	3
MUS201	Intro to Music and its Literature	3
MUS202	Intro to Music and its Literature	3

MUS203	Intro to Music and its Literature	3
MUS205	Intro to Jazz History	3
MUS206	Intro to History of Rock and Roll	3
MUS211	Advanced Music Theory I	3
MUS212	Advanced Music Theory II	3
MUS213	Advanced Music Theory III	3
PHL101	Introduction to Philosophy: Philosophical Problems	3
PHL102	Ethics	3
PHL103	Intro to Logic and Critical Thnkg	3
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3
SP220	Gender and Communication	3
SPAN201	Second Year Spanish	4
SPAN202	Second Year Spanish	4
SPAN203	Second Year Spanish	4
WR241	Imaginative Creative Writing Fiction	3
WR242	Imaginative Writing Poetry	3
WR243	Imaginative Writing Explorations	3

## SOCIAL SCIENCES

Four (4) courses chosen from two (2) or more disciplines:

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3
ANTH230	Native North Americans: Oregon	3
ANTH231	Native North Americans: PNW	3
ANTH232	Native North Americans	3
CJ101	Intro to Criminology	4
ECON201	Microeconomics	4
ECON202	Macroeconomics	4
ED169	Overview of Student Special Needs	3
ED258	Multicultural Education	3
GEOG105	Cultural Geography	3
HDFS140	Contemporary American Families	3
HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
HDFS229	Child Development PreK - Adolescent	3
HDFS247	Child Development 0-8	3
HST101	History of Western Civilization	3
HST102	History of Western Civilization	3
HST103	History of Western Civilization	3
HST104	History of the Middle East	3
HST195	History of the Vietnam War	3

HST201	History of the United States	3	G202	Physical Geology II	4
HST202	History of the United States	3	G203	Historical Geology	4
HST203	History of the United States	3	GS104	Physical Science	4
HST240	Hist of Oregon and the South Coast	3	GS105	Physical Science	4
PS201	American Government: Political Institutions	3	GS106	Introduction to Earth Science	4
PS202	American Government: Policy Issues	3	GS107	Astronomy	4
PS203	Local Politics and Government	3	GS108	Oceanography	4
PS205	International Relations: US Foreign Policy in the 20th Century	3	NR260	Watershed Processes	4
PSY100	Introduction to Psychology	4	PH201	General Physics I: Mechanics	5
PSY201	General Psychology	3	PH202	General Physics II: Heat, Waves, Relativity	5
PSY202	General Psychology	3	PH203	Gen Physics III: Elect & Magnetism	5
PSY203	General Psychology	3	PH211	General Physics with Calculus I	5
PSY216	Social Psychology	3	PH212	General Physics with Calculus II	5
PSY228	Introduction to Social Science Research	3	PH213	General Physics with Calculus III	5
PSY231	Human Sexuality	3			
PSY237	Life Span Development	3			
PSY239	Introduction to Abnormal Psychology	3			
PSY243	Drugs and Behavior	3			
SOC204	Introduction to Sociology	3			
SOC205	Social Institutions and Change	3			
SOC206	Social Problems and Issues	3			
SOC208	Sociology of Sport	3			
SOC210	Marriage and Family	3			
SOC213	Racial and Ethnic Relations	3			
SOC218	Sociology of Gender	3			

## SCIENCE/MATHEMATICS/COMPUTER SCIENCE

Four (4) courses from two (2) or more disciplines including at least three (3) laboratory courses in biological and/or physical science.

### Laboratory Courses

Code	Title	Credits
BI101	General Biology	4
BI102	General Biology	4
BI103	General Biology	4
BI142	Habitats: Marine Biology	4
BI201	Introductory Biology	4
BI202	Introductory Biology	4
BI203	Introductory Biology	4
BI231	Human Anatomy and Physiology I	4
BI232	Human Anatomy and Physiology II	4
BI233	Human Anatomy and Physiology III	4
BI234	Microbiology	4
CHEM221	General Chemistry I	5
CHEM222	General Chemistry II	5
CHEM223	General Chemistry III	5
CHEM245	Organic Chemistry I	4
CHEM246	Organic Chemistry II	4
CHEM247	Organic Chemistry III	4
ENV235	Introduction to Soil Science	4
G201	Physical Geology I	4

### Non-Laboratory Courses

Code	Title	Credits
BI140	Practical Ecology	3
BI149	Introduction to Human Genetics	3
CHEM110	Foundations of General, Organic, and Biochemistry	4
CS160	Computer Science Orientation	4
CS161	Introduction to Computer Science I	4
CS162	Introduction to Computer Science II	4
CS261	Data Structures	4
ENV110	Introduction Environmental Science	3
G221	General Geology	3
G246	Geological Hazards And Natural Catastrophes	3
MTH105	Math in Society	4
MTH111	College Algebra	4
MTH112	Trigonometry	4
MTH212	Fundamentals of Elementary Mathematics II	4
MTH213	Fundamentals of Elementary Mathematics III	4
MTH231	Elements of Discrete Mathematics I	4
MTH232	Elements of Discrete Mathematics II	4
MTH241	Calculus for Bus and Soc Science I	4
MTH242	Calculus for Bus and Soc Science II	4
MTH243	Intro to Probability and Statistics	4
MTH244	Probability & Statistics II	4
MTH251	Calculus I Differential Calculus	4
MTH252	Calculus II Integral Calculus	4
MTH253	Calculus III Infinite Sequences And Series	4
MTH254	Vector Calculus I	4
MTH255	Vector Calculus II	4
MTH256	Differential Equations	4
MTH260	Matrix Methods and Linear Algebra	4
MTH264	Introduction to Matrix Algebra and Power Series	4

## CULTURAL LITERACY

Students are required to complete at least one (1) course from any of the above discipline studies that meets the statewide criteria for cultural

literacy. SWOCC offers these courses that satisfy the Cultural Literacy requirement.

Code	Title	Credits	Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3	CIS120	Concepts of Computing	4
ANTH202	Introduction to Archaeology	3	CIS125W	Word Processing Applications Microsoft	3
ANTH203	Language and Culture	3	HD100	College Success and Survival	3
ANTH221	Intro to Cultural Anthropology	3	HD102	College Nuts and Bolts	1
ANTH222	Cultural Anthropology II	3	HD111	Math Success	2
ANTH223	Cultural Anthropology III	3	HD112	Study Skills	3
ANTH224	Intro to Medical Anthropology	3	HD113	Stop Test Anxiety Now	1
ANTH230	Native North Americans: Oregon	3	HD140	Career/Education Exploration	1
ANTH231	Native North Americans: PNW	3	HD152	Stress Management	2
ANTH232	Native North Americans	3	HD208	Career/Life Plan	3
ED258	Multicultural Education	3	LIB127	Navigating the 24/7 Library	1
ENG107	World Literature	3	<i>A maximum of 45 credits is allowed for basic, developmental, or supportive courses under federal financial aid guidelines.</i>		
ENG108	World Literature	3			
ENG109	World Literature	3			
GEOG105	Cultural Geography	3			
HDFS140	Contemporary American Families	3			
HUM204	World Mythology & Religion	3			
HUM205	World Mythology & Religion	3			
HUM206	World Mythology & Religion	3			
HST104	History of the Middle East	3			
MUS205	Intro to Jazz History	3			
MUS206	Intro to History of Rock and Roll	3			
PSY216	Social Psychology	3			
PSY231	Human Sexuality	3			
SOC208	Sociology of Sport	3			
SOC210	Marriage and Family	3			
SOC213	Racial and Ethnic Relations	3			
SOC218	Sociology of Gender	3			
SP220	Gender and Communication	3			

## ELECTIVES

- Students may take any college-level course that would bring total credits to 90 quarter hours including up to 12 credits of college designated Career and Technical Education courses.
- All courses must be completed with a grade of 'C' or better.
- A maximum of nine (9) credits of any PE185 sport/activity courses may be applied to the AAOT degree.
- Three (3) credits of PE185 Sport/Activity may be granted toward the AAOT degree for completion of military basic training. A copy of the military transcript or DD-214 is required.
- Courses numbered 199/299 will qualify as elective credit only.

## SUPPORTIVE COURSES

*Note: The college has determined that the following supportive courses may be necessary to assist students to successfully complete their program; they count as electives only.*

# ASSOCIATE OF GENERAL STUDIES (AGS)

The purpose of the Associate of General Studies (AGS) degree is to provide students an opportunity to pursue a broad general education during the two years at a community college. It is intended as a flexible program for the student who is not pursuing a specified curriculum in the lower division transfer or career technical areas. The AGS degree may, in addition to including the number of hours in the divisional areas as listed below, include courses in lower division collegiate transfer and career technical education. Because of the flexibility and broad approach of this degree, a student may find that it may not fulfill all of the requirements of full junior standing when transferred to a four-year institution.

This flexible degree option enables a student to complete an associate's 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.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours of specified courses with a cumulative Grade Point Average (GPA) of 2.0 or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. In addition to the General Education Requirements and the Distribution Requirements, students must complete enough elective courses to reach a total of 90 credits for the degree. All courses must be numbered 100 or above to counts toward an AGS degree. All Honors courses may substitute for their equivalent requirements.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## GENERAL EDUCATION REQUIREMENTS

### WRITING

**Eight (8) credits** of writing are required, so choose **two (2) courses** from below. Information Literacy will be included in the writing requirement:

Code	Title	Credits
WR121	English Composition	4
WR122	English Composition	4
or WR227	Report Writing	

### COMMUNICATION

**One (1) course in speech:**

Code	Title	Credits
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3

## MATHEMATICS

**One (1) course of college-level mathematics** from MTH105 Math in Society or higher, excluding MTH211 Fundamentals of Elementary Mathematics I.

## HEALTH, WELLNESS, AND FITNESS

**Three (3) credits** of PE185 sport/activity or choose one (1) three-credit course from HE250 Personal Health or PE231 Wellness for Life.

## DISTRIBUTION REQUIREMENTS

### ARTS AND LETTERS

**Three (3) courses from:**

*Note: A second-year foreign language may be included, but not a first-year foreign language.*

Code	Title	Credits
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART116	Basic Design II, Color Theory	4
ART117	Basic Design III, Intro to 3D Desgn	4
ART131	Introduction to Drawing I	3
ART132	Introduction to Drawing II	3
ART133	Introduction to Drawing III	3
ART191	Beginning Sculpture	3
ART192	Beginning Sculpture	3
ART204	History of Western Art: Introduction to Art History	3
ART205	History of Western Art: Introduction to Art History	3
ART206	History of Western Art: Introduction to Art History	3
ART225	Computer Art I	3
ART244	Bronze Casting	3
ART253	Ceramics I	3
ART256	Ceramics II	3
ART281	Painting I Beginning	3
ART282	Painting II Beginning	3
ART283	Painting III Beginning	3
ART284	Painting I Intermediate	3
ART285	Painting II Intermediate	3
ART286	Painting III Intermediate	3
ASL201	2nd Yr American Sign Language I	4
ASL202	2nd Yr American Sign Language II	4
ASL203	2nd Yr American Sign Language III	4
ENG104	Introduction to Literature Fiction	3
ENG105	Introduction to Literature Drama	3
ENG106	Introduction to Literature Poetry	3
ENG107	World Literature	3
ENG108	World Literature	3
ENG109	World Literature	3
ENG201	Shakespeare	3
ENG204	Survey of English Literature	3
ENG205	Survey of English Literature	3
ENG206	Survey of English Literature	3
ENG253	Survey of American Literature	3

ENG254	Survey of American Literature	3	GEOG105	Cultural Geography	3
ENG255	Survey of American Literature	3	HDFS140	Contemporary American Families	3
HUM204	World Mythology & Religion	3	HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
HUM205	World Mythology & Religion	3	HDFS229	Child Development PreK - Adolescent	3
HUM206	World Mythology & Religion	3	HDFS247	Child Development 0-8	3
MUS101	Music Fundamentals	3	HST101	History of Western Civilization	3
MUS111	Music Theory I	3	HST102	History of Western Civilization	3
MUS112	Music Theory II	3	HST103	History of Western Civilization	3
MUS113	Music Theory III	3	HST104	History of the Middle East	3
MUS201	Intro to Music and its Literature	3	HST195	History of the Vietnam War	3
MUS202	Intro to Music and its Literature	3	HST201	History of the United States	3
MUS203	Intro to Music and its Literature	3	HST202	History of the United States	3
MUS205	Intro to Jazz History	3	HST203	History of the United States	3
MUS206	Intro to History of Rock and Roll	3	HST240	Hist of Oregon and the South Coast	3
MUS211	Advanced Music Theory I	3	PS201	American Government: Political Institutions	3
MUS212	Advanced Music Theory II	3	PS202	American Government: Policy Issues	3
MUS213	Advanced Music Theory III	3	PS203	Local Politics and Government	3
PHL101	Introduction to Philosophy: Philosophical Problems	3	PS205	International Relations: US Foreign Policy in the 20th Century	3
PHL102	Ethics	3	PSY100	Introduction to Psychology	4
PHL103	Intro to Logic and Critical Thnkg	3	PSY201	General Psychology	3
SP100	Basic Speech Communications	3	PSY202	General Psychology	3
SP111	Fundamentals of Public Speaking	3	PSY203	General Psychology	3
SP218	Interpersonal Communication	3	PSY216	Social Psychology	3
SP219	Small Group Discussion	3	PSY228	Introduction to Social Science Research	3
SP220	Gender and Communication	3	PSY231	Human Sexuality	3
SPAN201	Second Year Spanish	4	PSY237	Life Span Development	3
SPAN202	Second Year Spanish	4	PSY239	Introduction to Abnormal Psychology	3
SPAN203	Second Year Spanish	4	SOC204	Introduction to Sociology	3
WR241	Imaginative Creative Writing Fiction	3	SOC205	Social Institutions and Change	3
WR242	Imaginative Writing Poetry	3	SOC206	Social Problems and Issues	3
WR243	Imaginative Writing Explorations	3	SOC208	Sociology of Sport	3
			SOC210	Marriage and Family	3
			SOC213	Racial and Ethnic Relations	3
			SOC218	Sociology of Gender	3

## SOCIAL SCIENCES

Three (3) courses from:

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3
ANTH230	Native North Americans: Oregon	3
ANTH231	Native North Americans: PNW	3
ANTH232	Native North Americans	3
CJ101	Intro to Criminology	4
ECON201	Microeconomics	4
ECON202	Macroeconomics	4
ED169	Overview of Student Special Needs	3
ED258	Multicultural Education	3

## SCIENCE/MATHEMATICS/COMPUTER SCIENCE

Select three (3) courses with a minimum of two (2) laboratory courses in biological or physical science:

### LABORATORY COURSES

Code	Title	Credits
BI101	General Biology	4
BI102	General Biology	4
BI103	General Biology	4
BI142	Habitats: Marine Biology	4
BI201	Introductory Biology	4
BI202	Introductory Biology	4
BI203	Introductory Biology	4

BI231	Human Anatomy and Physiology I	4	MTH255	Vector Calculus II	4
BI232	Human Anatomy and Physiology II	4	MTH256	Differential Equations	4
BI233	Human Anatomy and Physiology III	4	MTH260	Matrix Methods and Linear Algebra	4
BI234	Microbiology	4	MTH264	Introduction to Matrix Algebra and Power Series	4
CHEM221	General Chemistry I	5			
CHEM222	General Chemistry II	5			
CHEM223	General Chemistry III	5			
ENV235	Introduction to Soil Science	4			
G201	Physical Geology I	4			
G202	Physical Geology II	4			
G203	Historical Geology	4			
GS104	Physical Science	4			
GS105	Physical Science	4			
GS106	Introduction to Earth Science	4			
GS107	Astronomy	4			
GS108	Oceanography	4			
NR260	Watershed Processes	4			
PH201	General Physics I: Mechanics	5			
PH202	General Physics II: Heat, Waves, Relativity	5			
PH203	Gen Physics III: Elect & Magnetism	5			
PH211	General Physics with Calculus I	5			
PH212	General Physics with Calculus II	5			
PH213	General Physics with Calculus III	5			

## NON-LABORATORY COURSES

Code	Title	Credits
BI140	Practical Ecology	3
BI149	Introduction to Human Genetics	3
CHEM110	Foundations of General, Organic, and Biochemistry	4
CS160	Computer Science Orientation	4
CS161	Introduction to Computer Science I	4
CS162	Introduction to Computer Science II	4
CS261	Data Structures	4
ENV110	Introduction Environmental Science	3
G221	General Geology	3
G246	Geological Hazards And Natural Catastrophes	3
MTH105	Math in Society	4
MTH111	College Algebra	4
MTH112	Trigonometry	4
MTH212	Fundamentals of Elementary Mathematics II	4
MTH213	Fundamentals of Elementary Mathematics III	4
MTH231	Elements of Discrete Mathematics I	4
MTH232	Elements of Discrete Mathematics II	4
MTH241	Calculus for Bus and Soc Science I	4
MTH242	Calculus for Bus and Soc Science II	4
MTH243	Intro to Probability and Statistics	4
MTH244	Probability & Statistics II	4
MTH251	Calculus I Differential Calculus	4
MTH252	Calculus II Integral Calculus	4
MTH253	Calculus III Infinite Sequences And Series	4
MTH254	Vector Calculus I	4

## ELECTIVES

- Students may take any college-level course including career and technical education courses without limitation that would bring total credits to 90 credit hours.
- A maximum of nine (9) credits of PE185 sport/activity courses may be applied toward an AGS degree.
- Three (3) credits hours of PE185 may be granted toward an AGS degree for completion of military basic training. A copy of the military transcript or DD-214 is required.
- Courses numbered 199/299 will qualify as elective credit only.

## SUPPORTIVE COURSES

*Note: The College has determined that the following supportive courses may be necessary to assist students to successfully complete their program; they count as electives only.*

Code	Title	Credits
CIS120	Concepts of Computing	4
CIS125W	Word Processing Applications Microsoft	3
HD100	College Success and Survival	3
HD102	College Nuts and Bolts	1
HD111	Math Success	2
HD112	Study Skills	3
HD113	Stop Test Anxiety Now	1
HD140	Career/Education Exploration	1
HD152	Stress Management	2
HD208	Career/Life Plan	3
LIB127	Navigating the 24/7 Library	1

*A maximum number of 45 credits is allowed for basic, developmental, or supportive courses under federal financial aid guidelines.*

# ASSOCIATE OF SCIENCE (AS)

The Associate of Science (AS) degree is designed for students who plan to transfer and complete a Bachelor of Science degree at a four-year institution. The degree requirements allow students more flexibility in course selection, allowing them to focus on their discipline requirements.

*NOTE: Completion of this degree does not guarantee that all lower division general education requirements have been met for a bachelor's degree (i.e., this is not a block transfer degree as is the AAOT). In selecting courses for this degree, students are highly encouraged to consult the specific transfer curriculum pages in this catalog, an advisor, and the institution to which they intend to transfer in order to determine if it is an appropriate choice.*

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours of specified courses with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete elective courses to reach a total of 90 credits. The courses must be numbered 100 or above. Career technical courses may only be applied to the AS degree in the following curricula which are governed by formal transfer agreements with four-year universities and are part of a current, formal transfer agreement with a four-year institution. Career technical courses offered at Southwestern are designated by "CTE" in the course description section of this catalog. All Honors courses may substitute for their equivalent requirements.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## GENERAL EDUCATION REQUIREMENTS

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

### WRITING

**Eight (8) credits** of writing are required, so choose **two (2) courses** from below. Information Literacy will be included in the writing requirement:

Code	Title	Credits
WR121	English Composition	4
WR122 or WR227	English Composition Report Writing	4

### COMMUNICATION

**One (1) course** taken from:

Code	Title	Credits
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3

## MATHEMATICS

**Select four (4) credit hours of college-level mathematics** from MTH105 or higher, excluding MTH211.

## HEALTH, WELLNESS, AND FITNESS

**Three (3) credits of health/PE:** Three (3) credits of PE185 sport/activity courses or HE250 or PE231.

## DISTRIBUTION REQUIREMENTS

Complete six (6) credits from each of the following Related Area of Instruction Requirements. All courses must be completed with a grade of 'C' or better.

## ARTS AND LETTERS

**Six (6) credit hours from:**

*Only second year foreign language may be used to fulfill the Arts and Letters requirement.*

Code	Title	Credits
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART116	Basic Design II, Color Theory	4
ART117	Basic Design III, Intro to 3D Desgn	4
ART131	Introduction to Drawing I	3
ART132	Introduction to Drawing II	3
ART133	Introduction to Drawing III	3
ART191	Beginning Sculpture	3
ART192	Beginning Sculpture	3
ART204	History of Western Art: Introduction to Art History	3
ART205	History of Western Art: Introduction to Art History	3
ART206	History of Western Art: Introduction to Art History	3
ART225	Computer Art I	3
ART244	Bronze Casting	3
ART253	Ceramics I	3
ART256	Ceramics II	3
ART281	Painting I Beginning	3
ART282	Painting II Beginning	3
ART283	Painting III Beginning	3
ART284	Painting I Intermediate	3
ART285	Painting II Intermediate	3
ART286	Painting III Intermediate	3
ASL201	2nd Yr American Sign Language I	4
ASL202	2nd Yr American Sign Language II	4
ASL203	2nd Yr American Sign Language III	4
ENG104	Introduction to Literature Fiction	3
ENG105	Introduction to Literature Drama	3
ENG106	Introduction to Literature Poetry	3
ENG107	World Literature	3
ENG108	World Literature	3
ENG109	World Literature	3
ENG201	Shakespeare	3
ENG204	Survey of English Literature	3

ENG205	Survey of English Literature	3	ECON202	Macroeconomics	4
ENG206	Survey of English Literature	3	ED169	Overview of Student Special Needs	3
ENG253	Survey of American Literature	3	ED258	Multicultural Education	3
ENG254	Survey of American Literature	3	GEOG105	Cultural Geography	3
ENG255	Survey of American Literature	3	HDFS140	Contemporary American Families	3
HUM204	World Mythology & Religion	3	HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
HUM205	World Mythology & Religion	3	HDFS229	Child Development PreK - Adolescent	3
HUM206	World Mythology & Religion	3	HDFS247	Child Development 0-8	3
MUS101	Music Fundamentals	3	HST101	History of Western Civilization	3
MUS111	Music Theory I	3	HST102	History of Western Civilization	3
MUS112	Music Theory II	3	HST103	History of Western Civilization	3
MUS113	Music Theory III	3	HST104	History of the Middle East	3
MUS201	Intro to Music and its Literature	3	HST195	History of the Vietnam War	3
MUS202	Intro to Music and its Literature	3	HST201	History of the United States	3
MUS203	Intro to Music and its Literature	3	HST202	History of the United States	3
MUS205	Intro to Jazz History	3	HST203	History of the United States	3
MUS206	Intro to History of Rock and Roll	3	HST240	Hist of Oregon and the South Coast	3
MUS211	Advanced Music Theory I	3	PS201	American Government: Political Institutions	3
MUS212	Advanced Music Theory II	3	PS202	American Government: Policy Issues	3
MUS213	Advanced Music Theory III	3	PS203	Local Politics and Government	3
PHL101	Introduction to Philosophy: Philosophical Problems	3	PS205	International Relations: US Foreign Policy in the 20th Century	3
PHL102	Ethics	3	PSY100	Introduction to Psychology	4
PHL103	Intro to Logic and Critical Thnkg	3	PSY201	General Psychology	3
SP100	Basic Speech Communications	3	PSY202	General Psychology	3
SP111	Fundamentals of Public Speaking	3	PSY203	General Psychology	3
SP218	Interpersonal Communication	3	PSY216	Social Psychology	3
SP219	Small Group Discussion	3	PSY228	Introduction to Social Science Research	3
SP220	Gender and Communication	3	PSY231	Human Sexuality	3
SPAN201	Second Year Spanish	4	PSY237	Life Span Development	3
SPAN202	Second Year Spanish	4	PSY239	Introduction to Abnormal Psychology	3
SPAN203	Second Year Spanish	4	SOC204	Introduction to Sociology	3
WR241	Imaginative Creative Writing Fiction	3	SOC205	Social Institutions and Change	3
WR242	Imaginative Writing Poetry	3	SOC206	Social Problems and Issues	3
WR243	Imaginative Writing Explorations	3	SOC208	Sociology of Sport	3
			SOC210	Marriage and Family	3
			SOC213	Racial and Ethnic Relations	3
			SOC218	Sociology of Gender	3

## SOCIAL SCIENCES

Six (6) credit hours from:

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3
ANTH230	Native North Americans: Oregon	3
ANTH231	Native North Americans: PNW	3
ANTH232	Native North Americans	3
CJ101	Intro to Criminology	4
ECON201	Microeconomics	4

## SCIENCE/MATHEMATICS/COMPUTER SCIENCE

Six (6) credit hours from:

### Laboratory Courses

Code	Title	Credits
BI101	General Biology	4
BI102	General Biology	4
BI103	General Biology	4
BI142	Habitats: Marine Biology	4
BI201	Introductory Biology	4
BI202	Introductory Biology	4
BI203	Introductory Biology	4

BI231	Human Anatomy and Physiology I	4	MTH255	Vector Calculus II	4
BI232	Human Anatomy and Physiology II	4	MTH256	Differential Equations	4
BI233	Human Anatomy and Physiology III	4	MTH260	Matrix Methods and Linear Algebra	4
BI234	Microbiology	4	MTH264	Introduction to Matrix Algebra and Power Series	4
CHEM221	General Chemistry I	5			
CHEM222	General Chemistry II	5			
CHEM223	General Chemistry III	5			
ENV235	Introduction to Soil Science	4			
G201	Physical Geology I	4			
G202	Physical Geology II	4			
G203	Historical Geology	4			
GS104	Physical Science	4			
GS105	Physical Science	4			
GS106	Introduction to Earth Science	4			
GS107	Astronomy	4			
GS108	Oceanography	4			
NR260	Watershed Processes	4			
PH201	General Physics I: Mechanics	5			
PH202	General Physics II: Heat, Waves, Relativity	5			
PH203	Gen Physics III: Elect & Magnetism	5			
PH211	General Physics with Calculus I	5			
PH212	General Physics with Calculus II	5			
PH213	General Physics with Calculus III	5			

## ELECTIVES

- All courses must be completed with a grade of 'C' or better.
- Students may take any college-level course that would bring total credits to 90 credit hours. Career and technical education courses may only be applied to the AS degree in the designated emphasis areas which are governed by agreements with four-year universities and are part of a current, formal transfer agreement with a four-year institution (see specific catalog program page).
- A maximum of nine (9) credits of PE185 sport/activity courses may be applied to the AS degree.
- Three (3) credit hours of PE185 sport/activity courses may be granted toward an AS degree for completion of military basic training. A copy of the military transcript or DD-214 is required.
- Courses numbered 199/299 will qualify as elective credit only.
- A maximum of 45 credits is allowed for basic, developmental, or supportive courses under federal financial aid guidelines.

### Non-Laboratory Courses

Code	Title	Credits
BI140	Practical Ecology	3
BI149	Introduction to Human Genetics	3
CHEM110	Foundations of General, Organic, and Biochemistry	4
CS160	Computer Science Orientation	4
CS161	Introduction to Computer Science I	4
CS162	Introduction to Computer Science II	4
CS261	Data Structures	4
ENV110	Introduction Environmental Science	3
G221	General Geology	3
G246	Geological Hazards And Natural Catastrophes	3
MTH105	Math in Society	4
MTH111	College Algebra	4
MTH112	Trigonometry	4
MTH212	Fundamentals of Elementary Mathematics II	4
MTH213	Fundamentals of Elementary Mathematics III	4
MTH231	Elements of Discrete Mathematics I	4
MTH232	Elements of Discrete Mathematics II	4
MTH241	Calculus for Bus and Soc Science I	4
MTH242	Calculus for Bus and Soc Science II	4
MTH243	Intro to Probability and Statistics	4
MTH244	Probability & Statistics II	4
MTH251	Calculus I Differential Calculus	4
MTH252	Calculus II Integral Calculus	4
MTH253	Calculus III Infinite Sequences And Series	4
MTH254	Vector Calculus I	4

# BAKING AND PASTRY ARTS, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Baking and Pastry Arts provides a broad foundation of baking and pastry theory and practical training necessary for success in the food service industry. Students will learn the art of creating tasty baked goods, pastries, and confections, from traditional bread baking to beautiful showpieces. Students will also learn to use sugar, syrups, icings and chocolate. Prepares students for a career as a professional baker or pastry chef in a bakery, restaurant, hotel or resort.

Oregon Coast Culinary Institute (OCCI) at Southwestern was granted accreditation by the American Culinary Federation (ACF). This accreditation is the highest level available for initial accreditation by the ACF – the premier professional chefs' organization in North America, focusing its efforts on offering education, apprenticeship and industry certification. With the ACF accreditation, OCCI's graduates will automatically gain the title of Certified Culinarian upon graduation, along with their associate's degrees.

## ENTRY REQUIREMENTS

For application and fee information, contact OCCI Admissions at 541-888-7195.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 92 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Prepare yeast-raised products to include breads, yeast-leavened pastries to include laminated doughs, breakfast pastries and leavened cakes.
- Prepare a variety of cakes, fillings and icings to include chemical and mechanical leavening techniques.
- Prepare a variety of egg-and dairy-based products to include meringue, sponge, soufflés, mousses, custards, and creams.
- Prepare a variety of fried baked goods to include fritters and doughnuts.
- Prepare a variety of pastry products to include pies, tarts, Pâte à Choux, crepes, puff pastry, and fillo dough.
- Identify, select and demonstrate the use of various chocolates and sugar and the common uses for the decoration processes.
- List and explain the application of mixes and other convenience products pertaining to the baking process.
- Utilize concepts of cost control, purchasing, receiving, quality standards, profit, and staffing costs.
- Describe and apply the principles of nutrition to maximize nutrient retention in baking preparation.
- Demonstrate supervisory skills and abilities utilizing critical-thinking skills.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CRT2015	Sanitation and Safety for Managers	3
CRT2031	Bakery and Pastry Fundamentals	6
CRT2032	Baking and Pastry Fundamentals II	7
CRT2039	Prof Pres for the Culinary Wrkfrnc <sup>1</sup>	3
MTH81	Applied Mathematics for Culinary Arts	4
<b>Credits</b>		<b>23</b>
<b>Winter</b>		
CRT2016	Culinary Nutrition <sup>2</sup>	3
CRT2027	Introduction to Sugar	1
CRT2028	Basic Chocolate	1
CRT2033	Classic and Contemporary Cakes	4
CRT2040	Culinary Arts for Baking and Pastry	6
CRT2007	Inventory Control and Purchasing	1
CIS120	Concepts of Computing	4
<b>Credits</b>		<b>20</b>
<b>Spring</b>		
CRT2017	Restaurant Management Supervision	3
CRT2018	Culinary Arts Career Planning	1
CRT2024	Frozen Desserts	3
CRT2026	Dessert Menu Development	1
CRT2030	Bakery Design	3
CRT2045	Retail Baking	7
WR115	Fundamentals of Report Writing (or higher) <sup>3</sup>	4
<b>Credits</b>		<b>22</b>
<b>Second Year</b>		
<b>Summer</b>		
CRT2034	Advanced Sugar and Chocolate	2
CRT2037	Plated Desserts	6
CRT2038	Applied Visual Principles	1
CRT2042	Wedding Cakes	3
HE250	Personal Health <sup>4</sup>	3
<b>Credits</b>		<b>15</b>

## Fall

CRT280B2	CWE: Baking and Pastry Arts	12
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>92</b>

<sup>1</sup> SP111, SP218, SP219 may be substituted for CRT2039.

<sup>2</sup> FN225 may be substituted for CRT2016.

<sup>3</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.

<sup>4</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.

\* All Honors courses may substitute for their equivalent requirements.

# BAKING AND PASTRY ARTS, CERTIFICATE OF COMPLETION

The Certificate of Completion Baking and Pastry Arts provides a broad foundation of baking and pastry theory and practical training necessary for success in the food service industry. Students will learn the art of creating tasty baked goods, pastries, and confections, from traditional bread baking to beautiful showpieces. Students will also learn to use sugar, syrups, icings and chocolate. Prepares students for an entry-level baking position such as a pastry cook or baker in a bakery, restaurant, hotel or resort.

## ENTRY REQUIREMENTS

For application and fee information, contact OCCI Admissions at 541-888-7195.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 73 credit hours with a minimum Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion Baking and Pastry Arts is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Prepare yeast-raised products to include breads, yeast-leavened pastries to include laminated doughs, breakfast pastries and leavened cakes.
- Prepare a variety of cakes, fillings and icings to include chemical and mechanical leavening techniques.
- Prepare a variety of egg- and dairy-based products, fried baked goods, and a variety of pastry products to include but not limited to meringue, fritters, and pies.
- Identify, select and demonstrate the use of various chocolates and sugar and the common uses for the decoration processes.

- List and explain the application of mixes and other convenience products pertaining to the baking process.
- Describe and apply the principles of nutrition to maximize nutrient retention in baking preparation.
- Obtain ServSafe Certification.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CRT2015	Sanitation and Safety for Managers	3
CRT2031	Bakery and Pastry Fundamentals	6
CRT2032	Baking and Pastry Fundamentals II	7
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
CRT2016	Culinary Nutrition <sup>1</sup>	3
CRT2027	Introduction to Sugar	1
CRT2028	Basic Chocolate	1
CRT2033	Classic and Contemporary Cakes	4
CRT2040	Culinary Arts for Baking and Pastry	6
CRT2007	Inventory Control and Purchasing	1
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
CRT2017	Restaurant Management Supervision	3
CRT2018	Culinary Arts Career Planning	1
CRT2024	Frozen Desserts	3
CRT2026	Dessert Menu Development	1
CRT2030	Bakery Design	3
CRT2045	Retail Baking	7
<b>Credits</b>		<b>18</b>
<b>Second Year</b>		
<b>Summer</b>		
CRT2034	Advanced Sugar and Chocolate	2
CRT2037	Plated Desserts	6
CRT2042	Wedding Cakes	3
<b>Credits</b>		<b>11</b>
<b>Fall</b>		
CRT280B2	CWE: Baking and Pastry Arts	12
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>73</b>

<sup>1</sup> FN225 Nutrition may be substituted for CRT2016 Culinary Nutrition.

\* All Honors courses may substitute for their equivalent requirements.

# BAKING MANAGEMENT, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Baking Management program provides a broad foundation of baking and pastry theory and practical training necessary for success in the food service industry. Students will learn the art of creating tasty baked goods, pastries, and confections, from traditional bread baking to beautiful showpieces. Students will also learn to use sugar, syrups, icings and chocolate. This program curriculum prepares students for a career as a professional baker or pastry chef in a bakery, restaurant, hotel or resort.

This degree utilizes the same curriculum as the Baking and Pastry Arts degree, except that during the final terms the Baking Management student will take up to an additional 27 academic credits. This will allow the student to transfer into the Bachelor of Applied Science in Hospitality and Tourism program at Southern Oregon University (SOU) with junior standing for registration purposes. The articulated SOU Hospitality and Tourism Management degree will require an additional (9) credits in humanities, (4) credits in social sciences, and (11) credits in science to meet SOU's University Studies Requirements.

Oregon Coast Culinary Institute (OCCI) at Southwestern was granted accreditation by the American Culinary Federation (ACF). This accreditation is the highest level available for initial accreditation by the ACF – the premier professional chefs' organization in North America, focusing its efforts on offering education, apprenticeship and industry certification. With the ACF accreditation, OCCI's graduates will automatically gain the title of Certified Culinarian upon graduation, along with their associate's degrees.

## ENTRY REQUIREMENTS

For application and fee information, contact OCCI Admissions at 541-888-7195.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 108 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to

- Demonstrate understanding of safe and effective kitchen equipment use and maintenance.
- Prepare yeast-raised products to include breads, yeast-leavened pastries to include laminated doughs, breakfast pastries and leavened cakes.

- Prepare a variety of cakes, fillings and icings to include chemical and mechanical leavening techniques.
- Prepare a variety of egg-and dairy-based products to include meringue, sponge, soufflés, mousses, custards, and creams.
- Prepare a variety of fried baked goods to include fritters and doughnuts.
- Prepare a variety of pastry products to include pies, tarts, Pâte à Choux, crepes, puff pastry, and fillo dough.
- Identify, select and demonstrate the use of various chocolates and sugar and the common uses for the decoration processes.
- List and explain the application of mixes and other convenience products pertaining to the baking process.
- Engage in critical analysis and creative thinking in hospitality operations.
- Apply the basic principles of analytical thinking and problem solving when examining hospitality management issues.
- Analyze trends and organizational data and develop business strategies for the hospitality industry.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CRT2015	Sanitation and Safety for Managers	3
CRT2031	Bakery and Pastry Fundamentals	6
CRT2032	Baking and Pastry Fundamentals II	7
CRT2039	Prof Pres for the Culinary Wrkfrc <sup>1</sup>	3
<b>Credits</b>		<b>19</b>
<b>Winter</b>		
CRT2016	Culinary Nutrition <sup>2</sup>	3
CRT2027	Introduction to Sugar	1
CRT2028	Basic Chocolate	1
CRT2033	Classic and Contemporary Cakes	4
CRT2040	Culinary Arts for Baking and Pastry	6
CIS120	Concepts of Computing	4
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
CRT2007	Inventory Control and Purchasing	1
CRT2017	Restaurant Management Supervision	3
CRT2018	Culinary Arts Career Planning	1
CRT2024	Frozen Desserts	3
CRT2026	Dessert Menu Development	1
CRT2030	Bakery Design	3
CRT2045	Retail Baking	7
<b>Credits</b>		<b>19</b>

**Second Year****Summer**

CRT2034	Advanced Sugar and Chocolate	2
CRT2037	Plated Desserts	6
CRT2038	Applied Visual Principles	1
CRT2042	Wedding Cakes	3
HE250	Personal Health	3

---

<b>Credits</b>	<b>15</b>
----------------	-----------

**Fall**

CRT280B1	CWE: Baking and Pastry Arts	6
ECON201	Microeconomics	4
BA211	Principles of Accounting I	4
WR121	English Composition	4

---

<b>Credits</b>	<b>18</b>
----------------	-----------

**Winter**

CRT280B1	CWE: Baking and Pastry Arts	6
ECON202	Macroeconomics	4
WR122	English Composition	4
MTH243	Intro to Probability and Statistics	4

---

<b>Credits</b>	<b>18</b>
----------------	-----------

---

<b>Total Credits</b>	<b>108</b>
----------------------	------------

<sup>1</sup> SP111, SP218, SP219 may be substituted for CRT2039.

<sup>2</sup> FN225 may be substituted for CRT2016.

\* All Honors courses may substitute for their equivalent requirements.

# BUSINESS MANAGEMENT/ ENTREPRENEURSHIP, ASSOCIATE OF APPLIED SCIENCE

This two-year degree exposes students to all aspects of operating a small business with a focus on entrepreneurship. The program also prepares students for positions such as management trainee, first-line supervisor, buyers and purchasing agents, sales managers, and higher levels of management for either profit or nonprofit organizations. Focus is placed on entrepreneurship for those interested in starting/operating a business or applying this managerial approach in a medium to large organization.

Employment in this field is expected to remain steady. Prospects are very good for those who want to own and manage a business, especially if they have determination, talent and a unique service or product.

Many students will decide to begin this program by first earning a Career Pathway Certificate of Completion in Supervision or Marketing. A Certificate of Completion can typically be completed in one year.

Students who intend to transfer to a four-year institution with the goal of completing a bachelor's degree in business should consider completing the ASOT-BUS degree and consult with business program faculty.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 95 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Identify appropriate ethical and legal procedures for a small business.
- Recognize and evaluate opportunities in the global marketplace.
- Demonstrate professional decorum while employing appropriate and effective business communication skills in virtual and interpersonal environments.
- Develop critical-thinking and decision-making skills as an individual, a team member, and a leader of an organization.
- Develop and evaluate financial record keeping systems and interpret results.
- Develop and evaluate marketing strategies for a small business.
- Explore entrepreneurial potential and develop a business plan.

## AWARD MAP

### Pathway Option

Career Pathway Certificate of Completion: Supervision

Career Pathway Certificate of Completion: Marketing

: Less Than One Year Certificate of Completion: Retail Management

Associate: Business Management/Entrepreneurship

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
BA101	Introduction to Business	4
BA150	Introduction to Entrepreneurship	3
CIS120	Concepts of Computing	4
MTH82	Business Mathematics	4
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
BA211	Principles of Accounting I	4
CIS125S	Spreadsheet Applications	3
BA223	Principles of Marketing	4
WR115	Fundamentals of Report Writing	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BA156	Essentials of Economics <sup>4</sup>	3
BA206	Management Fundamentals	4
BA213	Principles of Accounting III	4
BA233	E-Marketing	3
BA239	Advertising	3
<b>Credits</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
BA230	Business Law	4
BA238	Sales	3
BA250	Small Business Management Entrepreneurship	3
SP218	Interpersonal Communication <sup>5</sup>	3
Specific Elective <sup>6</sup>		3
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
BA203	Intro. to International Business	3
BA205	Solving Communication Problems With Technology	4
BA222	Finance	3
BA285	Human Relations in Organizations	3
PE231	Wellness for Life <sup>7</sup>	3
<b>Credits</b>		<b>16</b>

<b>Spring</b>		
BA224	Human Resource Management	4
BA277	Business Ethics	3
or PHL102	or Ethics	
BA280	CWE: Business Admin <sup>8</sup>	3
BA292	Entrepreneurship Capstone	3
Specific Elective <sup>6</sup>		3
	<b>Credits</b>	<b>16</b>
	<b>Total Credits</b>	<b>95</b>

- <sup>1</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.
- <sup>2</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.
- <sup>3</sup> MTH60, MTH65, MTH95 or higher, excluding MTH211, may be substituted for MTH82.
- <sup>4</sup> Four (4) credits of ECON201 or ECON202 may be substituted for BA156.
- <sup>5</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- <sup>6</sup> Specific Electives: Any AC, BA, CIS, CS, PSY, or SOC courses not required for degree; CRT2015; ECON201; ECON202; OA116; MTH65; MTH95; MTH111; MTH241; MTH243.
- <sup>7</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>8</sup> Call 541-888-7405 to schedule with Internship Coordinator one month prior to term.
- \* All Honors courses may substitute for their equivalent requirements.

## MARKETING, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Marketing is for students who wish to update skills or increase advancement potential.

Courses are designed to provide students with a strong basic understanding of fundamentals and current practices in the field of marketing. Businesses will find this short-term certificate especially helpful in quickly training present and new employees in basic subject matter pertinent to the marketing function.

### GRADUATION REQUIREMENTS

Students must complete a minimum of 29 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Marketing is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate effective communication skills including both verbal and written.
- Describe the marketing methods including the analysis and inter-relationship of the marketing mix: Product, price, place and promotion.
- Develop/implement a marketing plan to achieve the goals of a business.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
BA101	Introduction to Business	4
BA238	Sales	3
	<b>Credits</b>	<b>7</b>
<b>Winter</b>		
BA205	Solving Communication Problems With Technology	4
BA223	Principles of Marketing	4
CIS120	Concepts of Computing	4
WR115	Fundamentals of Report Writing	4
	<b>Credits</b>	<b>16</b>
<b>Spring</b>		
BA233	E-Marketing	3
BA239	Advertising	3
	<b>Credits</b>	<b>6</b>
	<b>Total Credits</b>	<b>29</b>

- <sup>1</sup> A higher writing may be substituted excluding WR241, WR242, WR243, or WR250.

## SUPERVISION, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Supervision prepares the individual for careers in supervision and management. Its objective is to assist students in learning the newest supervisory and management skills and to help businesses save money on training costs.

### GRADUATION REQUIREMENTS

Students must complete a minimum of 22 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate effective communication skills including both verbal and written.
- Understand the role of a leader.
- Identify and implement strategies for managing employee relations.

### Program Guide

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
BA101	Introduction to Business	4
<b>Credits</b>		<b>4</b>
<b>Winter</b>		
SP218	Interpersonal Communication <sup>2</sup>	3
BA285	Human Relations in Organizations	3
WR115	Fundamentals of Report Writing	4
<b>Credits</b>		<b>10</b>
<b>Spring</b>		
BA206	Management Fundamentals	4
BA224	Human Resource Management	4
<b>Credits</b>		<b>8</b>
<b>Total Credits</b>		<b>22</b>

<sup>1</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.

<sup>2</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.

\* All Honors courses may substitute for their equivalent requirements.

# BUSINESS, ASSOCIATE OF SCIENCE OREGON TRANSFER

The Associate of Science/Oregon Transfer Business (ASOT-BUS) is a degree that is intended to prepare students for transfer into a bachelor-level business program at a public Oregon university. Students who receive this degree will have met all lower division general education requirements of that institution's bachelor's degree programs. Students transferring with this degree will have junior standing for registration purposes. Admission to the business school/program of any public Oregon university is not guaranteed upon completion of the ASOT-BUS degree.

Students who plan to transfer should contact their chosen transfer institution as soon as possible. Universities have different requirements such as minimum GPA requirements, a limitation of non-graded courses (Pass/No Pass), or specific additional courses.

## GRADUATION REQUIREMENTS

Complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the ASOT Business degree is awarded.

Students must complete a minimum of 90 credit hours. A maximum of nine (9) credits of PE185 may be applied to the ASOT-BUS degree. Career Technical Education courses may only count for 12 credits. Eight to nine (8-9) CTE credits may be accepted by a four-year business program.

See specific CTE limitations at the four-year institution. Courses that are developmental in nature (designed to prepare students for college transfer courses) are not applicable to this degree. Three (3) credit hours of PE185 sport/activity courses may be granted toward the degree for successful completion of military basic training. A copy of military transcript or DD-214 is required. A maximum of 45 credits is allowed for basic, developmental, or supportive courses under federal financial aid guidelines. All Honors courses may substitute for their equivalent requirements.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM GUIDE FOUNDATIONAL REQUIREMENTS

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

### WRITING

**Eight (8) credits** of writing are required, so choose **two (2) courses** from below. Information Literacy will be included in the writing requirement:

Code	Title	Credits
WR121	English Composition	4
WR227 or WR122	Report Writing English Composition	4

*Information Literacy is included through embedding the appropriate content and analytic activity in foundational writing courses.*

### MATHEMATICS

**Take (3) math courses - Statistics and (2) courses for which MTH 95 is a prerequisite:**

Code	Title	Credits
MTH243	Intro to Probability and Statistics	4
Two courses for which MTH95 is a prerequisite.		

### COMMUNICATION

**A minimum of one (1) course in fundamentals of speech or communication:**

Code	Title	Credits
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3

### DIGITAL LITERACY

Code	Title	Credits
CIS120	Concepts of Computing	4

## DISCIPLINE STUDY REQUIREMENTS

*All courses must be completed with a grade of 'C' or better.*

### ARTS AND LETTERS

**Three (3) courses chosen from two (2) or more disciplines:**

*Second year foreign language may be included, but not first year.*

Code	Title	Credits
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART116	Basic Design II, Color Theory	4
ART117	Basic Design III, Intro to 3D Design	4
ART131	Introduction to Drawing I	3
ART132	Introduction to Drawing II	3
ART133	Introduction to Drawing III	3
ART191	Beginning Sculpture	3
ART192	Beginning Sculpture	3
ART204	History of Western Art: Introduction to Art History	3
ART205	History of Western Art: Introduction to Art History	3
ART206	History of Western Art: Introduction to Art History	3
ART225	Computer Art I	3
ART244	Bronze Casting	3
ART253	Ceramics I	3
ART256	Ceramics II	3
ART281	Painting I Beginning	3
ART282	Painting II Beginning	3
ART283	Painting III Beginning	3
ART284	Painting I Intermediate	3
ART285	Painting II Intermediate	3

			<b>Code</b>	<b>Title</b>	<b>Credits</b>
ART286	Painting III Intermediate	3			
ASL201	2nd Yr American Sign Language I	4	ANTH201	Physical Anthropology and Evolution	3
ASL202	2nd Yr American Sign Language II	4	ANTH202	Introduction to Archaeology	3
ASL203	2nd Yr American Sign Language III	4	ANTH203	Language and Culture	3
ENG104	Introduction to Literature Fiction	3	ANTH221	Intro to Cultural Anthropology	3
ENG105	Introduction to Literature Drama	3	ANTH222	Cultural Anthropology II	3
ENG106	Introduction to Literature Poetry	3	ANTH223	Cultural Anthropology III	3
ENG107	World Literature	3	ANTH224	Intro to Medical Anthropology	3
ENG108	World Literature	3	ANTH230	Native North Americans: Oregon	3
ENG109	World Literature	3	ANTH231	Native North Americans: PNW	3
ENG201	Shakespeare	3	ANTH232	Native North Americans	3
ENG204	Survey of English Literature	3	CJ101	Intro to Criminology	4
ENG205	Survey of English Literature	3	ED169	Overview of Student Special Needs	3
ENG206	Survey of English Literature	3	ED258	Multicultural Education	3
ENG253	Survey of American Literature	3	GEOG105	Cultural Geography	3
ENG254	Survey of American Literature	3	HDFS140	Contemporary American Families	3
ENG255	Survey of American Literature	3	HDFS222	Understanding Families: Supporting Diversity	3
HUM204	World Mythology & Religion	3		Disability and Risk	
HUM205	World Mythology & Religion	3	HDFS229	Child Development PreK - Adolescent	3
HUM206	World Mythology & Religion	3	HDFS247	Child Development 0-8	3
MUS101	Music Fundamentals	3	HST101	History of Western Civilization	3
MUS111	Music Theory I	3	HST102	History of Western Civilization	3
MUS112	Music Theory II	3	HST103	History of Western Civilization	3
MUS113	Music Theory III	3	HST104	History of the Middle East	3
MUS201	Intro to Music and its Literature	3	HST201	History of the United States	3
MUS202	Intro to Music and its Literature	3	HST202	History of the United States	3
MUS203	Intro to Music and its Literature	3	HST203	History of the United States	3
MUS205	Intro to Jazz History	3	HST240	Hist of Oregon and the South Coast	3
MUS206	Intro to History of Rock and Roll	3	PS201	American Government: Political Institutions	3
MUS211	Advanced Music Theory I	3	PS202	American Government: Policy Issues	3
MUS212	Advanced Music Theory II	3	PS203	Local Politics and Government	3
MUS213	Advanced Music Theory III	3	PS205	International Relations: US Foreign Policy in the	3
PHL101	Introduction to Philosophy: Philosophical Problems	3		20th Century	
			PSY100	Introduction to Psychology	4
PHL102	Ethics	3	PSY201	General Psychology	3
PHL103	Intro to Logic and Critical Thnkg	3	PSY202	General Psychology	3
SP100	Basic Speech Communications	3	PSY203	General Psychology	3
SP111	Fundamentals of Public Speaking	3	PSY216	Social Psychology	3
SP218	Interpersonal Communication	3	PSY228	Introduction to Social Science Research	3
SP219	Small Group Discussion	3	PSY231	Human Sexuality	3
SP220	Gender and Communication	3	PSY237	Life Span Development	3
SPAN201	Second Year Spanish	4	PSY239	Introduction to Abnormal Psychology	3
SPAN202	Second Year Spanish	4	PSY243	Drugs and Behavior	3
SPAN203	Second Year Spanish	4	SOC204	Introduction to Sociology	3
WR241	Imaginative Creative Writing Fiction	3	SOC205	Social Institutions and Change	3
WR242	Imaginative Writing Poetry	3	SOC206	Social Problems and Issues	3
WR243	Imaginative Writing Explorations	3	SOC208	Sociology of Sport	3
			SOC210	Marriage and Family	3
			SOC213	Racial and Ethnic Relations	3
			SOC218	Sociology of Gender	3

## **SOCIAL SCIENCES**

**Two (2) courses from the list below:**

## SCIENCE/MATHEMATICS/COMPUTER SCIENCE

Four (4) courses from two (2) or more disciplines including at least three (3) laboratory courses in biological and/or physical science.

### Laboratory Courses

Code	Title	Credits
BI101	General Biology	4
BI102	General Biology	4
BI103	General Biology	4
BI142	Habitats: Marine Biology	4
BI201	Introductory Biology	4
BI202	Introductory Biology	4
BI203	Introductory Biology	4
BI231	Human Anatomy and Physiology I	4
BI232	Human Anatomy and Physiology II	4
BI233	Human Anatomy and Physiology III	4
BI234	Microbiology	4
CHEM221	General Chemistry I	5
CHEM222	General Chemistry II	5
CHEM223	General Chemistry III	5
ENV235	Introduction to Soil Science	4
G201	Physical Geology I	4
G202	Physical Geology II	4
G203	Historical Geology	4
GS104	Physical Science	4
GS105	Physical Science	4
GS106	Introduction to Earth Science	4
GS107	Astronomy	4
GS108	Oceanography	4
PH201	General Physics I: Mechanics	5
PH202	General Physics II: Heat, Waves, Relativity	5
PH203	Gen Physics III: Elect & Magnetism	5
PH211	General Physics with Calculus I	5
PH212	General Physics with Calculus II	5
PH213	General Physics with Calculus III	5

### Non-Laboratory Courses

Code	Title	Credits
BI140	Practical Ecology	3
BI149	Introduction to Human Genetics	3
CHEM110	Foundations of General, Organic, and Biochemistry	4
CS160	Computer Science Orientation	4
CS161	Introduction to Computer Science I	4
CS162	Introduction to Computer Science II	4
CS261	Data Structures	4
ENV110	Introduction Environmental Science	3
G221	General Geology	3
G246	Geological Hazards And Natural Catastrophes	3
MTH105	Math in Society	4
MTH111	College Algebra	4
MTH112	Trigonometry	4
MTH212	Fundamentals of Elementary Mathematics II	4

MTH213	Fundamentals of Elementary Mathematics III	4
MTH231	Elements of Discrete Mathematics I	4
MTH232	Elements of Discrete Mathematics II	4
MTH241	Calculus for Bus and Soc Science I	4
MTH242	Calculus for Bus and Soc Science II	4
MTH244	Probability & Statistics II	4
MTH251	Calculus I Differential Calculus	4
MTH252	Calculus II Integral Calculus	4
MTH253	Calculus III Infinite Sequences And Series	4
MTH254	Vector Calculus I	4
MTH255	Vector Calculus II	4
MTH256	Differential Equations	4
MTH260	Matrix Methods and Linear Algebra	4
MTH264	Introduction to Matrix Algebra and Power Series	4

## BUSINESS-SPECIFIC REQUIRED COURSES

### REQUIRED COURSES:

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

Code	Title	Credits
BA101	Introduction to Business	4
BA211	Principles of Accounting I	4
BA212	Principles of Accounting II	4
BA213	Principles of Accounting III	4
BA230	Business Law	4
ECON201	Microeconomics	4
ECON202	Macroeconomics	4
Elective <sup>1</sup>		3-4

<sup>1</sup> A university-specific elective is recommended. See your advisor for help choosing an elective.

## CULTURAL LITERACY

Students are required to complete at least one (1) course from any of the above discipline studies that meets the statewide criteria for cultural literacy. SWOCC offers these courses that satisfy the Cultural Literacy requirement.

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3
ANTH230	Native North Americans: Oregon	3
ANTH231	Native North Americans: PNW	3
ANTH232	Native North Americans	3
ED258	Multicultural Education	3
ENG107	World Literature	3
ENG108	World Literature	3

ENG109	World Literature	3
GEOG105	Cultural Geography	3
HDFS140	Contemporary American Families	3
HUM204	World Mythology & Religion	3
HUM205	World Mythology & Religion	3
HUM206	World Mythology & Religion	3
HST104	History of the Middle East	3
MUS205	Intro to Jazz History	3
MUS206	Intro to History of Rock and Roll	3
PSY216	Social Psychology	3
PSY231	Human Sexuality	3
SOC208	Sociology of Sport	3
SOC210	Marriage and Family	3
SOC213	Racial and Ethnic Relations	3
SOC218	Sociology of Gender	3
SP220	Gender and Communication	3

# CHEMICAL ENGINEERING, ASSOCIATE OF SCIENCE

The Associate of Science (AS) in Chemical Engineering degree will provide fundamental engineering skills. Chemical engineering is the study and modeling of systems where heat and fluid flow are coupled with chemical reactions. Examples of systems are the human body, ground water, the atmosphere, the ocean, and chemical reactors. Natural systems are measured and modeled in order to understand present and future behavior. Man-made systems are specifically designed to convert raw materials into more useful products. This degree was designed to transfer to Oregon State University's College of Engineering. Please consult your advisor for details.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 106 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree. Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## LEARNING OUTCOMES

1. Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
3. Communicate effectively with a range of audiences.
4. Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
5. Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
6. Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

## PLACEMENT INFORMATION

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ENGR111	Intro to Engineering	3

MTH251	Calculus I Differential Calculus	4
CHEM221	General Chemistry I	5
ENGR211	Statics <sup>1,*</sup>	3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
MTH252	Calculus II Integral Calculus	4
CHEM222	General Chemistry II	5
ENGR112	Engineering Computation	4
WR121	English Composition	4
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
CHEM223	General Chemistry III	5
WR227	Report Writing	4
BI203	Introductory Biology <sup>2</sup>	4
MTH264	Introduction to Matrix Algebra and Power Series	4
<b>Credits</b>		<b>17</b>
<b>Summer</b>		
Social Science <sup>3</sup>		3
Arts and Letters <sup>3</sup>		3
Cultural Diversity <sup>3</sup>		3
<b>Credits</b>		<b>9</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM245	Organic Chemistry I	4
MTH254	Vector Calculus I	4
PH211	General Physics with Calculus I	5
ENGR201	Electrical Fundamentals I	4
<b>Credits</b>		<b>17</b>
<b>Winter</b>		
PE231	Wellness for Life	3
PH212	General Physics with Calculus II	5
CHEM246	Organic Chemistry II	4
SP111	Fundamentals of Public Speaking	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
MTH256	Differential Equations	4
PH213	General Physics with Calculus III	5
CHEM247	Organic Chemistry III	4
Arts & Letters <sup>3</sup>		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>106</b>

<sup>1</sup> ENGR211 may require instructor consent if taken before completion of MTH252.

<sup>2</sup> General Biology can be BI201, BI202, or BI203.

<sup>3</sup> Select course from specific subject area from the AS course list.

\* Students are encouraged to apply for the Degree Partnership Program with Oregon State University during the first year. Ask your advisor for details.

\*\* All Honors courses may substitute for their equivalent requirements.

# CHEMISTRY, ASSOCIATE OF SCIENCE

The Associate of Science Degree in Chemistry prepares students for transfer to a four-year school as juniors in either chemistry or biochemistry majors. The curriculum provides fundamental knowledge of the major fields of chemistry, covering a full year of both general and organic chemistry. Students will gain laboratory experience in organic synthesis, analytical methods, and spectroscopy. Chemistry is called the central science and as such, it serves as a foundation for careers in many fields, such as medicine, environmental science, and materials science.

This degree is designed to transfer to Southern Oregon University's Bachelor of Science in Chemistry program. Other transfer options may be available. Consult your advisor for details.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 95 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

1. Demonstrate knowledge of chemical structure to predict and explain the physical properties of chemical materials.
2. Demonstrate knowledge of chemical reactivity to predict and explain the outcomes of reactions.
3. Demonstrate knowledge of chemical quantitation to predict and explain chemical phenomena.
4. Critical Thinking: Collect and analyze data using classical methods and modern instrumentation and evaluate experimental results using the principles of the scientific method.
5. Information Literacy: Locate, summarize, and critique scientific articles, as well as synthesize scientific information from various sources to communicate the results of their own experiments.
6. Global Learning: Demonstrate personal and social responsibility, environmental stewardship, and global self-awareness.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
MTH251	Calculus I Differential Calculus	4
WR121	English Composition	4
BI201	Introductory Biology	4
<b>Credits</b>		<b>17</b>
<b>Winter</b>		
CHEM222	General Chemistry II	5
BI202	Introductory Biology	4
MTH252	Calculus II Integral Calculus	4
WR227	Report Writing	4
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
CHEM223	General Chemistry III	5
BI203	Introductory Biology	4
SP111	Fundamentals of Public Speaking	3
Western Culture <sup>1</sup>		3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM245	Organic Chemistry I	4
MTH254	Vector Calculus I	4
PH211	General Physics with Calculus I	5
Difference, Power, and Discrimination <sup>2</sup>		3
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
CHEM246	Organic Chemistry II	4
PH212	General Physics with Calculus II	5
Social Processes and Institutions <sup>3</sup>		3
Cultural Diversity <sup>4</sup>		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
CHEM247	Organic Chemistry III	4
PH213	General Physics with Calculus III	5
PE231	Wellness for Life	3
Literature and the Arts <sup>5</sup>		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>95</b>

<sup>1</sup> Western Culture - options: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.

<sup>2</sup> Difference, Power, and Discrimination - options: HST201, HST202, HST203, SOC206, SOC213

<sup>3</sup> Social Processes and Institutions - options: ANTH221, ANTH222, ANTH223, ECON201, ECON202, HST101, HST102, HST103, PS201, PS205, PSY201, PSY202, PSY203, SOC204, or SOC205.

<sup>4</sup> Cultural Diversity - options: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206

<sup>5</sup> Literature and the Arts - options: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

\* All Honors courses may substitute for their equivalent requirements.

# CHILDHOOD EDUCATION AND FAMILY STUDIES, ASSOCIATE OF SCIENCE

The Associate of Science Childhood Education and Family Studies degree (AS CE&FS) meets all of the requirements for an Associate of Arts Oregon Transfer (AAOT) degree while giving a strong foundation in childhood education and family studies - allowing students to earn a degree that will meet employment requirements for many early childhood programs, and provide an opportunity for a seamless transfer into a bachelor's degree program.

All courses specific to childhood education and family studies degrees and certificates are offered online through Southwestern's online platform. Transfer courses that meet Southwestern's course outcomes are readily accepted into the program.

The *A.S. Childhood Education and Family Studies* and *A.A.S. Preschool Child Development* at Southwestern are accredited by the Commission on the Accreditation of Early Childhood Higher Education Programs of the National Association for the Education of Young Children, 1313 L Street NW, Suite 500, Washington DC 20005. (800) 424-2460 ext. 8007. [www.naeyc.org](http://www.naeyc.org) The accreditation runs from July 2018 through July 2025.

Southwestern's AS CE&FS degree is articulated with Eastern Oregon University's online bachelor's degree with a focus on Early Childhood Education and Southern Oregon University's Early Childhood Development program. This degree can also lead to a bachelor's degree in human development, early childhood education or social science with a certificate in early childhood education at Portland State University (PSU) Distance Education programs. Students may petition for adjustments in the Southwestern AS degree if course requirements are met for the first two years of any regionally accredited four-year institution offering a degree in education, early childhood education, family studies, human or child development.

For further program information, contact the Childhood Education faculty at [ece@socc.edu](mailto:ece@socc.edu).

## CHILDHOOD EDUCATION & FAMILY STUDIES PRINCIPLES & GOALS

Main principles in the Childhood Education & Family Studies Program include:

- Understanding that children lead their own learning based on the level of their development
- Focusing on the importance of families in their roles with their young children
- Respecting diversity
- Addressing the needs of children with diverse abilities in inclusive settings
- Themes of inclusion, bilingual and multicultural education and care
- Critical thinking
- Reflective teaching

These principles are infused throughout the Childhood Education & Family Studies coursework. Coursework and field experiences at every

level recognize the social, historical, political, and cultural contexts that have impacted the profession.

Southwestern's Childhood Education and Family Studies (CE&FS) program goals include:

- The CE&FS program seeks to empower its graduates by enabling them to acquire the knowledge and skills that will allow them to excel in their careers or further educational goals.
- The CE&FS program seeks to provide opportunities for teacher candidate-child, teacher candidate-classroom teacher, teacher candidate-content and teacher candidate-faculty interaction supporting teacher's professional growth and development.
- The CE&FS program seeks to provide model early care and education programs and staff for teacher candidates to develop effective knowledge, skills and attitudes.
- Graduates of the Childhood Education and Family Studies (CE&FS) program will possess broad general education and content area knowledge, remain effective and reflective practitioners and problem solvers, apply innovative learning technologies and participate in opportunities for professional growth.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Students will also be required to have a current immunization record and background check to complete practicum requirements. The requirements will vary per state. Students whose home state is not Oregon, are encouraged to research requirements for the state regulating organization regarding what will be required to complete the background check.

In Oregon, students must be listed on the Oregon Central Background Registry (CBR). To begin this process, visit the State of Oregon Early Learning Division to be prepared to complete practicum work in a certified early learning center, apply for a background check, and receive additional information regarding how to comply with fingerprinting requirements.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 98 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Practicum and student teaching courses require students to pass CLASS assessments to successfully complete the courses. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## CREDIT FOR PRIOR LEARNING

Credit for prior learning options are available for students with a Preschool Child Development Associate (CDA) credential, an Infant Toddler Child Development Associate (CDA) credential, a Step Seven on

the Oregon Registry, or a Certificate of Completion for First Connections that includes mentoring in an infant toddler learning environment. Contact [ece@socc.edu](mailto:ece@socc.edu) for more information.

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this degree, students will have knowledge and skills in the following Standards developed by National Association for the Education of Young Children Early Childhood Associate Degree Accreditation (NAEYC) organization:

### 1. Promoting Child Development and Learning

Students develop and use their understanding of child development – including young children’s unique characteristics and needs, and the multiple interacting influences on children’s development and learning – to create environments that are healthy, respectful, supportive, and challenging for each child.

Key elements of Outcome 1;

- a. Describe young children’s diverse characteristics and needs, from birth through age 8.
- b. Explain the multiple influences on early development and learning.
- c. Use knowledge of child development to create healthy, respectful, supportive, and challenging learning environments for young children.

### 2. Building Family and Community Relationships

Students articulate the complex characteristics of children’s families and communities and use this understanding to create respectful, reciprocal relationships that support and empower families, and to engage all families in their children’s development and learning.

Key elements of Outcome 2;

- a. Describe diverse family and community characteristics.
- b. Develop and implement strategies to support and engage families and communities through respectful, reciprocal relationships.
- c. Develop and implement plans to engage families and communities in young children’s development and learning.

### 3. Observing, Documenting, and Assessing to Support Young Children and Families

Students articulate the goals, benefits, and purposes of assessment and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence the development of every child.

Key elements of Outcome 3;

- a. State the goals, benefits, and purposes of assessment – including its use in development of appropriate goals, curriculum, and teaching strategies for young children.
- b. Use observation, documentation, and other appropriate assessment tools and approaches, including the use of technology in documentation, assessment and data collection.
- c. Practice responsible assessment to promote positive outcomes for each child, including an awareness of assistive technology for children with ability differences.
- d. Describe how assessment partnerships with families and with professional colleagues can be used to build effective learning environments.

### 4. Using Developmentally Effective Approaches

Students implement a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child’s development and learning, which will vary depending on children’s ages, characteristics, and the early childhood setting.

Key elements of Outcome 4;

- a. Discuss how supportive relationships and positive interactions are the foundation of their work with young children.
- b. List and implement effective instructional and guidance strategies and tools for early education, including appropriate uses of technology.
- c. Use a broad repertoire of developmentally appropriate teaching/ learning and guidance approaches.
- d. Reflect on their own practice to promote positive outcomes for each child.

### 5. Using Content Knowledge to Build Meaningful Curriculum

Students develop and apply their knowledge of developmental domains and academic (or content) disciplines to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for each child.

Key elements of Outcome 5;

- a. Begin to explain content knowledge and resources in academic disciplines: language and literacy; the arts – music, creative movement, dance, drama, visual arts; mathematics; science; physical education – physical activity, health, and safety; and social studies.
- b. Recognize and apply the central concepts, inquiry tools, and structures of content areas or academic disciplines.
- c. Use their own knowledge, appropriate early learning outcomes, and other resources to design, implement, and evaluate developmentally meaningful and challenging curriculum for each child.

### 6. Becoming a Professional

Students are collaborative learners who continuously demonstrate knowledgeable, reflective and critical perspectives of their work, make informed decisions that integrate knowledge from a variety of sources, including ethical guidelines, and advocate for sound educational practices and policies.

Key elements of Outcome 6;

- a. Identify as a member of the early childhood field and become involved in the professional community.
- b. Locate and apply ethical guidelines and other early childhood professional guidelines.
- c. Engage in continuous, collaborative learning to inform practice; using technology effectively with young children, with peers, and as a professional resource.
- d. Integrate knowledgeable, reflective, and critical perspectives on early education into their work.
- e. Engage in informed advocacy for young children and the early childhood profession.

### 7. Early Childhood Field Experiences

Students engage in field experiences and clinical practice to develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children in a variety of early childhood settings and with multiple age groups.

Key elements of Outcome 7;

- a. Observe and practice in at least two of the three early childhood age groups (birth – age 3, 3-5, 5-8).

- b. Observe and practice in at least two of the three main types of early education settings (primary school grades, child care centers and homes, ECEAP/Head Start programs).

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ECE150	Introduction and Observation in ECE <sup>1</sup>	4
ECE170	Health and Safety Early Childhood	3
HDFS225	Prenatal Infant and Toddler Development	3
WR121	English Composition	4
MTH105	Math in Society <sup>4</sup>	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
ECE163	Environments and Guidance in ECE <sup>2</sup>	3
ECE163B	Practicum I ECE <sup>2</sup>	2
ECE151	Guidance and Classroom Management	3
HDFS247	Child Development 0-8	3
WR122	English Composition	4
Science/Mathematics/Computer Science <sup>3</sup>		4
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
ECE209	Theory and Practice I Pre-K <sup>2</sup>	3
ECE209B	Practicum II Pre-K <sup>2</sup>	2
ECE154	Children's Language and Lit Dev	3
HDFS229	Child Development PreK - Adolescent	3
SP218	Interpersonal Communication <sup>5</sup>	3
<b>Credits</b>		<b>14</b>
<b>Second Year</b>		
<b>Fall</b>		
ECE102	Theory and Practice II Pre-K <sup>2</sup>	3
ECE102B	Practicum III Pre-K <sup>2</sup>	2
ECE240	Lesson and Curriculum Planning	3
ED169	Overview of Student Special Needs	3
Science/Mathematics/Computer Science <sup>3</sup>		4
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
ED258	Multicultural Education	3
HDFS140	Contemporary American Families	3
Arts and Letters <sup>7</sup>		3
Arts and Letters <sup>7</sup>		3
Science/Mathematics/Computer Science <sup>3</sup>		4
<b>Credits</b>		<b>16</b>

<b>Spring</b>		
ED134	Children Who are Dual Lang Learners <sup>6</sup>	2
PE231	Wellness for Life <sup>9</sup>	3
HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
ED101K	Practicum: Grade K-3 <sup>8</sup>	1
Science/Mathematics/Computer Science <sup>3</sup>		4
Arts and Letters <sup>7</sup>		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>98</b>

- <sup>1</sup> One criminal background check and fingerprinting is required for ECE150 and all practicum courses.
- <sup>2</sup> ECE163, ECE209 and ECE102 must be taken in sequence with their corequisite practicum courses. For those interested in working with infants and toddlers, ECE263, ECE161, ECE262 and their co-requisite Practicum courses may be substituted. A criminal background check must be on file before enrolling in these classes.
- <sup>3</sup> AAOT Science/Math/Computer Science designated courses will satisfy this requirement. GS104, GS105, GS106, GS107, or GS108 are recommended.
- <sup>4</sup> A higher math may be substituted. Students considering the pursuit of K-12 teaching will be required to take MTH211, MTH212 and MTH213.
- <sup>5</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- <sup>6</sup> For students wishing to pursue a career in Parenting Education and Home Visiting ED134 may be substituted with HDFS297.
- <sup>7</sup> AAOT Arts & Letters designated courses will satisfy this requirement. Students with 1st year Foreign Language or ASL are recommended to take Second Year Foreign Language or ASL. ART131, ENG109, or HUM206 also recommended.
- <sup>8</sup> ED101P or ED101K will satisfy this requirement, depending on Practicum placement. Practicums have specific requirements; please call 541-888-1575 to make an appointment with the program coordinator to schedule site two months prior to term. Students interested in Early Intervention may be placed in an appropriate site. Credits may be taken in any term dependent upon availability.
- <sup>9</sup> HE250 may be substituted for PE231.
- \* All Honors courses may substitute for their equivalent requirements.

# CIS CYBERSECURITY, ASSOCIATE OF APPLIED SCIENCE

Cybersecurity has emerged as a unique profession specializing in the technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access.

The cybersecurity profession combines knowledge and skills from disciplines such as computer science, information technology, criminal justice, psychology, and business, along with specialized topics unique to cybersecurity.

Earn a Cybersecurity Associate of Applied Science degree!

- Specialize in cybersecurity while learning about computing.
- Increase your understanding of robust cyber defense technology.
- Utilize computer technology to address information system needs with security in mind.
- Analyze common security vulnerabilities and apply appropriate security controls.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 95 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. All courses must be completed with a grade of 'C' or better.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

- Identify cybersecurity practices to mitigate threats that originating inside and outside of an organization.
- Analyze common security vulnerabilities and apply appropriate security controls.
- Demonstrate ability to plan and implement both wired and wireless networks sufficient for home or small business use.
- Research, interpret, and communicate technical information in written, graphic, diagrammatic, electronic, and oral forms.
- Design an appropriate risk analysis for a business in a given environment.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CIS185	Introduction To Cyber Security	3
CJ100	Intro to Criminal Justice	4
CS160	Computer Science Orientation	4
CIS151	Network Essentials	4
PE231	Wellness for Life <sup>3</sup>	3
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
CIS140U	Intro to Operating Systems: Unix	4
CJ101	Intro to Criminology	4
CIS152	Network Routing & Switching Config	4
CS195	Web Development I	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
WR115	Fundamentals of Report Writing <sup>2</sup>	4
MTH105	Math in Society <sup>6</sup>	4
BA277 or PHL102	Business Ethics or Ethics	3
CIS188	Wireless Networking	3
CS133WS	Computer Language I: Web Scripting	4
<b>Credits</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
CS275	Database Management	4
MTH243	Intro to Probability and Statistics	4
BA285	Human Relations in Organizations <sup>7</sup>	3
CIS285	Cyber Security Essentials	4
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
SP111	Fundamentals of Public Speaking <sup>5</sup>	3
PSY202	General Psychology <sup>1</sup>	3
CS244	Systems Analysis	3
CIS286	Cyber Security Operations I	4
<b>Credits</b>		<b>13</b>
<b>Spring</b>		
CIS287	Cyber Security Operations II	4
CIS280	CWE: Computer Information Systems	4
CIS297	IT Professional Capstone	4
Specific Elective <sup>4</sup>		4
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>95</b>

<sup>1</sup> PSY100, PSY201, PSY203, PSY216 may be substituted for PSY202.

<sup>2</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.

<sup>3</sup> PE231, HE250 or three (3) credits of PE185 sport/activity courses will satisfy this requirement.

- <sup>4</sup> Specific Electives: Any PSY, BA, CJ, CIS/CS course not required for degree; WR227, MTH95 or higher not required for degree, ART225.
- <sup>5</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- <sup>6</sup> MTH105 or higher, excluding MTH211, will satisfy this requirement.
- <sup>7</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.
- \* All honors may substitute for their equivalent requirements.

# CIS DIGITAL DESIGN, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) CIS Digital Design degree is designed to successfully prepare students for careers in the expanding fields of digital design and media productions through an integrated curriculum exposing students to design principles and technical strategies. Upon successful completion of the AAS CIS Digital Design degree, students are prepared for a variety of entry-level positions in numerous digital design fields. Students attain knowledge and learn skills to seek careers in creative and support professions within such media industries as film and video, graphic design, production, game development, animation, and web design. Some of the careers available in media include: Production designer, camera operator, visual effects production, multimedia producer, duplication, production assistant, graphic artist, art assistant, web designer, and other emerging opportunities.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate professional design principles and practices.
- Plan, design, develop, and edit digital images and graphics.
- Plan, design, develop, and edit digital time-based media.
- Plan, design, develop, and edit interactive webpages.
- Work effectively as part of a design team.

## AWARD MAP

### Pathway Option

Career Pathway Certificate of Completion: Digital Interactive Foundations

Career Pathway Certificate of Completion: Digital Image Foundations

Certificate of Completion: Digital Design

Associate: CIS Digital Design

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART131	Introduction to Drawing I	3
CIS120	Concepts of Computing	4
CIS125PH	Computer Applications: Photoshop	3
DD160	Digital Design Orientation	3
<b>Credits</b>		<b>17</b>
<b>Winter</b>		
ART110	Digital Photography I	3
ART116	Basic Design II, Color Theory	4
CS195	Web Development I	3
DD235PH	Digital Design App: Photoshop	3
WR115	Fundamentals of Report Writing (or higher) <sup>1</sup>	4
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
ART117	Basic Design III, Intro to 3D Design	4
BA285	Human Relations in Organizations <sup>2</sup>	3
CIS125IL	Computer Applications: Illustrator	3
CIS125MA	Computer Applications: Maya	3
CS133WS	Computer Language I: Web Scripting	4
<b>Credits</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
ART210	Digital Photography II	3
BA150	Introduction to Entrepreneurship <sup>3</sup>	3
CIS125DW	Computer Applications: Dreamweaver	3
MTH60	Algebra I (or higher) <sup>7</sup>	4
<b>Credits</b>		<b>13</b>
<b>Winter</b>		
BA223	Principles of Marketing	4
DD250	Projects in Digital Media	3
DD280	CWE: Digital Design <sup>6</sup>	4
SP100	Basic Speech Communications <sup>8</sup>	3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
DD297	Digital Design Capstone	3
PE231	Wellness for Life <sup>5</sup>	3
Specific Elective <sup>6</sup>		6
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>90</b>

<sup>1</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.

<sup>2</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.

<sup>3</sup> CIS250 may be substituted for BA150

- <sup>5</sup> PE231, HE250 or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>6</sup> Specific Electives may be substituted: Any ART, BA,CS/CIS, or DD course not otherwise required within the degree; MTH course higher than MTH60.
- <sup>7</sup> MTH65, MTH95, MTH98, or higher, excluding MTH211, may be substituted for MTH60.
- <sup>8</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- \* All Honors courses may substitute for their equivalent requirements.

## DIGITAL DESIGN, CERTIFICATE OF COMPLETION

The Certificate of Completion Digital Design is designed to successfully prepare students for entry-level support positions in the expanding field of digital design through an integrated curriculum exposing students to design principles and technical strategies. Upon successful completion of the Certificate of Completion Digital Design, students are prepared for a variety of entry-level support positions in numerous digital design fields. Students attain knowledge and learn skills to seek careers in creative and support professions within such media industries as graphic design and web design.

### GRADUATION REQUIREMENTS

Students must complete a minimum of 52 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

### PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Create and edit digital images and graphics.
- Create and edit interactive webpages.
- Work effectively as part of a design team.
- Discuss professional design principles and practices.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

### PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4

ART131	Introduction to Drawing I	3
CIS125PH	Computer Applications: Photoshop	3
DD160	Digital Design Orientation	3
MTH60	Algebra I (or higher) <sup>1</sup>	4
<b>Credits</b>		<b>17</b>
<b>Winter</b>		
ART110	Digital Photography I	3
ART116	Basic Design II, Color Theory	4
CIS120	Concepts of Computing (or higher)	4
CS195	Web Development I	3
DD235PH	Digital Design App: Photoshop	3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
ART117	Basic Design III, Intro to 3D Design	4
BA285	Human Relations in Organizations <sup>2</sup>	3
CIS125IL	Computer Applications: Illustrator	3
CS133WS	Computer Language I: Web Scripting	4
WR115	Fundamentals of Report Writing (or higher) <sup>3</sup>	4
<b>Credits</b>		<b>18</b>
<b>Total Credits</b>		<b>52</b>

<sup>1</sup> MTH65, or higher, excluding MTH211, may be substituted for MTH60.

<sup>2</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.

<sup>3</sup> A higher writing course may be substituted excluding WR241, WR242, WR243, WR250.

\* All Honors courses may substitute for their equivalent requirements.

## DIGITAL IMAGE FOUNDATIONS, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Digital Image Foundations is designed to successfully prepare students for careers in the expanding fields of digital design and media productions through an integrated curriculum exposing students to design principles and technical strategies. The certificate provides foundational knowledge and skills that can qualify students for entry-level employment in digital graphics with organizations offering on-the-job training or qualify students for advancement within their current employment.

### GRADUATION REQUIREMENTS

Students must complete a minimum of 12 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Create and edit digital images and graphics.
- Discuss professional design principles and practices.
- Work effectively as part of a design team.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CIS125PH	Computer Applications: Photoshop	3
DD160	Digital Design Orientation	3
<b>Credits</b>		<b>6</b>
<b>Winter</b>		
DD235PH	Digital Design App: Photoshop	3
<b>Credits</b>		<b>3</b>
<b>Spring</b>		
CIS125IL	Computer Applications: Illustrator	3
<b>Credits</b>		<b>3</b>
<b>Total Credits</b>		<b>12</b>

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Create and edit interactive webpages.
- Discuss professional design principles and practices.
- Work effectively as part of a design team.

Program Guide

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CIS125DW	Computer Applications: Dreamweaver	3
CIS125PH	Computer Applications: Photoshop	3
<b>Credits</b>		<b>6</b>
<b>Winter</b>		
CS195	Web Development I	3
<b>Credits</b>		<b>3</b>
<b>Spring</b>		
CS133WS	Computer Language I: Web Scripting	4
<b>Credits</b>		<b>4</b>
<b>Total Credits</b>		<b>13</b>

# DIGITAL INTERACTIVE FOUNDATIONS, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Digital Interactive Foundations is designed to successfully prepare students for careers in the expanding fields of digital design and media productions through an integrated curriculum exposing students to design principles and technical strategies. The certificate provides foundational knowledge and skills that can qualify students for entry-level employment in interactive webpage design with organizations offering on-the-job training or qualify students for advancement within their current employment.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 13 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

# COMPUTER INFORMATION SYSTEMS, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science Computer Information Systems (AAS CIS) degree offers program courses focused on technical support in a networked environment. This degree prepares students for employment opportunities in the computer information services industry. The program offers students the opportunity to gain knowledge and hands-on experience to support an organization's information technology infrastructure. The CIS program additionally provides professional continuing education, classes and certificates for individuals working in the field or studying other disciplines.

Students completing the AAS CIS are prepared to seek entry-level employment and entrepreneurial occupations such as network administrator, systems administrator, support technician, and applications specialist/trainer.

Students planning to earn a bachelor's degree are responsible for researching the departmental requirements of the school to which they plan to transfer. Students planning to transfer may want to consider the AAOT, AGS or AS degree options.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 94 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. All courses must be completed with a grade of 'C' or better.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Demonstrate the skills and knowledge to install, configure, and maintain end-user computer systems and software
- Demonstrate the skills and knowledge to install, configure and maintain network servers.
- Demonstrate the ability to plan and implement both wired and wireless networks sufficient for home or small business use.
- Demonstrate basic ability to develop new products and services to meet the needs of a changing economy
- Apply project-life-cycle concepts to assist in business need solutions.
- Research, interpret and communicate technical information in written, graphic, diagrammatic, electronic and oral forms.
- Demonstrate the ability to work independently or in a group environment with sensitivity to the business and cultural needs.

## AWARD MAP

### Pathway Option

Career Pathway Certificate of Completion: Support Technician

Certificate of Completion: Computer Information Systems

Associate: Computer Information Systems

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CS160 or ENGR112	Computer Science Orientation or Engineering Computation	4
CIS151	Network Essentials	4
CIS185	Introduction To Cyber Security	3
MTH98	Math Literacy <sup>1</sup>	4
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CIS140U	Intro to Operating Systems: Unix	4
CIS145	Hardware Installation Support	4
CIS152	Network Routing & Switching Config	4
CS195	Web Development I	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BA285	Human Relations in Organizations <sup>2</sup>	3
CIS188	Wireless Networking	3
CIS225	End User Support	4
CS133WS	Computer Language I: Web Scripting	4
WR115	Fundamentals of Report Writing (or higher) <sup>3</sup>	4
<b>Credits</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
CIS285	Cyber Security Essentials	4
CS275	Database Management	4
PE231	Wellness for Life <sup>4</sup>	3
Specific Elective <sup>5</sup>		7
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
CIS279	Network Server Administration	4
CS244	Systems Analysis	3
SP100	Basic Speech Communications (or higher) <sup>6</sup>	3
Specific Elective <sup>5</sup>		3
<b>Credits</b>		<b>13</b>
<b>Spring</b>		
CIS280	CWE: Computer Information Systems <sup>7</sup>	4

CIS297	IT Professional Capstone	4
Specific Elective <sup>5</sup>		3
Specific Elective <sup>5</sup>		4
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>94</b>

<sup>1</sup> MTH95 or higher, excluding MTH211, may be substituted for MTH98.

<sup>2</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.

<sup>3</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.

<sup>4</sup> PE231, HE250 or three (3) credits of PE185 sport/activity courses will satisfy this requirement.

<sup>5</sup> Specific Electives: Any BA, CJ or CS/CIS course not required for the degree; WR227, MTH65, MTH95 or higher, ART225.

<sup>6</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.

<sup>7</sup> Call 541-888-7405 to schedule with Internship Coordinator one month prior to term.

\* All Honors courses may substitute for their equivalent requirements.

# COMPUTER SCIENCE, ASSOCIATE OF SCIENCE OREGON TRANSFER

Students having the Associate of Science Oregon Transfer Computer Science (ASOT-CS) degree recognized on an official college transcript will have met the lower division general education requirements of bachelor's degree programs of any Oregon public university.

Students transferring under this agreement will have junior status for registration purposes. Each student is encouraged to work with an advisor in the selection of courses within the ASOT-CS degree for alignment to the transferring institution. Courses, class standing or GPA requirements for specific majors, departments or schools are not necessarily satisfied by an ASOT-CS degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. All Honors courses may substitute for their equivalent requirements.

Courses that are developmental in nature (designed to prepare students for college transfer courses) are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## UNIVERSITY - SPECIFIC PREREQUISITES AND RECOMMENDATIONS

For specific university transfer requirements see the University Center.

## FOUNDATIONAL REQUIREMENTS

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

### WRITING

**Eight (8) credits** of writing are required, so choose **two (2) courses** from below:

Code	Title	Credits
WR121	English Composition	4
WR122	English Composition	4
or WR227	Report Writing	

*Note: Information Literacy is included through embedding the appropriate content and analytical activity in courses that count toward the writing Foundational Requirement.*

### MATHEMATICS

Code	Title	Credits
MTH251	Calculus I Differential Calculus	4
MTH252	Calculus II Integral Calculus	4

## COMMUNICATION

Select a **minimum of three (3) credits** of a fundamentals of speech or communication course.

Code	Title	Credits
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3

## HEALTH, WELLNESS, AND FITNESS

Three (3) credits of PE185 sport/activity courses, HE250 Personal Health or PE231 Wellness for Life.

## DISCIPLINE STUDIES REQUIREMENTS

### ARTS AND LETTERS

**Three (3) courses** chosen from **two (2) or more disciplines**:

*Only second year foreign language courses fulfill the Arts and Letters category.*

Code	Title	Credits
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART116	Basic Design II, Color Theory	4
ART117	Basic Design III, Intro to 3D Design	4
ART131	Introduction to Drawing I	3
ART132	Introduction to Drawing II	3
ART133	Introduction to Drawing III	3
ART191	Beginning Sculpture	3
ART192	Beginning Sculpture	3
ART204	History of Western Art: Introduction to Art History	3
ART205	History of Western Art: Introduction to Art History	3
ART206	History of Western Art: Introduction to Art History	3
ART225	Computer Art I	3
ART244	Bronze Casting	3
ART253	Ceramics I	3
ART256	Ceramics II	3
ART281	Painting I Beginning	3
ART282	Painting II Beginning	3
ART283	Painting III Beginning	3
ART284	Painting I Intermediate	3
ART285	Painting II Intermediate	3
ART286	Painting III Intermediate	3
ASL201	2nd Yr American Sign Language I	4
ASL202	2nd Yr American Sign Language II	4
ASL203	2nd Yr American Sign Language III	4
ENG104	Introduction to Literature Fiction	3
ENG105	Introduction to Literature Drama	3
ENG106	Introduction to Literature Poetry	3
ENG107	World Literature	3
ENG108	World Literature	3
ENG109	World Literature	3

ENG201	Shakespeare	3	CJ101	Intro to Criminology	4
ENG204	Survey of English Literature	3	ED169	Overview of Student Special Needs	3
ENG205	Survey of English Literature	3	ED258	Multicultural Education	3
ENG206	Survey of English Literature	3	GEOG105	Cultural Geography	3
ENG253	Survey of American Literature	3	HDFS140	Contemporary American Families	3
ENG254	Survey of American Literature	3	HDFS222	Understanding Families: Supporting Diversity	3
ENG255	Survey of American Literature	3		Disability and Risk	
HUM204	World Mythology & Religion	3	HDFS229	Child Development PreK - Adolescent	3
HUM205	World Mythology & Religion	3	HDFS247	Child Development 0-8	3
HUM206	World Mythology & Religion	3	HST101	History of Western Civilization	3
MUS101	Music Fundamentals	3	HST102	History of Western Civilization	3
MUS111	Music Theory I	3	HST103	History of Western Civilization	3
MUS112	Music Theory II	3	HST104	History of the Middle East	3
MUS113	Music Theory III	3	HST195	History of the Vietnam War	3
MUS201	Intro to Music and its Literature	3	HST201	History of the United States	3
MUS202	Intro to Music and its Literature	3	HST202	History of the United States	3
MUS203	Intro to Music and its Literature	3	HST203	History of the United States	3
MUS205	Intro to Jazz History	3	HST240	Hist of Oregon and the South Coast	3
MUS206	Intro to History of Rock and Roll	3	PS201	American Government: Political Institutions	3
MUS211	Advanced Music Theory I	3	PS202	American Government: Policy Issues	3
MUS212	Advanced Music Theory II	3	PS203	Local Politics and Government	3
MUS213	Advanced Music Theory III	3	PS205	International Relations: US Foreign Policy in the	3
PHL101	Introduction to Philosophy: Philosophical	3		20th Century	
	Problems		PSY100	Introduction to Psychology	4
PHL102	Ethics	3	PSY201	General Psychology	3
PHL103	Intro to Logic and Critical Thnkg	3	PSY202	General Psychology	3
SP100	Basic Speech Communications	3	PSY203	General Psychology	3
SP111	Fundamentals of Public Speaking	3	PSY216	Social Psychology	3
SP218	Interpersonal Communication	3	PSY228	Introduction to Social Science Research	3
SP219	Small Group Discussion	3	PSY231	Human Sexuality	3
SP220	Gender and Communication	3	PSY237	Life Span Development	3
SPAN201	Second Year Spanish	4	PSY239	Introduction to Abnormal Psychology	3
SPAN202	Second Year Spanish	4	PSY243	Drugs and Behavior	3
SPAN203	Second Year Spanish	4	SOC204	Introduction to Sociology	3
WR241	Imaginative Creative Writing Fiction	3	SOC205	Social Institutions and Change	3
WR242	Imaginative Writing Poetry	3	SOC206	Social Problems and Issues	3
WR243	Imaginative Writing Explorations	3	SOC208	Sociology of Sport	3
			SOC210	Marriage and Family	3
			SOC213	Racial and Ethnic Relations	3
			SOC218	Sociology of Gender	3

## SOCIAL SCIENCES

Two (2) courses chosen from two (2) or more disciplines:

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3
ANTH230	Native North Americans: Oregon	3
ANTH231	Native North Americans: PNW	3
ANTH232	Native North Americans	3

## SCIENCE/MATHEMATICS/COMPUTER SCIENCE

Four (4) courses from two (2) or more disciplines, including at least three (3) laboratory courses in biological and/or physical science:

### Laboratory Courses

Code	Title	Credits
BI101	General Biology	4
BI102	General Biology	4
BI103	General Biology	4
BI142	Habitats: Marine Biology	4
BI201	Introductory Biology	4

BI202	Introductory Biology	4
BI203	Introductory Biology	4
BI231	Human Anatomy and Physiology I	4
BI232	Human Anatomy and Physiology II	4
BI233	Human Anatomy and Physiology III	4
BI234	Microbiology	4
CHEM221	General Chemistry I	5
CHEM222	General Chemistry II	5
CHEM223	General Chemistry III	5
ENV235	Introduction to Soil Science	4
G201	Physical Geology I	4
G202	Physical Geology II	4
G203	Historical Geology	4
GS104	Physical Science	4
GS105	Physical Science	4
GS106	Introduction to Earth Science	4
GS107	Astronomy	4
GS108	Oceanography	4
PH201	General Physics I: Mechanics	5
PH202	General Physics II: Heat, Waves, Relativity	5
PH203	Gen Physics III: Elect & Magnetism	5
PH211	General Physics with Calculus I	5
PH212	General Physics with Calculus II	5
PH213	General Physics with Calculus III	5

### Non-Laboratory Courses

Code	Title	Credits
BI140	Practical Ecology	3
BI149	Introduction to Human Genetics	3
CHEM110	Foundations of General, Organic, and Biochemistry	4
ENV110	Introduction Environmental Science	3
G221	General Geology	3
G246	Geological Hazards And Natural Catastrophes	3
MTH105	Math in Society	4
MTH111	College Algebra	4
MTH112	Trigonometry	4
MTH212	Fundamentals of Elementary Mathematics II	4
MTH213	Fundamentals of Elementary Mathematics III	4
MTH231	Elements of Discrete Mathematics I	4
MTH232	Elements of Discrete Mathematics II	4
MTH241	Calculus for Bus and Soc Science I	4
MTH242	Calculus for Bus and Soc Science II	4
MTH243	Intro to Probability and Statistics	4
MTH244	Probability & Statistics II	4
MTH253	Calculus III Infinite Sequences And Series	4
MTH254	Vector Calculus I	4
MTH255	Vector Calculus II	4
MTH256	Differential Equations	4
MTH260	Matrix Methods and Linear Algebra	4
MTH264	Introduction to Matrix Algebra and Power Series	4

## COMPUTER SCIENCE - SPECIFIC REQUIRED COURSES

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

Code	Title	Credits
CS160	Computer Science Orientation	4
CS161	Introduction to Computer Science I	4
CS162	Introduction to Computer Science II	4
CS261	Data Structures	4
ECON201	Microeconomics	4
ECON202	Macroeconomics	4

## ELECTIVES

- Students may take any college-level course that would bring total credits to 90 including up to 12 credits of college-designated career and technical education. Eight to nine (8-9) credits, depending on choice of transfer institution.
- All courses must be completed with a grade of 'C' or better.
- A maximum of nine (9) credits of PE185 sport/activity courses may be applied to the ASOT-CS degree.
- Three (3) credit hours of PE185 sport/activity courses may be granted toward the ASOT-CS for completion of military basic training. A copy of the military transcript or DD-214 is required.
- Courses numbered 199/299 will qualify as elective credit only.
- A maximum of 45 credits is allowed for basic, developmental, or supportive courses under federal financial aid guidelines.

## CULTURAL LITERACY

Students are required to complete at least one (1) course from any of the above discipline studies that meets the statewide criteria for cultural literacy. SWOCC offers these courses that satisfy the Cultural Literacy requirement.

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3
ANTH230	Native North Americans: Oregon	3
ANTH231	Native North Americans: PNW	3
ANTH232	Native North Americans	3
ED258	Multicultural Education	3
ENG107	World Literature	3
ENG108	World Literature	3
ENG109	World Literature	3
GEOG105	Cultural Geography	3
HDFS140	Contemporary American Families	3

HUM204	World Mythology & Religion	3
HUM205	World Mythology & Religion	3
HUM206	World Mythology & Religion	3
HST104	History of the Middle East	3
MUS205	Intro to Jazz History	3
MUS206	Intro to History of Rock and Roll	3
PSY216	Social Psychology	3
PSY231	Human Sexuality	3
SOC208	Sociology of Sport	3
SOC210	Marriage and Family	3
SOC213	Racial and Ethnic Relations	3
SOC218	Sociology of Gender	3
SP220	Gender and Communication	3

# CRIMINAL JUSTICE, ASSOCIATE OF SCIENCE

The Associate of Science (AS) Criminal Justice degree is designed for students who plan to transfer and complete a bachelor's degree in criminal justice (or a related field) at specific four-year institutions. It may also be earned as a stand-alone degree for current criminal justice employees or for students who plan to apply for work after the completion of the two-year degree. This degree will satisfy most of the lower division requirements of transfer institutions.

The AS Criminal Justice is articulated with Southern Oregon University (SOU) Bachelor of Science degree in Criminology and Criminal Justice. Students following this program of study will have met SOU's lower-division general education requirements, will be assured junior standing within the academic major, and will be eligible for admission to the Criminology and Criminal Justice major. The agreement is based on the evaluation of the rigor and content of the general education and technical courses at both Southwestern and SOU and is subject to a yearly re-evaluation by both schools for continuance.

Students should contact the SOU Department of Criminology and Criminal Justice 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.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 99 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Identify the characteristics of professional integrity and ethical standards for Oregon criminal justice professionals.
- Describe and relate the constitutional rights and responsibilities of citizens, offenders, and victims as they apply to state, federal, and procedural laws.
- Describe the processes and technology used to gather, investigate, manage, and report information in the criminal justice field.
- Identify the legal responsibilities of criminal justice professionals as they relate to cultural diversity and establishing positive community relationships.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process.

Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CJ100	Intro to Criminal Justice	4
SOC204	Introduction to Sociology <sup>1</sup>	3
SP111	Fundamentals of Public Speaking <sup>2</sup>	3
WR121	English Composition	4
Math/Science/Computer Science <sup>3</sup>		4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
CJ101	Intro to Criminology	4
CJ110	Intro to Policing	4
SOC205	Social Institutions and Change <sup>1</sup>	3
WR122	English Composition	4
Math/Science/Computer Science <sup>3</sup>		4
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
CJ220	Introduction to Criminal Law	4
MTH105	Math in Society (or higher) <sup>7</sup>	4
SOC206	Social Problems and Issues <sup>1</sup>	3
WR227	Report Writing	4
Math/Science/Computer Science <sup>3</sup>		4
<b>Credits</b>		<b>19</b>
<b>Second Year</b>		
<b>Fall</b>		
CJ226	Constitutional Law	4
MTH243	Intro to Probability and Statistics	4
PS201	American Government: Political Institutions	3
or PS202	or American Government: Policy Issues	
or PS203	or Local Politics and Government	
or PS205	or International Relations: US Foreign Policy in the 20th Century	
Health, Wellness, and Fitness <sup>4</sup>		1
Arts and Letters <sup>5</sup>		3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CIS120	Concepts of Computing	4
CJ130	Corrections	4
Health, Wellness, and Fitness <sup>4</sup>		1
Arts and Letters <sup>5</sup>		3
Specific Elective <sup>6</sup>		3-4
<b>Credits</b>		<b>15-16</b>
<b>Spring</b>		
CJ247	Ethics in Criminal Justice	3
Health, Wellness, and Fitness <sup>4</sup>		1
Arts and Letters <sup>5</sup>		3

Specific Elective <sup>6</sup>	6-8
<b>Credits</b>	<b>13-15</b>
<b>Total Credits</b>	<b>99-102</b>

- <sup>1</sup> Recommend SOC204, SOC205, or SOC206. May use any ANTH, HST, SOC, PSY, except 180/280 courses, BA101, CJ201, ECON201, ECON202, ED258, GEOG105, HDFS140, HDFS222, HDFS229, HDFS247, HE250, PE231, PS201, PS202, PS203, PS205 will also satisfy this requirement.
- <sup>2</sup> SP111, SP218, SP219 will satisfy this requirement.
- <sup>3</sup> Math/Science/Computer Science: Refer to Associate of Science (p. 34) Degree Requirement (p. 34) Science/Mathematics/Computer Science course list. At least two of the courses must have labs.
- <sup>4</sup> HE250, PE231 or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>5</sup> Arts and Letters: Refer to Associate of Science (p. 34) Degree Requirements.
- <sup>6</sup> Specific Electives: Any course in CJ, EM, or HD will satisfy this requirement.
- <sup>7</sup> MTH105 Math in Society or higher, excluding MTH211.
- \* All Honors courses may substitute for their equivalent requirements.

# CULINARY ARTS, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Culinary Arts program offers chef training (basic and advanced) as well as restaurant management skills. After studying the fundamentals of classical and contemporary cuisine and restaurant procedures, students will develop advanced skills in *garde manger* and *a la carte* cooking. Students have the opportunity to choose between a local or distant externship during their final term in the program. The graduate will have the necessary training to work in a variety of culinary positions such as sous chef, garde manger, kitchen supervisor, and restaurant manager.

Oregon Coast Culinary Institute (OCCI) at Southwestern was granted accreditation by the American Culinary Federation (ACF). This accreditation is the highest level available for initial accreditation by the ACF – the premier professional chefs' organization in North America, focusing its efforts on offering education, apprenticeship and industry certification. With the ACF accreditation, OCCI's graduates can gain the title of certified culinarian upon graduation, along with their associate's degrees.

## ENTRY REQUIREMENTS

For application and fee information, contact OCCI Admissions at 541-888-7195.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 91 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Demonstrate understanding of safety and sanitation knowledge through application in the kitchen environment in areas of food handling and kitchen equipment use, including knife handling skills.
- Demonstrate food preparation foundations through applications of basic cooking methods in the areas of the hot kitchen, cold kitchen, and pastry.
- Become familiar with regional and international cuisines through a learned appreciation of native products, flavors and techniques.
- Understand key elements of successfully operating food service establishments by utilizing concepts of nutrition, safe and profitable menu and restaurant design, and further applying critical thinking through food costing, purchasing and receiving, and supervisory management concepts.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking

the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CRT2000	Introduction Professional Cooking	5
CRT2001	Basic Food Preparation	6
CRT2002	Intro Food and Beverage Industry	1
CRT2015	Sanitation and Safety for Managers	3
CRT2039	Prof Pres for the Culinary Wrkfrc <sup>1</sup>	3
MTH81	Applied Mathematics for Culinary Arts <sup>5</sup>	4
<b>Credits</b>		<b>22</b>
<b>Winter</b>		
CRT2003	Baking and Pastry for Culinary Arts	6
CRT2005	Menu Planning and Design	1
CRT2007	Inventory Control and Purchasing	1
CRT2016	Culinary Nutrition <sup>2</sup>	3
CRT2050	Regional and International Cuisine	6
CIS120	Concepts of Computing	4
<b>Credits</b>		<b>21</b>
<b>Spring</b>		
CRT2012	A La Carte I	6
CRT2013	A La Carte II	6
CRT2017	Restaurant Management Supervision	3
CRT2018	Culinary Arts Career Planning	1
WR115	Fundamentals of Report Writing <sup>3</sup>	4
<b>Credits</b>		<b>20</b>
<b>Second Year</b>		
<b>Summer</b>		
CRT2004	Introduction Vineyards and Beverage	2
CRT2006	Restaurant Layout and Design	2
CRT2060	Garde Manger	8
HE250	Personal Health <sup>4</sup>	3
CRT2038	Applied Visual Principles	1
<b>Credits</b>		<b>16</b>
<b>Fall</b>		
CRT280C2	CWE: Culinary Arts	12
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>91</b>

<sup>1</sup> SP111, SP218, SP219 may be substituted for CRT2039.

<sup>2</sup> FN225 may be substituted for CRT2016.

<sup>3</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.

<sup>4</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.

<sup>5</sup> MTH95 or higher, excluding MTH211, may substitute for MTH81.

\* All Honors courses may substitute for their equivalent requirements.

# CULINARY ARTS, CERTIFICATE OF COMPLETION

The Certificate of Completion Culinary Arts program prepares students for the culinary world by offering chef training (basic and advanced) as well as restaurant management skills without the 17 academic credits. After studying the fundamentals of classical and contemporary cuisine and restaurant procedures, students will develop advanced skills in *garde manger* and *a la carte* cooking. The graduate will have the necessary training to work in a variety of entry-level cooking positions such as prep cook and line cook.

## ENTRY REQUIREMENTS

For application and fee information, contact OCCI Admissions at 541-888-7195.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 73 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses in the program must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Demonstrate understanding of safe and effective kitchen equipment use and maintenance.
- Demonstrate expert-level operation of professional kitchen tools and equipment.
- Demonstrate knife skills, knife sharpening techniques, handling a steel, and cutting techniques.
- Understand the basic principles for using seasoning and flavoring to create good tasting food.
- Obtain ServSafe Certification.
- Demonstrate food preparation for the following cooking methods - saute, broil, grill, braise, deep and stir fry, and poach.
- Become familiar with regional and international cuisine. Develop an appreciation for native products, herbs, and foods.
- Understand the basic principles of emulsification and all aspects of the elements of cold food pantry.
- Describe and apply the principles of nutrition to maximize nutrient retention in food preparation.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CRT2000	Introduction Professional Cooking	5

CRT2001	Basic Food Preparation	6
CRT2002	Intro Food and Beverage Industry	1
CRT2015	Sanitation and Safety for Managers	3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CRT2003	Baking and Pastry for Culinary Arts	6
CRT2005	Menu Planning and Design	1
CRT2007	Inventory Control and Purchasing	1
CRT2016	Culinary Nutrition <sup>1</sup>	3
CRT2050	Regional and International Cuisine	6
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
CRT2012	A La Carte I	6
CRT2013	A La Carte II	6
CRT2017	Restaurant Management Supervision	3
CRT2018	Culinary Arts Career Planning	1
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Summer</b>		
CRT2004	Introduction Vineyards and Beverage	2
CRT2006	Restaurant Layout and Design	2
CRT2038	Applied Visual Principles	1
CRT2060	Garde Manger	8
<b>Credits</b>		<b>13</b>
<b>Fall</b>		
CRT280C2	CWE: Culinary Arts	12
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>73</b>

<sup>1</sup> FN225 may be substituted for CRT2016.

# CULINARY MANAGEMENT, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Culinary Management program offers chef training (basic and advanced) as well as restaurant management skills. After studying the fundamentals of classical and contemporary cuisine and restaurant procedures, students will develop advanced skills in *garde manger* and *a la carte* cooking. Students will have the opportunity to choose between a local or distant externship during their final term in the program. The graduate will have the necessary training to work in a variety of culinary positions such as sous chef, garde manger, kitchen supervisor, and restaurant manager.

Oregon Coast Culinary Institute (OCCI) at Southwestern was granted accreditation by the American Culinary Federation (ACF). This accreditation is the highest level available for initial accreditation by the ACF – the premier professional chefs' organization in North America – focusing its efforts on offering education, apprenticeship and industry certification. With the ACF accreditation, OCCI's graduates can apply for the title of certified culinarian upon graduation, along with their associate's degrees. This degree utilizes the same curriculum as the Culinary Arts degree, except that during the final terms the Culinary Management student will take up to an additional 27 academic credits. This will allow the student to transfer into the Bachelor of Applied Science in Hospitality and Tourism at Southern Oregon University. With this degree, the student will transfer to Southern Oregon University with junior standing for registration purposes.

## ENTRY REQUIREMENTS

For application and fee information, contact OCCI Admissions at 541-888-7195.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 107 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Demonstrate understanding of safe and effective kitchen equipment use and maintenance.
- Demonstrate expert-level operation of professional kitchen tools and equipment.
- Demonstrate knife skills, knife sharpening techniques, handling a steel, and cutting techniques.

- Understand the basic principles for using seasoning and flavoring to create good tasting food.
- Obtain ServSafe Certification.
- Demonstrate food preparation for the following cooking methods - saute, broil, grill, braise, deep and stir fry, and poach.
- Understand basic principles of baking through formulas and measurement, mixing and gluten development and the baking process.
- Prepare a variety of pastry products.
- Become familiar with regional and international cuisine. Develop an appreciation for native products, herbs, and foods.
- Understand the basic principles of emulsification and all aspects of the elements of cold food pantry.
- Utilize concept of menu planning, cost control, purchasing, receiving, quality standards, profit, and staffing costs.
- Describe and apply the principles of nutrition to maximize nutrient retention in food preparation.
- Demonstrate supervisory skills and abilities utilizing critical-thinking skills.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CRT2000	Introduction Professional Cooking	5
CRT2001	Basic Food Preparation	6
CRT2002	Intro Food and Beverage Industry	1
CRT2015	Sanitation and Safety for Managers	3
CRT2039	Prof Pres for the Culinary Wrkfr <sup>1</sup>	3
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
CRT2003	Baking and Pastry for Culinary Arts	6
CRT2005	Menu Planning and Design	1
CRT2007	Inventory Control and Purchasing	1
CRT2016	Culinary Nutrition <sup>2</sup>	3
CRT2050	Regional and International Cuisine	6
CIS120	Concepts of Computing	4
<b>Credits</b>		<b>21</b>
<b>Spring</b>		
CRT2012	A La Carte I	6
CRT2013	A La Carte II	6
CRT2017	Restaurant Management Supervision	3
CRT2018	Culinary Arts Career Planning	1
<b>Credits</b>		<b>16</b>

**Second Year****Summer**

CRT2004	Introduction Vineyards and Beverage	2
CRT2006	Restaurant Layout and Design	2
CRT2038	Applied Visual Principles	1
CRT2060	Garde Manger	8
HE250	Personal Health	3

---

<b>Credits</b>	<b>16</b>
----------------	-----------

**Fall**

CRT280C1	CWE: Culinary Arts	6
BA211	Principles of Accounting I	4
ECON201	Microeconomics	4
WR121	English Composition	4

---

<b>Credits</b>	<b>18</b>
----------------	-----------

**Winter**

CRT280C1	CWE: Culinary Arts	6
ECON202	Macroeconomics	4
MTH243	Intro to Probability and Statistics	4
WR122	English Composition	4

---

<b>Credits</b>	<b>18</b>
----------------	-----------

---

<b>Total Credits</b>	<b>107</b>
----------------------	------------

<sup>1</sup> SP111, SP218, SP219 may be substituted for CRT2039.

<sup>2</sup> FN225 may be substituted for CRT2016.

\* All Honors courses may be substituted for their equivalent requirements.

# DATA CENTER TECHNICIAN, CERTIFICATE OF COMPLETION

A data center technician installs, maintains, and repairs a data center's computer and network systems. Students completing this one-year certificate are fully prepared for employment in this rapidly-growing industry.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 46 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Apply technical skills to implement and maintain computer and network systems solutions and troubleshoot computer and network problems on an entry-level
- Demonstrate a basic knowledge of computer information systems.
- Demonstrate the ability to work independently or in a group environment with sensitivity to the needs of customers and coworkers.
- Demonstrate the skill and knowledge to install, configure and maintain PC and server hardware/software in a network environment.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CIS151	Network Essentials	4
CS160	Computer Science Orientation	4
MTH86	Computer Technology Mathematics <sup>1</sup>	4
WR115	Fundamentals of Report Writing <sup>2</sup>	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
CIS152	Network Routing & Switching Config	4
CIS140U	Intro to Operating Systems: Unix	4
CIS145	Hardware Installation Support	4
CIS279	Network Server Administration	4
<b>Credits</b>		<b>16</b>

<b>Spring</b>		
CIS225	End User Support	4
CS133WS	Computer Language I: Web Scripting	4
BA285	Human Relations in Organizations	3
SP218	Interpersonal Communication	3
<b>Credits</b>		<b>14</b>
<b>Total Credits</b>		<b>46</b>

<sup>1</sup> MTH105 or higher, excluding MTH211, may be substituted for MTH86.

<sup>2</sup> A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.

<sup>3</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.

\* All Honors courses may be substituted for their equivalent requirements.

# DENTAL ASSISTING, CERTIFICATE OF COMPLETION

The Certificate of Completion Dental Assisting is a three-term certificate that prepares students to meet the requirements to become a dental assistant with expanded functions (EFDA). Upon completion, students are eligible to sit for the Dental Assisting National Board (DANB) exams: National Entry-Level Dental Assisting (NELDA) exam, the Radiation Health and Safety (RHS) exam, and the Infection Control Exam (ICE). The curriculum is based on general dentistry. Students are trained in four-handed chairside assisting techniques to work with general dentists during all phases of examination and treatment. Students also gain experience in the administrative aspects of dentistry such as scheduling, patient communication, charting and billing. Curriculum is derived from identified learning outcomes relevant to the discipline.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Student entering this program must obtain certification through the American Heart Association in cardiopulmonary resuscitation (CPR) as per the Oregon Health Authority requirements (Chapter 409, Division 30 <https://secure.sos.state.or.us/oard/displayChapterRules.action?selectedChapter=34>). Additionally, specific immunizations, drug screening, and background checks are required.

For more information go to myLakerLink at [https://mylakerlink.socc.edu/ICS/Admissions/Program\\_Specific\\_Forms.jnz](https://mylakerlink.socc.edu/ICS/Admissions/Program_Specific_Forms.jnz).

## GRADUATION REQUIREMENTS

Students must complete a minimum of 53 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Demonstrate an understanding of dental instruments and terminology.
- Demonstrate general chairside skills.
- Demonstrate radiographic proficiency.
- Demonstrate an understanding of legal and ethical issues in dentistry.
- Demonstrate proficiency in infection control techniques.
- Demonstrate occupational safety skills.
- Demonstrate patient education and management skills.

- Demonstrate administrative office skills.
- Demonstrate laboratory skills.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
AH111	Medical Terminology I	3
DEN101	Dental Assisting I <sup>1,3</sup>	4
DEN102	Infection Control	2
DEN103	Introduction to Dental Assisting Seminar	1
DEN114	Dental Admin & Legal and Ethical	4
WR115	Fundamentals of Report Writing <sup>2</sup>	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
DEN104	Dental & Medical Emergency Mngmt	2
DEN105	Dental Materials	2
DEN107	Practicum in Dental Assisting I <sup>1</sup>	4
DEN110	Dental Radiology	4
MTH60	Algebra I <sup>4</sup>	4
DEN280	CWE: Dental Assisting <sup>1</sup>	2
<b>Credits</b>		<b>18</b>
<b>Spring</b>		
DEN109	Dental Assisting II <sup>1</sup>	4
DEN111	Practicum in Dental Assisting II	4
DEN112	Chairside Assisting	2
DEN113	Expanded Functions Dental Assistant	2
DEN280	CWE: Dental Assisting <sup>1</sup>	2
BA285	Human Relations in Organizations	3
<b>Credits</b>		<b>17</b>
<b>Total Credits</b>		<b>53</b>

<sup>1</sup> This course has Oregon Health Authority requirements, (Chapter 409, Division 30 <https://secure.sos.state.or.us/oard/displayChapterRules.action?selectedChapter=34>) such as immunizations, drug screen, criminal background check, American Heart Association CPR/BLS card, OSHA/HIPAA trainings, program policies, etc. Students must meet the Oregon Health Authority requirement before they can register for DEN101, DEN107, DEN111, and DEN280.

<sup>2</sup> WR121, WR122, WR123, or WR227 may be substituted for WR115.

<sup>3</sup> Students are required to obtain an American Heart Association BLS CPR/First Aid certification or equivalent before students can register for DEN 101. For more information, contact the Administrative Assistant, Sumner Hall, room 4, 541-888-7443, or at [jstalcup@socc.edu](mailto:jstalcup@socc.edu).

- <sup>4</sup> MTH65 or higher, excluding MTH211, may be substituted for MTH60.
- \* All Honors courses may substitute for their equivalent requirements.

# ELECTRICAL/COMPUTER ENGINEERING, ASSOCIATE OF SCIENCE

The Associate of Science (AS) in Electrical/Computer Engineering degree will provide fundamental engineering skills in circuit analysis and design, computer programming, engineering problem solving, and an understanding of the professional expectations and ethics of engineering. This program provides a two year foundation for transfer into a four year program in electrical or computer engineering. This degree was designed to transfer to Oregon Institute of Technology's College of Engineering or Oregon State University's College of Engineering. Please consult your advisor for details.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 105 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree. Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## LEARNING OUTCOMES

- Students will demonstrate the ability to solve engineering problems using a variety of mathematical and computational methods.
- Students will learn and apply the required ethics expected in a professional engineering setting.
- Students will gain a fundamental understanding of electrical concepts and will be able to apply analysis techniques to electric circuits of varying complexity.
- Students will gain familiarity with transient analysis of circuits with time varying voltage and/or current sources including Fourier and Laplace analysis.
- Students will design and test electric circuits for practical applications.
- Students will be able to communicate designs and results effectively.
- Students will demonstrate an ability to function in interdisciplinary teams.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PRE-PROGRAM COURSES

Students are required to take the following courses *prior to* the program courses, depending on students' college placement information. See advisor for details:

Code	Title	Credits
CS160	Computer Science Orientation (or higher)	4

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ENGR111	Intro to Engineering	3
CHEM221	General Chemistry I	5
MTH251	Calculus I Differential Calculus	4
WR121	English Composition	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
MTH252	Calculus II Integral Calculus	4
ENGR112	Engineering Computation	4
SP111	Fundamentals of Public Speaking	3
CS161	Introduction to Computer Science I <sup>5</sup>	4
Social Science <sup>1</sup>		3
<b>Credits</b>		<b>18</b>
<b>Spring</b>		
BI103	General Biology <sup>2</sup>	4
WR227	Report Writing	4
CS162	Introduction to Computer Science II	4
MTH264	Introduction to Matrix Algebra and Power Series <sup>6</sup>	4
Cultural Diversity <sup>3</sup>		3
<b>Credits</b>		<b>19</b>
<b>Second Year</b>		
<b>Fall</b>		
MTH254	Vector Calculus I	4
PH211	General Physics with Calculus I	5
CS261	Data Structures	4
ENGR201	Electrical Fundamentals I	4
<b>Credits</b>		<b>17</b>
<b>Winter</b>		
MTH255	Vector Calculus II	4
PH212	General Physics with Calculus II	5
ENGR202	Electrical Fundamentals II	4
PE231	Wellness for Life <sup>4</sup>	3
Arts & Letters <sup>1</sup>		3
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
PH213	General Physics with Calculus III	5
ENGR203	Electrical Fundamentals III	4
MTH256	Differential Equations	4
Arts & Letters <sup>1</sup>		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>105</b>

<sup>1</sup> Select appropriate course in specific subject area from the course listed in AS Social Science or Arts and Letters (p. 34) category.

- <sup>2</sup> BI101, BI102, BI103, BI201, BI202, BI203, BI234, ENV235, F250 may be substituted. Transfer to OIT for Civil Engineering should substitute G201.
- <sup>3</sup> Cultural Diversity: ANTH224, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206 will satisfy this requirement.
- <sup>4</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>5</sup> CS161 may require instructor consent to register, talk to your advisor for details.
- <sup>6</sup> MTH253 may be substituted for MTH264, students transferring to Oregon Institute of Technology and Portland State University must take MTH253.
- \* All Honors courses may substitute for their equivalent requirements.

# ELEMENTARY EDUCATION, ASSOCIATE OF ARTS OREGON TRANSFER

The Associate of Arts Oregon Transfer Elementary Education (Elementary Education AAOT) is a prescriptive degree that identifies the optimal and specific set of community college courses students need to take to transfer efficiently into an Elementary Education program at Oregon universities. It is important to note the AAOT 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.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours. All courses must be completed with a grade of 'C' or better. Students must have a cumulative GPA of 2.0 at the time the AAOT is awarded. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Students must successfully complete the following courses from the list of approved general education courses for the AAOT degree and a number of elective credits.

Students may take any college-level course that would bring total credits to 90 quarter hours, including up to 12 credits of college-designated career and technical education (CTE) courses. Note: Some courses are considered career technical courses and have limitations within this degree, they are designated with "CTE" in the Course Description area of this catalog. A maximum of nine (9) credits of PE185 sport/activity courses may be applied to the AAOT degree. All Honors courses may substitute for their equivalent requirements.

Courses that are developmental in nature (designed to prepare students for college transfer courses) are not applicable to this degree.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## STUDENT LEARNING OUTCOMES

Student learning outcomes for this degree can be found by clicking here (p. 146).

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
GEOG105	Cultural Geography <sup>3</sup>	3
PS201	American Government: Political Institutions	3

WR121	English Composition	4
Biological Lab Science <sup>1</sup>		4
<b>Credits</b>		<b>14</b>
<b>Winter</b>		
HDFS247	Child Development 0-8	3
HST201	History of the United States	3
or HST202	or History of the United States	
or HST203	or History of the United States	
WR122	English Composition	4
PSY201	General Psychology	3
or PSY202	or General Psychology	
ED101P	Practicum: Ed Pre-K <sup>5</sup>	1
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
HE250	Personal Health	3
or PE231	or Wellness for Life	
Lab Science <sup>1</sup>		4
Elective <sup>6</sup>		3
Elective <sup>6</sup>		4
ED101K	Practicum: Grade K-3 <sup>5</sup>	1
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ED169	Overview of Student Special Needs	3
ED216	Introduction To Education	3
MTH211	Fundamentals of Elementary Mathematics I <sup>2</sup>	4
ART131	Introduction to Drawing I	3
or ART115	or Basic Design I Intro to Elements of Art and Principles of Design	
Elective <sup>9</sup>		3
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
MTH212	Fundamentals of Elementary Mathematics II	4
ED258	Multicultural Education	3
ED101U	Practicum: Grade 3-6	1
Lab Science <sup>1</sup>		4
Elective <sup>9</sup>		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
MTH213	Fundamentals of Elementary Mathematics III	4
ENG104	Introduction to Literature Fiction	3
or ENG105	or Introduction to Literature Drama	
or ENG106	or Introduction to Literature Poetry	
SP111	Fundamentals of Public Speaking	3
Arts & Letters <sup>3</sup>		3
Elective <sup>9</sup>		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>90</b>

- <sup>1</sup> Science options: 3 sciences are required, and must include a biology and an earth science with a lab. Biological science options include: BI101, BI102, BI103, BI201, BI202, BI203. Earth science options include: GS104, GS105, GS106, GS107, GS108. Third option includes: PH201, PH202, PH203, CHEM221, CHEM222, CHEM223 or any other science listed here.
- <sup>2</sup> Prerequisite is MTH95. MTH211, MTH212, MTH213 are offered every other year, beginning in 21-22 school year. Consult your advisor for details.
- <sup>3</sup> ANTH221 may be substituted for GEOG105.
- <sup>4</sup> Any course from the AAOT Arts & Letters Discipline list (p. 27).
- <sup>5</sup> ED101P Practicum: Ed Pre-K, ED101K Practicum: Grade K-3, or ED101U Practicum: Grade 3-6 will satisfy this requirement, depending on Practicum placement. Practicums have specific requirements; please call 541-888-1575 to make an appointment with the program coordinator to schedule site two months prior to term. Students interested in Early Intervention may be placed in an appropriate site. Credits may be taken in any term dependent upon availability.
- <sup>6</sup> Free Electives to reach 90 credits. Recommended Electives: ED135, ED134, ECE150, ED154, ECE151, ECE154, HDFS140, HDFS229, HDFS222 (Up to 12 credit of CTE courses are allowable). ED201 and ED202 are required for students transferring to SOU. See an advisor for specific university requirements.
- \* All Honors courses may substitute for their equivalent requirements.

# ELEMENTARY EDUCATION, ASSOCIATE OF SCIENCE

Southwestern and Southern Oregon University (SOU) have partnered to create a seamless pathway for earning an elementary teaching license on the South Coast! Southwestern's Associate of Science (AS) in Elementary Education prepares students to directly transfer into This degree is articulated with SOU's BA/BS degree programs in Education Studies. This associate's degree establishes a strong foundation in early education, and will also benefit students that are interested in pursuing a career as instructional assistants in elementary school settings.

The AS in Elementary Education includes foundational courses, professional education courses, specific general education courses, as well as field experiences to prepare graduates to enter most elementary education degree programs. This degree meets all of the requirements of an Associate of Arts Oregon Transfer (AAOT) degree and is articulated with SOU's Bachelor of Science (BS) in Elementary Education program. Students choosing to transfer to SOU's program will have junior standing.

For further information about SOU's degree programs contact the SOU Education Department.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 91 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will:

- Develop professional knowledge of theory and pedagogy appropriate for pre-kindergarten, elementary, and middle-level school settings.
- Reflect on the scope and role of public education in American life.
- Describe and apply child development principles in planning lessons for children from pre-Kindergarten through early adolescence.
- Build background knowledge in content disciplines for teaching in pre-Kindergarten through middle-level grade settings.
- Gain experience in pre-Kindergarten through middle-level education settings via practicum and course assignments.
- Demonstrate the completion of foundational student learning outcomes required for the AAOT degree.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more

information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
GEOG105	Cultural Geography	3
SP111 or SP219	Fundamentals of Public Speaking or Small Group Discussion	3
WR121	English Composition	4
Biological Lab Science <sup>1</sup>		4
Elective <sup>9</sup>		2
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
HDFS247	Child Development 0-8	3
WR122	English Composition	4
Literature <sup>4</sup>		3
History <sup>5</sup>		3
Social Science <sup>6</sup>		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
ED154	Children's Literature	4
HE250 or PE231	Personal Health or Wellness for Life	3
ED101P	Practicum: Ed Pre-K <sup>8</sup>	1
Lab Science <sup>3</sup>		4
Literature <sup>4</sup>		3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ED169	Overview of Student Special Needs	3
ED216	Introduction To Education	3
ED135	Teaching Math to Young Children	3
MTH211	Fundamentals of Elementary Mathematics I <sup>2</sup>	4
Art & Music Appreciation <sup>7</sup>		3
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
ED202	Art Education for Elementary Ed	3
MTH212	Fundamentals of Elementary Mathematics II	4
ED258	Multicultural Education	3
ED101U	Practicum: Grade 3-6 <sup>8</sup>	1
Lab Science <sup>3</sup>		4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
ED201	Music Education for Elementary Ed <sup>7</sup>	3
MTH213	Fundamentals of Elementary Mathematics III	4
ED134	Children Who are Dual Lang Learners	2
ED101K	Practicum: Grade K-3 <sup>8</sup>	1

Elective <sup>9</sup>	3
<b>Credits</b>	<b>13</b>
<b>Total Credits</b>	<b>91</b>

- <sup>1</sup> Biological Science options: BI101, BI102, BI103, BI201, BI202, BI203 will satisfy this requirement.
- <sup>2</sup> Prerequisite is MTH95. MTH211, MTH212, MTH213 are offered every other year, beginning in 21-22 school year. Consult your advisor for details.
- <sup>3</sup> Science options: GS104, GS105, GS106, GS107, GS108 are recommended. PH201, PH202, PH203, CHEM221, CHEM222, CHEM223 will also satisfy this requirement.
- <sup>4</sup> Literature options: ENG104, ENG105, ENG106 are recommended. ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG253, ENG254, ENG255, ENG262 will also satisfy this requirement.
- <sup>5</sup> History options: HST101, HST102, HST103, HST201, HST202, HST203.
- <sup>6</sup> Social Science options: PSY100, PSY201, PSY202, PSY203, PSY216, PSY228, PSY231, PSY232, PSY237, PSY239, PSY243 will satisfy this requirement.
- <sup>7</sup> Art & Music Appreciation: ART131, ART204, ART205, ART206 or MUS201, MUS202, MUS203, MUS205, MUS206 will satisfy this requirement.
- <sup>8</sup> ED101P Practicum: Ed Pre-K, ED101K Practicum: Grade K-3, or ED101U Practicum: Grade 3-6 will satisfy this requirement, depending on Practicum placement. Practicums have specific requirements; please call 541-888-1575 to make an appointment with the program coordinator to schedule site two months prior to term. Students interested in Early Intervention may be placed in an appropriate site. Credits may be taken in any term dependent upon availability.
- <sup>9</sup> Any college level course that is not a CTE course will satisfy this requirement.
- \* All Honors courses may substitute for their equivalent requirements.

# ENVIRONMENTAL ENGINEERING, ASSOCIATE OF SCIENCE

The Associate of Science (AS) in Environmental Engineering degree will provide fundamental engineering skills. Environmental engineers manage our environment for the benefit of humanity and nature. They provide engineering solutions to problems with our land, air and water resources. In both public and private practice, environmental engineers work in interdisciplinary teams to manage environmental problems through application of scientific, engineering, and social skills. This degree was designed to transfer to Oregon State University's College of Engineering. Please consult your advisor for details.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 107 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree. Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## LEARNING OUTCOMES

1. Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. Communicate effectively with a range of audiences.
4. Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
5. Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
6. Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ENGR111	Intro to Engineering	3

MTH251	Calculus I Differential Calculus	4
CHEM221	General Chemistry I	5
WR121	English Composition	4
<b>Credits</b>		<b>16</b>

<b>Winter</b>		
MTH252	Calculus II Integral Calculus	4
CHEM222	General Chemistry II	5
ENGR112	Engineering Computation	4
SP111	Fundamentals of Public Speaking	3
<b>Credits</b>		<b>16</b>

<b>Spring</b>		
CHEM223	General Chemistry III	5
WR227	Report Writing	4
DRFT110	Computer Assisted Drafting I	3
or DRFT112	or Computer Assisted Drafting III	
MTH264	Introduction to Matrix Algebra and Power Series <sup>1</sup>	4
<b>Credits</b>		<b>16</b>

<b>Summer</b>		
PE231	Wellness for Life	3
Social Science <sup>4</sup>		3
Arts & Letters <sup>4</sup>		3
Cultural Diversity <sup>4</sup>		3
<b>Credits</b>		<b>12</b>

<b>Second Year</b>		
<b>Fall</b>		
CHEM245	Organic Chemistry I	4
MTH254	Vector Calculus I	4
PH211	General Physics with Calculus I	5
ENGR211	Statics	3
<b>Credits</b>		<b>16</b>

<b>Winter</b>		
ENGR212	Dynamics	3
PH212	General Physics with Calculus II	5
CHEM246	Organic Chemistry II <sup>2</sup>	4
Arts & Letters <sup>4</sup>		3
<b>Credits</b>		<b>15</b>

<b>Spring</b>		
MTH256	Differential Equations	4
PH213	General Physics with Calculus III	5
CHEM247	Organic Chemistry III <sup>3</sup>	4
or BI234	or Microbiology	
ENGR213	Strength of Materials	3
<b>Credits</b>		<b>16</b>

<b>Total Credits</b>		<b>107</b>
----------------------	--	------------

<sup>1</sup> Students transferring to Portland State University are required to take MTH260 in place of MTH264.

<sup>2</sup> Students transferring to Portland State University are required to take MTH255 in place of CHEM246.

<sup>3</sup> Students transferring to Portland State University are required to take BI234 in place of CHEM247.

- <sup>4</sup> Select course from specific subject area from the AS course list.
- \* All Honors courses may substitute for their equivalent requirements.

# FIRE SCIENCE, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Fire Science program includes the necessary general education and specialized fire and emergency services coursework to prepare students for careers in the fire service. Students will learn fundamental firefighting skills such as utilizing protective clothing and equipment, conducting search and rescue operations, advancing hoselines, and operating fire streams. Students will also be challenged with the academic aspect of firefighting in subjects including building construction, fire behavior, strategies and tactics, and fire prevention. With the knowledge, skills, and abilities gained from this program of study, students will be aptly prepared for a career in the fire service.

Students are required to complete internship credits as part of their degree plan. During this internship, students become affiliated with a fire department and gain valuable on-the-job experience while working with professional firefighters. Students have the opportunity to build a professional network, learn through practical experience (i.e. training, emergency response, etc.), and receive valuable leadership and guidance. It is highly recommended that students complete their internship credits locally, while in school to maximize the experience.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate technical proficiency in fundamental firefighting skills.
- Apply critical-thinking and decision-making skills relevant to fire service scenarios.
- Demonstrate behaviors consistent with professional and employer expectations.

## AWARD MAP

### Pathway Option

Career Pathway Certificate of Completion: Fire Science Level I  
 Career Pathway Certificate of Completion: Fire Science Level II  
 Career Pathway Certificate of Completion: Fire Science Level III  
 Career Pathway Certificate of Completion: Fire Science Level IV  
 Career Pathway Certificate of Completion: Fire and Emergency Services Higher Education  
 Associate: Fire Science

Math and writing placement are unique to each student and are determined during the admissions and intake advising process.

Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	4
FS105	Firefighter Fundamentals I	2
FS180	Internship: Fire Science <sup>7</sup>	1
MTH60	Algebra I <sup>1</sup>	4
WR121	English Composition <sup>2</sup>	4
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CIS120	Concepts of Computing	4
FS110	Firefighter Fundamentals II	2
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combustion	3
FS180	Internship: Fire Science <sup>7</sup>	1
Speech <sup>3</sup>		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
FS115	Firefighter Fundamentals III	2
FS125	Principles of Fire and Emergency S	4
Health, Wellness, and Fitness <sup>4</sup>		3
Human Relations <sup>5</sup>		3
Specific Elective <sup>6</sup>		3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
FS123	Structural Firefighter I (or specific elective) <sup>6</sup>	4
FS200	Strategy and Tactics	3
FS205	Fire Prevention	3
FS231	Fire Protection Hydraulics and Wate	3
FS280	CWE: Fire Science <sup>7</sup>	1
<b>Credits</b>		<b>14</b>
<b>Winter</b>		
FS210	Hazardous Materials for First Respo (or specific elective) <sup>6</sup>	2
FS215	Legal Aspects of Emergency Services	2
FS220	Fire Protection Systems	3
FS280	CWE: Fire Science <sup>7</sup>	1
EMT151	Emergency Medical Technician Part A	5
Specific Elective <sup>6</sup>		2
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
FS130	Fire Apparatus Driver/Operator (or specific elective) <sup>6</sup>	1
FS222	Fire Instructor I (or specific elective) <sup>6</sup>	3

FS225	Prin of Fire & Emerg Service Admin	3
FS232	Occupational Safety and Health ES	3
EMT152	Emergency Medical Technician Part B	5
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>90</b>

- 1 MTH65 or higher may be substituted for MTH60, excluding MTH81 and MTH211 .
- 2 A higher writing may be substituted excluding WR241, WR242, WR243, WR250.
- 3 Required Program Course - Speech options: SP100, SP111, SP218, SP219, or SP220.
- 4 PE231, HE250 or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- 5 Required Program Course - Human Relations options: BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203.
- 6 Any FS, EM, EMT, and/or CJ course not already required for the degree will fulfill this requirement. At least eight (8) credits of specific electives must be FS courses.
- 7 Call 541-888-7405 to schedule with Internship Coordinator one month prior to term.
- \* All Honors courses may substitute for their equivalent requirements.

# FIRE AND EMERGENCY SERVICES HIGHER EDUCATION, CAREER PATHWAY CERTIFICATE OF COMPLETION

This Career Pathway Certificate of Completion is designed to capture a student's progress for completing all Fire and Emergency Services Higher Education coursework. These courses, and the Career Pathway Certificate of Completion, will help the student develop professional skills in the fire service. Students seeking entry level job, promotion/advancement, or just professional development will benefit from the coursework and the Career Pathway Certificate of Completion.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 34 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Apply critical thinking and decision-making skills relevant to fire service scenarios.
- Demonstrate behaviors consistent with professional and employer expectations.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	4
<b>Credits</b>		<b>4</b>
<b>Winter</b>		
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combustion	3
<b>Credits</b>		<b>6</b>
<b>Spring</b>		
FS125	Principles of Fire and Emergency S	4
<b>Credits</b>		<b>4</b>
<b>Second Year</b>		
<b>Fall</b>		
FS200	Strategy and Tactics	3
FS205	Fire Prevention	3
FS231	Fire Protection Hydraulics and Wate	3
<b>Credits</b>		<b>9</b>
<b>Winter</b>		
FS215	Legal Aspects of Emergency Services	2
FS220	Fire Protection Systems	3
<b>Credits</b>		<b>5</b>
<b>Spring</b>		
FS225	Prin of Fire & Emerg Service Admin	3
FS232	Occupational Safety and Health ES	3
<b>Credits</b>		<b>6</b>
<b>Total Credits</b>		<b>34</b>

# FIRE SCIENCE LEVEL I, CAREER PATHWAY CERTIFICATE OF COMPLETION

This Career Pathway Certificate of Completion is designed to capture a student's progress at a specific point of their fire science coursework. With coursework focused on professionalism, volunteer experience, and structural firefighting, students will develop professional skills vital to the fire service. Students seeking an entry level job or professional development will benefit from the Fire Science Level I Career Pathway Certificate of Completion.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 16 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will:

- Demonstrate technical proficiency in fundamental firefighting skills.
- Demonstrate behaviors consistent with professional and employer expectations.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	4
FS105	Firefighter Fundamentals I	2
FS180	Internship: Fire Science <sup>1</sup>	1
<b>Credits</b>		<b>7</b>
<b>Winter</b>		
FS110	Firefighter Fundamentals II	2
FS180	Internship: Fire Science <sup>1</sup>	1
<b>Credits</b>		<b>3</b>
<b>Spring</b>		
FS115	Firefighter Fundamentals III	2
FS123	Structural Firefighter I	4
<b>Credits</b>		<b>6</b>
<b>Total Credits</b>		<b>16</b>

<sup>1</sup> See Internship Coordinator to schedule a month prior to term. 541-888-7405.

# FIRE SCIENCE LEVEL II, CAREER PATHWAY CERTIFICATE OF COMPLETION

This Career Pathway Certificate of Completion is designed to capture a student's progress at a specific point of their fire science coursework. With coursework focused on professionalism, volunteer experience, building construction and fire behavior, as well as structural firefighting and other skills, students will develop professional skills vital to the fire service. Students seeking an entry level job or professional development

will benefit from the Fire Science Level II Career Pathway Certificate of Completion.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 25 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be passed with a grade of 'C' or better.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate technical proficiency in fundamental firefighting skills.
- Demonstrate behaviors consistent with professional and employer expectations.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	4
FS105	Firefighter Fundamentals I	2
FS180	Internship: Fire Science <sup>1</sup>	1
<b>Credits</b>		<b>7</b>
<b>Winter</b>		
FS110	Firefighter Fundamentals II	2
FS180	Internship: Fire Science <sup>1</sup>	1
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combustion	3
<b>Credits</b>		<b>9</b>
<b>Spring</b>		
FS115	Firefighter Fundamentals III	2
FS130	Fire Apparatus Driver/Operator	1
FS123	Structural Firefighter I	4
FS210	Hazardous Materials for First Respo	2
<b>Credits</b>		<b>9</b>
<b>Total Credits</b>		<b>25</b>

<sup>1</sup> See Internship Coordinator to schedule a month prior to term. 541-888-7405.

# FIRE SCIENCE LEVEL III, CAREER PATHWAY CERTIFICATE OF COMPLETION

This Career Pathway Certificate of Completion is designed to capture a student's progress at a specific point of their fire science coursework. With coursework focused on professionalism, volunteer experience, building construction and fire behavior, fire prevention and firefighter safety, as well as structural firefighting and other skills, students will develop professional skills vital to the fire service. Students seeking an entry level job or professional development will benefit from the Fire Science Level III Career Pathway Certificate of Completion.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 35 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

- Demonstrate technical proficiency in fundamental firefighting skills.
- Apply critical thinking and decision-making skills relevant to fire service scenarios.
- Demonstrate behaviors consistent with professional and employer expectations.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	4
FS180	Internship: Fire Science <sup>1</sup>	1
FS205	Fire Prevention	3
FS105	Firefighter Fundamentals I	2
<b>Credits</b>		<b>10</b>
<b>Winter</b>		
FS110	Firefighter Fundamentals II	2
FS180	Internship: Fire Science <sup>1</sup>	1
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combustion	3
FS222	Fire Instructor I	3
<b>Credits</b>		<b>12</b>
<b>Spring</b>		
FS115	Firefighter Fundamentals III	2
FS130	Fire Apparatus Driver/Operator	1

FS123	Structural Firefighter I	4
FS210	Hazardous Materials for First Respo	2
FS125	Principles of Fire and Emergency S	4
<b>Credits</b>		<b>13</b>
<b>Total Credits</b>		<b>35</b>

<sup>1</sup> See Internship Coordinator to schedule a month prior to term. 541-888-7405.

# FIRE SCIENCE LEVEL IV, CAREER PATHWAY CERTIFICATE OF COMPLETION

This Career Pathway Certificate of Completion is designed to capture a student's progress at a specific point of their fire science coursework. With coursework focused on professionalism, volunteer experience, building construction and fire behavior, fire prevention and firefighter safety, fireground strategy and tactics, fire protection systems, as well as structural firefighting and other skills, students will develop professional skills vital to the fire service. Students seeking an entry level job or professional development will benefit from the Fire Science Level IV Career Pathway Certificate of Completion.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 44 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

- Demonstrate technical proficiency in fundamental firefighting skills.
- Apply critical thinking and decision-making skills relevant to fire service scenarios.
- Demonstrate behaviors consistent with professional and employer expectations.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	4
FS105	Firefighter Fundamentals I	2
FS180	Internship: Fire Science <sup>1</sup>	1
FS205	Fire Prevention	3
FS200	Strategy and Tactics	3

FS231	Fire Protection Hydraulics and Wate	3
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
FS110	Firefighter Fundamentals II	2
FS180	Internship: Fire Science <sup>1</sup>	1
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combustion	3
FS222	Fire Instructor I	3
FS220	Fire Protection Systems	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
FS115	Firefighter Fundamentals III	2
FS130	Fire Apparatus Driver/Operator	1
FS123	Structural Firefighter I	4
FS210	Hazardous Materials for First Respo	2
FS125	Principles of Fire and Emergency S	4
<b>Credits</b>		<b>13</b>
<b>Total Credits</b>		<b>44</b>

<sup>1</sup> See Internship Coordinator to schedule a month prior to term.  
541-888-7405.

# FIRE SCIENCE, ASSOCIATE OF SCIENCE

The Associate of Science (AS) in Fire Science is designed to meet the needs of students who plan on pursuing a bachelor's or higher degree at a university. Fire departments and private agencies are increasingly expecting candidates for administrator and supervisor positions to have higher levels of education. Fire Science coursework is developed using model curriculum from the United States Fire Administration's Fire and Emergency Services Higher Education initiative. Students will study relevant topics including building construction, firefighting strategies and tactics, fire prevention, and fire protection systems.

This program is designed to transfer to Eastern Oregon University's Fire Services Administration program.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Apply critical-thinking and decision-making skills relevant to fire service scenarios.
- Apply core fire science knowledge to prevention, training, operational, and administrative situations relevant to the fire service.
- Demonstrate effective verbal and nonverbal communication in emergency and nonemergency situations including, but not limited to: communicating on the fireground, drafting administrative documents, handling disciplinary issues, completing incident reports, and conducting public education.
- Complete general education requirements in preparation to transfer to a four-year degree program.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
FS100	Principles of Emergency Services	4
MTH105	Math in Society <sup>1</sup>	4
WR121	English Composition	4

Health, Wellness, and Fitness <sup>2</sup>		3
Arts and Letters <sup>3</sup>		3
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
FS120	Building Const Related to Fire Svc	3
FS121	Fire Behavior and Combustion	3
MTH243	Intro to Probability and Statistics	4
WR122	English Composition	4
or WR227	or Report Writing	
Social Science <sup>3</sup>		3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
FS125	Principles of Fire and Emergency S	4
Speech <sup>5</sup>		3
Social Science <sup>3</sup>		3
Arts and Letters <sup>3</sup>		3
<b>Credits</b>		<b>13</b>
<b>Second Year</b>		
<b>Fall</b>		
FS200	Strategy and Tactics	3
FS205	Fire Prevention	3
FS231	Fire Protection Hydraulics and Wate	3
Social Science <sup>3</sup>		3
Elective <sup>4</sup>		3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
FS215	Legal Aspects of Emergency Services	2
FS220	Fire Protection Systems	3
Science, Mathematics, or Computer Science <sup>3</sup>		4
Arts and Letters <sup>3</sup>		3
Elective <sup>4</sup>		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
FS225	Prin of Fire & Emerg Service Admin	3
FS232	Occupational Safety and Health ES	3
Science, Mathematics, or Computer Science <sup>3</sup>		4
Elective <sup>4</sup>		2
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>90</b>

<sup>1</sup> A higher math may be substituted excluding MTH211.

<sup>2</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.

<sup>3</sup> Select appropriate course in specific subject area from the course listed in Associate of Science (p. 34) General Education Requirements category.

<sup>4</sup> Any course 100 level or higher may be used as an elective.

<sup>5</sup> SP111, SP218, SP219 will satisfy this requirement.

\* All Honors courses may substitute for their equivalent requirements.

# FOREST ENGINEERING, ASSOCIATE OF SCIENCE

Forest engineering prepares graduates to plan and implement complex forestry and natural resource operations that help meet global demands for wood products while sustaining water, habitat, and other forest resources.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details.

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 98 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

*Upon successful completion of this program, the student will be able to:*

- Use techniques, skills, and modern engineering tools necessary for engineering practice.
- Develop engineered forest operations that achieve silvicultural objectives
- Develop engineered forest operations that appropriately protect soil and water resources.
- Survey and measure land and forest resources so that the engineering tasks associated with forest operations can be effectively completed.
- Provide designs and manage the forest transportation in a way that meets the needs of forest land management with societally acceptable environmental impact.
- Plan and manage safe, economic and environmentally sound forest operations.
- Incorporate long term forest land management and operational planning in an environmental and economic context into forest operation plans.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking

the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PRE-PROGRAM COURSE

Code	Title	Credits
MTH112	Trigonometry	4

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ENV235	Introduction to Soil Science	4
F111	Introduction to Forestry	3
MTH251	Calculus I Differential Calculus	4
PH211	General Physics with Calculus I	5
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
F222A	Elementary Forest Surveying	4
F250	Forest Biology	4
MTH252	Calculus II Integral Calculus	4
PH212	General Physics with Calculus II	5
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
F241	Dendrology	5
MTH243	Intro to Probability and Statistics	4
PE231	Wellness for Life	3
Difference, Power, and Discrimination <sup>1</sup>		3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
ENGR211	Statics	3
GEOG265	Intro to Geographical Info Systems	4
MTH254	Vector Calculus I	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
ENGR212	Dynamics	3
MTH256	Differential Equations	4
SP111	Fundamentals of Public Speaking	3
WR121	English Composition	4
Literature and Arts <sup>2</sup>		3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
ECON201	Microeconomics	4
ENGR213	Strength of Materials	3
WR227	Report Writing	4
Cultural Diversity <sup>3</sup>		3

Western Culture <sup>4</sup>	3
<b>Credits</b>	<b>17</b>
<b>Total Credits</b>	<b>98</b>

<sup>1</sup> Difference, Power, and Discrimination: HST201, HST202, HST203, SOC206, SOC213

<sup>2</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>3</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206

<sup>4</sup> Western Culture: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.

\* All Honors courses may substitute for their equivalent requirements.

# FOREST RENEWABLE MATERIALS/ADVANCED MANUFACTURING, ASSOCIATE OF SCIENCE

Renewable Materials is a multidisciplinary program that prepares students to work with renewable, plant-based materials to solve challenging world problems. Renewable materials such as wood, bamboo, canes, and agricultural fibers are examined to understand their characteristics and how to make useful products. Students gain broad perspectives on current issues associated with the sustainable utilization of renewable materials, including global trade, business innovation, energy production, and environment.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details.

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 95 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the AS degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate fundamental knowledge of wood and similar renewable materials that make them challenging to utilize as industrial and building materials.
- Demonstrate command of renewable material moisture content and specific gravity calculations.
- Demonstrate ability to find, compile, analyze, and communicate technical communication.
- Demonstrate familiarity with the diverse complexity of the Renewable Materials industry, and the challenges it faces with balancing business and environmental goals.
- Demonstrate a combination of technical and business acumen that allows effective management of process and people.

- Demonstrate ability to creatively self-direct learning outcomes within the classroom environment and/or through independent undergraduate research.
- Gain information and knowledge to become a better global citizen.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PRE-PROGRAM COURSE

Code	Title	Credits
MTH112	Trigonometry	4

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
F111	Introduction to Forestry	3
WR121	English Composition	4
PE231	Wellness for Life	3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CHEM222	General Chemistry II	5
CIS125S	Spreadsheet Applications	3
F250	Forest Biology	4
F180 or NR180	Internship: Forestry <sup>1</sup> or Internship: Natural Resources	5
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
CHEM223	General Chemistry III	5
SP111	Fundamentals of Public Speaking	3
WR227	Report Writing	4
Literature and Arts <sup>3</sup>		3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ECON201	Microeconomics	4
MTH251	Calculus I Differential Calculus	4
PH211	General Physics with Calculus I Difference, Power, and Discrimination <sup>2</sup>	5
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
ECON202	Macroeconomics	4
BA212	Principles of Accounting II <sup>6</sup>	4
PH212	General Physics with Calculus II	5
MTH252	Calculus II Integral Calculus	4
<b>Credits</b>		<b>17</b>

**Spring**

PH213	General Physics with Calculus III	5
Cultural Diversity <sup>4</sup>		3
Western Culture <sup>5</sup>		3
BA213	Principles of Accounting III	4
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>95</b>

<sup>1</sup> Schedule an appointment with the Internship Coordinator a month prior to term 888-7405. Students may take any combination up to 5 credits of F180 or NR180 in the terms they choose.

<sup>2</sup> Difference, Power and Discrimination - HST201, HST202, HST203, SOC206, SOC213 will satisfy this requirement

<sup>3</sup> Literature and the Arts:ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>4</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206

<sup>5</sup> Western Culture:ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.

<sup>6</sup> BA212 has a prerequisite of BA211 or BA111 or AC2764

\* \*All Honors courses may substitute for their equivalent requirements.

# FOREST RENEWABLE MATERIALS/ART AND DESIGN, ASSOCIATE OF SCIENCE

Renewable Materials is a multidisciplinary program that prepares students to work with renewable, plant-based materials to solve challenging world problems. Renewable materials such as wood, bamboo, canes, and agricultural fibers are examined to understand their characteristics and how to make useful products. Students gain broad perspectives on current issues associated with the sustainable utilization of renewable materials, including global trade, business innovation, energy production, and environmental impacts.

Students in the art and design option are concerned about wood products on an aesthetic level. This option prepares students to engage with renewable materials on an aesthetic level, whether as interior designers, fine artists or entrepreneurs. Students will gain an in-depth knowledge of how renewable materials can function visually within the human space. In addition, students will achieve an understanding of green building materials and green architecture.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details.

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the AS degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate fundamental knowledge of wood and similar renewable materials that make them challenging to utilize as industrial and building materials.
- Demonstrate command of renewable material moisture content and specific gravity calculations.
- Demonstrate ability to find, compile, analyze, and communicate technical communication.

- Demonstrate familiarity with the diverse complexity of the Renewable Materials industry, and the challenges it faces with balancing business and environmental goals.
- Demonstrate a combination of technical and business acumen that allows effective management of process and people.
- Demonstrate ability to creatively self-direct learning outcomes within the classroom environment and/or through independent undergraduate research.
- Gain information and knowledge to become a better global citizen.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
F111	Introduction to Forestry	3
WR121	English Composition	4
Specific Elective <sup>1</sup>		3
		<b>Credits</b>
		<b>15</b>
<b>Winter</b>		
CHEM222	General Chemistry II	5
CIS125S	Spreadsheet Applications	3
F250	Forest Biology	4
F280	CWE: Forestry <sup>6</sup>	1
or NR280	or CWE: Natural Resources	
Specific Elective <sup>1</sup>		3
		<b>Credits</b>
		<b>16</b>
<b>Spring</b>		
SP111	Fundamentals of Public Speaking	3
WR227	Report Writing	4
PE231	Wellness for Life	3
	Difference, Power, and Discrimination <sup>2</sup>	3
Specific Elective <sup>1</sup>		3
		<b>Credits</b>
		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART131	Introduction to Drawing I	3
ART291	Sculpture	3
CIS125P	Presentation Applications	1
Literature and Arts <sup>3</sup>		3
		<b>Credits</b>
		<b>14</b>
<b>Winter</b>		
ART110	Digital Photography I	3
MTH243	Intro to Probability and Statistics	4

F180	Internship: Forestry <sup>6</sup>	3
or NR180	or Internship: Natural Resources	
Social Processes and Institutions <sup>3</sup>		3
<b>Credits</b>		<b>13</b>
<b>Spring</b>		
ART117	Basic Design III, Intro to 3D Desgn	4
ART232	Drawing II	3
CIS125IL	Computer Applications: Illustrator	3
Cultural Diversity <sup>4</sup>		3
Specific Elective <sup>1</sup>		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>90</b>

<sup>1</sup> A total of 12 credits of F or NR courses not already required for the degree may be taken in any term.

<sup>2</sup> Difference, Power, and Discrimination - options: HST201, HST202, HST203, SOC206, SOC213

<sup>3</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>4</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206

<sup>5</sup> Social Processes and Institutions: ANTH221, ANTH222, ANTH223, ECON201, ECON202, HST101, HST102, HST103, PS201, PS205, PSY201, PSY202, PSY203, SOC204, SOC205 will satisfy this requirement.

<sup>6</sup> Schedule an appointment with the Internship Coordinator a month prior to term. 541-888-7405.

\* All Honors courses may substitute for their equivalent requirements.

# FOREST RENEWABLE MATERIALS/MARKETING AND MANAGEMENT, ASSOCIATE OF SCIENCE

Renewable Materials is a multidisciplinary program that prepares students to work with renewable, plant-based materials to solve challenging world problems. Renewable materials such as wood, bamboo, canes, and agricultural fibers are examined to understand their characteristics and how to make useful products. Students gain broad perspectives on current issues associated with the sustainable utilization of renewable materials, including global trade, business innovation, energy production, and environmental impacts.

The management and marketing option provides students with the skills to manage organizations or devise new marketing strategies to compete in the global wood products industry.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details. Check out the Forestry/Natural Resources program website!

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 92 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate fundamental knowledge of wood and similar renewable materials that make them challenging to utilize as industrial and building materials.
- Demonstrate command of renewable material moisture content and specific gravity calculations.
- Demonstrate ability to find, compile, analyze, and communicate technical communication.

- Demonstrate familiarity with the diverse complexity of the Renewable Materials industry, and the challenges it faces with balancing business and environmental goals.
- Demonstrate a combination of technical and business acumen that allows effective management of process and people.
- Demonstrate ability to creatively self-direct learning outcomes within the classroom environment and/or through independent undergraduate research.
- Gain information and knowledge to become a better global citizen.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
F111	Introduction to Forestry	3
WR121	English Composition	4
Western Culture <sup>3</sup>		3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CHEM222	General Chemistry II	5
CIS125S	Spreadsheet Applications	3
F250	Forest Biology	4
Literature and the Arts <sup>2</sup>		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
SP111	Fundamentals of Public Speaking	3
WR227	Report Writing	4
PE231	Wellness for Life	3
Difference, Power, and Discrimination <sup>5</sup>		3
Specific Elective <sup>1</sup>		3
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
MTH111	College Algebra	4
BA250	Small Business Management Entrepreneurship	3
CIS125P	Presentation Applications	1
ECON201	Microeconomics	4
Cultural Diversity <sup>4</sup>		3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
BA212	Principles of Accounting II <sup>7</sup>	4
ECON202	Macroeconomics	4
MTH241 or MTH251	Calculus for Bus and Soc Science I or Calculus I Differential Calculus	4

F180 or NR180	Internship: Forestry <sup>6</sup> or Internship: Natural Resources	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BA213	Principles of Accounting III	4
BA230	Business Law	4
CIS125IL	Computer Applications: Illustrator	3
F241	Dendrology	5
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>92</b>

- <sup>1</sup> Total of three (3) credits of F or NR courses not already required for the degree may be taken in any term.
- <sup>2</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.
- <sup>3</sup> Western Culture: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.
- <sup>4</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206
- <sup>5</sup> Difference, Power, and Discrimination: HST201, HST202, HST203, SOC206, SOC213
- <sup>6</sup> Schedule an appointment with the Internship Coordinator a month prior to term. 541-888-7405.
- <sup>7</sup> BA212 has a prerequisite of BA211 or AC2764.
- \* All Honors courses may substitute for their equivalent requirements.

# FOREST RENEWABLE MATERIALS/SCIENCE AND ENGINEERING, ASSOCIATE OF SCIENCE

Renewable Materials is a multidisciplinary program that prepares students to work with renewable, plant-based materials to solve challenging world problems. Renewable materials such as wood, bamboo, canes, and agricultural fibers are examined to understand their characteristics and how to make useful products. Students gain broad perspectives on current issues associated with the sustainable utilization of renewable materials, including global trade, business innovation, energy production, and environmental impacts.

The science and engineering option focuses on science, technology and engineering when it comes to working with wood products. Students gain a strong understanding of where wood products come from, and test renewable materials to determine how we can use them in new and innovative ways. Students learn in woodshops, labs and even test materials in our climate rooms and earthquake testing room.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details. Check out the Forestry/Natural Resources program website!

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 101 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate fundamental knowledge of wood and similar renewable materials that make them challenging to utilize as industrial and building materials.
- Demonstrate command of renewable material moisture content and specific gravity calculations.
- Demonstrate ability to find, compile, analyze, and communicate technical communication.

- Demonstrate familiarity with the diverse complexity of the Renewable Materials industry, and the challenges it faces with balancing business and environmental goals.
- Demonstrate a combination of technical and business acumen that allows effective management of process and people.
- Demonstrate ability to creatively self-direct learning outcomes within the classroom environment and/or through independent undergraduate research.
- Gain information and knowledge to become a better global citizen.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PRE-PROGRAM COURSE

Code	Title	Credits
MTH112	Trigonometry (or higher)	4

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
F111	Introduction to Forestry	3
WR121	English Composition	4
ENGR111 or ENGR211	Intro to Engineering or Statics	3
Literature and the Arts <sup>1</sup>		3
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
CHEM222	General Chemistry II	5
CIS125S	Spreadsheet Applications	3
F250	Forest Biology	4
BA212	Principles of Accounting II <sup>5</sup>	4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
SP111	Fundamentals of Public Speaking	3
WR227	Report Writing	4
PE231	Wellness for Life	3
CHEM223	General Chemistry III	5
BA213	Principles of Accounting III	4
<b>Credits</b>		<b>19</b>
<b>Second Year</b>		
<b>Fall</b>		
BA230	Business Law <sup>6</sup>	4
ECON201	Microeconomics	4
MTH251	Calculus I Differential Calculus	4
PH201 or PH211	General Physics I: Mechanics or General Physics with Calculus I	5
<b>Credits</b>		<b>17</b>

<b>Winter</b>		
ECON202	Macroeconomics	4
MTH252	Calculus II Integral Calculus	4
PH202	General Physics II: Heat, Waves, Relativity	5
or PH212	or General Physics with Calculus II	
Cultural Diversity <sup>3</sup>		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
MTH254	Vector Calculus I	4
PH203	Gen Physics III: Elect & Magnetism	5
or PH213	or General Physics with Calculus III	
Western Culture <sup>4</sup>		3
Difference, Power, and Discrimination <sup>2</sup>		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>101</b>

<sup>1</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>2</sup> Difference, Power, and Discrimination: HST201, HST202, HST203, SOC206, SOC213

<sup>3</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206

<sup>4</sup> Western Culture: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.

<sup>5</sup> BA212 has a prerequisite of BA211 or BA111 or AC2764

<sup>6</sup> BA230 has a prerequisite of BA101

<sup>7</sup> NR201 may be substituted for F111.

\* All Honors courses may substitute for their equivalent requirements.

# FOREST TECHNOLOGY, CERTIFICATE OF COMPLETION

The Certificate of Completion Forest Technology can be completed within one year and is designed to prepare students for entry-level employment in the forestry field in supervised positions such as forester aides, surveyor assistant, measurement technician, and field mapping aide.

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 46 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Discuss important forest management challenges and potential solutions.
- Discuss characteristics of regional forests, field techniques, and management practices.
- Demonstrate basic skills in forest surveying, remote sensing, geographic information systems, and spreadsheet applications.

## PROGRAM NOTES

Students who are receiving Financial Aid Funds and wishing to receive the Forest Technology Certificate, in addition to the AS Forestry Emphasis, will need to petition for a dual major.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>Fall</b>		
ENV235	Introduction to Soil Science	4
F111	Introduction to Forestry	3
GEOG265	Intro to Geographical Info Systems	4

WR115	Fundamentals of Report Writing	4
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CIS125S	Spreadsheet Applications	3
F222A	Elementary Forest Surveying	4
F280	CWE: Forestry	4
MTH80	Technical Mathematics I <sup>2</sup>	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
F241	Dendrology	5
F250	Forest Biology <sup>5</sup>	4
F251	Recreation Resource Management	4
BA285	Human Relations in Organizations <sup>3</sup>	3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>46</b>

- 1 A higher writing may be substituted excluding WR241, WR242, WR243, or WR250.
  - 2 MTH60 or higher, excluding MTH211, may be substituted for MTH80.
  - 3 BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203, will satisfy this requirement.
  - 4 Call 541-888-7405 to schedule with Internship Coordinator one month prior to term. FE209 may be substituted.
  - 5 NR260 may be substituted. NR260 is only offered in Spring term. Talk to your advisor for details.
- \* All Honors courses may substitute for their equivalent requirements.

# FORESTRY MANAGEMENT, ASSOCIATE OF SCIENCE

The Forestry Management Associate of Science (AS) degree provides students with an introduction to the technical and scientific knowledge related to the field of forestry and forest management. This set of classes satisfies the requirements for an AS degree and also meets the lower division requirements at Oregon State University (OSU) for a Bachelor of Science in Forestry. There is a signed articulation agreement with the Forestry Department at Oregon State University that allows students who complete this AS degree and two additional courses to enter OSU as a junior in the forestry program.

The management option focuses on the biological, ecological and economic characteristics of forests and society. Students gain knowledge and experience in active forest management, including monitoring the health of forests and natural resources, maintaining species inventory, timber cruising, planning and executing harvesting operations, focusing on conservation and sustainability of natural resources such as wildlife, and protecting the forest from harmful weeds, insects, disease, erosion and fire.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details. Check out the Forestry/Natural Resources program website!

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 92 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, designed to prepare students for college transfer courses, are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Integrate technical field skills with analytical skills to identify important forest management challenges and identify potential solutions for these problems.
- Explain and discuss important current issues, and social and political components of forest management in the United States and other countries.

- Demonstrate basic skills in forest surveying, recreation management, soil science, remote sensing, geographic information systems, and spreadsheet applications.
- Identify important tree species in the Pacific Northwest.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
F111	Introduction to Forestry <sup>6</sup>	3
MTH111	College Algebra	4
PE231	Wellness for Life	3
SP111	Fundamentals of Public Speaking	3
WR121	English Composition	4
<b>Credits</b>		<b>17</b>
<b>Winter</b>		
BI202	Introductory Biology	4
CIS125S	Spreadsheet Applications	3
ECON201	Microeconomics	4
MTH112	Trigonometry	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
F241	Dendrology	5
MTH243	Intro to Probability and Statistics	4
WR227	Report Writing	4
	Difference, Power, and Discrimination <sup>1</sup>	3
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
ENV235	Introduction to Soil Science	4
PH201	General Physics I: Mechanics	5
GEOG265	Intro to Geographical Info Systems	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
F222A	Elementary Forest Surveying	4
F250	Forest Biology	4
F180	Internship: Forestry <sup>5</sup>	1-3
	or NR180 or Internship: Natural Resources	
	Literature and the Arts <sup>2</sup>	3
<b>Credits</b>		<b>12-14</b>
<b>Spring</b>		
F251	Recreation Resource Management	4
MTH241	Calculus for Bus and Soc Science I	4
	or MTH251 or Calculus I Differential Calculus	
	Cultural Diversity <sup>3</sup>	3

Western Culture <sup>4</sup>	3
<b>Credits</b>	<b>14</b>
<b>Total Credits</b>	<b>92-94</b>

- <sup>1</sup> Difference, Power, and Discrimination: HST201, HST202, HST203, SOC206, SOC213
- <sup>2</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.
- <sup>3</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206.
- <sup>4</sup> Western Culture: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.
- <sup>5</sup> Schedule an appointment with the Internship Coordinator one month prior to term 541-888-7405
- <sup>6</sup> NR201 may be substituted for F111.
- \* All Honors courses may substitute for their equivalent requirements.

# FORESTRY MANAGEMENT/ FOREST RESTORATION AND FIRE, ASSOCIATE OF SCIENCE

Forestry provides students with an introduction to the technical and scientific knowledge related to the field of forestry and forest management. This set of classes satisfies the requirements for an AS degree and also meets the lower division requirements at Oregon State University (OSU) for a Bachelor of Science in Forestry.

The forest restoration and fire option focuses on managing for forest disturbance processes including wildfire, landslides, insects and disease. Graduates will have the knowledge and the skillset to incorporate natural processes, including disturbance, into active forest management planning. This option prepares students to prevent or mitigate damage resulting from disturbances or to use disturbance processes purposefully to achieve management objectives. Disturbance processes are important considerations in any actively managed forest, regardless of the specific management objective. These skills will be particularly important for managing forests at the landscape scale and in the face of uncertainty and rapid change including in climate or land use patterns.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details.

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 93 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Integrate technical field skills with analytical skills to identify important forest management challenges and identify potential solutions for these problems.
- Explain and discuss important current issues, and social and political components of forest management in the United States and other countries.

- Demonstrate basic skills in forest surveying, recreation management, soil science, remote sensing, geographic information systems, and spreadsheet applications.
- Identify important tree species in the Pacific Northwest.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
ENV235	Introduction to Soil Science	4
F111	Introduction to Forestry <sup>6</sup>	3
MTH111	College Algebra	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
BI202	Introductory Biology	4
F222A	Elementary Forest Surveying	4
WR121	English Composition	4
MTH112	Trigonometry	4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
F241	Dendrology	5
MTH241 or MTH251	Calculus for Bus and Soc Science I or Calculus I Differential Calculus	4
FS100 or FS121 or FS131 or FS125	Principles of Emergency Services or Fire Behavior and Combustion or Wildland Firefighter Type 2 or Principles of Fire and Emergency S	3-4
Difference, Power, and Discrimination <sup>1</sup>		3
<b>Credits</b>		<b>15-16</b>
<b>Second Year</b>		
<b>Fall</b>		
ECON201	Microeconomics	4
PH201	General Physics I: Mechanics	5
PE231	Wellness for Life	3
GEOG265	Intro to Geographical Info Systems	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
CIS125S	Spreadsheet Applications	3
F250	Forest Biology	4
MTH243	Intro to Probability and Statistics	4
Literature and the Arts <sup>2</sup>		3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
SP111	Fundamentals of Public Speaking	3
WR227	Report Writing	4

F180	Internship: Forestry <sup>5</sup>	3
or NR180	or Internship: Natural Resources	
Cultural Diversity <sup>3</sup>		3
Western Culture <sup>4</sup>		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>93-94</b>

<sup>1</sup> Difference, Power, and Discrimination: HST201, HST202, HST203, SOC206, SOC213

<sup>2</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>3</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206.

<sup>4</sup> Western Culture: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.

<sup>5</sup> Schedule an appointment with the Internship Coordinator a month prior to term 541-888-7405.

<sup>6</sup> NR201 may be substituted for F111.

\* All Honors courses may substitute for their equivalent requirements.

# FORESTRY MANAGEMENT/ OPERATIONS MANAGEMENT, ASSOCIATE OF SCIENCE

Forestry provides students with an introduction to the technical and scientific knowledge related to the field of forestry and forest management. This set of classes satisfies the requirements for an AS degree and also meets the lower division requirements at Oregon State University (OSU) for a Bachelor of Science in Forestry.

Students in the operations option focus on the business and timber harvesting side of forestry. Students learn how to actively manage lands with economic efficiency and with evolving markets and policy to provide timber and fiber for the nation. To achieve program goals, the curriculum includes a traditional forestry foundation with courses in forest biology, economics, management and operations.

This degree was designed to transfer to Oregon State University's College of Forestry. Other transfer options may be available, consult your advisor for details. Check out the Forestry/Natural Resources program website!

The forestry field is projected to have many career opportunities coming up in the next decade as many forestry and natural resources professionals retire in the next few years. Students who enjoy working outdoors and want to have a career that focuses on managing our valuable forest lands to conserve and protect resources as well as produce valuable products for society should consider this degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 103 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Integrate technical field skills with analytical skills to identify important forest management challenges and identify potential solutions for these problems.
- Explain and discuss important current issues, and social and political components of forest management in the United States and other countries.
- Demonstrate basic skills in forest surveying, recreation management, soil science, remote sensing, geographic information systems, and spreadsheet applications.
- Identify important tree species in the Pacific Northwest.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
BA250	Small Business Management Entrepreneurship	3
CHEM221	General Chemistry I	5
ENV235	Introduction to Soil Science	4
F111	Introduction to Forestry <sup>5</sup>	3
PE231	Wellness for Life	3
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
BA212	Principles of Accounting II	4
BI202	Introductory Biology	4
WR121	English Composition	4
MTH243	Intro to Probability and Statistics	4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
BA213	Principles of Accounting III	4
BA230	Business Law	4
F241	Dendrology	5
	Difference, Power, and Discrimination <sup>1</sup>	3
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
ECON201	Microeconomics	4
MTH111	College Algebra	4
PH201	General Physics I: Mechanics	5
GEOG265	Intro to Geographical Info Systems	4
<b>Credits</b>		<b>17</b>
<b>Winter</b>		
F222A	Elementary Forest Surveying	4
F250	Forest Biology	4
MTH112	Trigonometry	4
ENGR112	Engineering Computation	4
	Literature and the Arts <sup>2</sup>	3
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
MTH241 or MTH251	Calculus for Bus and Soc Science I or Calculus I Differential Calculus	4
SP111	Fundamentals of Public Speaking	3
WR227	Report Writing	4
	Cultural Diversity <sup>3</sup>	3

Western Culture <sup>4</sup>	3
<b>Credits</b>	<b>17</b>
<b>Total Credits</b>	<b>103</b>

<sup>1</sup> Difference, Power, and Discrimination: HST201, HST202, HST203, SOC206, SOC213

<sup>2</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>3</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206.

<sup>4</sup> Western Culture: ART204, ART205, ART206, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, MUS201, MUS202, MUS203, PHL101, PHL102.

<sup>5</sup> NR201 may be substituted for F111.

\* All Honors courses may substitute for their equivalent requirements.

# GEOGRAPHIC INFORMATION SYSTEMS, CERTIFICATE OF COMPLETION

The Less Than One Year Certificate of Completion Geographic Information Science (GIS) can be completed in less than one year and will give students the basic knowledge and skills to be employed in an entry level position in the GIS field. GIS is applicable to an array of careers, including forestry, natural resources, planning, real estate, and more!

## GRADUATION REQUIREMENTS

Students must complete a minimum of 36 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade 'C' or better. One course must be completed at Southwestern before the Less Than One Year Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Discuss the benefits and applications of GIS and Cartographic technology
- Demonstrate skills in geographic information systems and cartographic design
- Plan and carry out GIS analyses independently
- Design, build, and use spatial databases

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CIS125DB	Database Applications	3
GEOG265	Intro to Geographical Info Systems	4
MTH98	Math Literacy (or higher)	4
<b>Credits</b>		<b>11</b>
<b>Winter</b>		
CIS125S	Spreadsheet Applications	3
F280 or NR280	CWE: Forestry <sup>1</sup> or CWE: Natural Resources	4
GEOG270	Adv Topics in Geog Info Systems	3
F222A	Elementary Forest Surveying	4
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
BA285	Human Relations in Organizations	3
GEOG275	Fundamentals of Cartography	3
GEOG277	GIS Capstone	1

WR115	Fundamentals of Report Writing <sup>2</sup>	4
<b>Credits</b>		<b>11</b>
<b>Total Credits</b>		<b>36</b>

<sup>1</sup> Call 541-888-7405 to schedule with Internship Coordinator one month prior to term.

<sup>2</sup> A higher writing may be substituted excluding WR241, WR242, WR243, or WR250.

\* All Honors courses may substitute for their equivalent requirements.

# INFANT AND TODDLER DEVELOPMENT, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) in Infant and Toddler Development degree prepares students to work in a variety of educational and childcare settings, including preschools, public schools, private schools, Head Start, Relief Nurseries, and family home settings that serve infants and toddlers. This degree offers students the opportunity to gain enhanced practical experience through practicum and student teaching courses. This degree program is fully articulated with Southern Oregon University's early childhood development program. Students who transfer to Southern Oregon University, and are accepted into the program, should be able to complete requirements for the bachelor's degree.

All coursework specific to childhood education and family studies degrees and certificates is offered online through Southwestern. Transfer courses that meet Southwestern's course outcomes are readily accepted into the program.

## CHILDHOOD EDUCATION & FAMILY STUDIES PRINCIPLES & GOALS

Main principles in the Childhood Education & Family Studies Program include:

- Understanding that children lead their own learning based on the level of their development
- Focusing on the importance of families in their roles with their young children
- Respecting diversity
- Addressing the needs of children with diverse abilities in inclusive settings
- Themes of inclusion, bilingual and multicultural education and care
- Critical thinking
- Reflective teaching

These principles are infused throughout the Childhood Education and Family Studies coursework. Coursework and field experiences at every level recognize the social, historical, political, and cultural contexts that have impacted the profession.

Southwestern's Childhood Education & Family Studies (CE&FS) program goals include:

- The CE&FS program seeks to empower its graduates by enabling them to acquire the knowledge and skills that will allow them to excel in their careers or further educational goals.
- The CE&FS program seeks to provide opportunities for teacher candidate-child, teacher candidate-classroom teacher, teacher candidate-content and teacher candidate-faculty interaction supporting teacher's professional growth and development.
- The CE&FS program seeks to provide model early care and education programs and staff for teacher candidates to develop effective knowledge, skills and attitudes.
- Graduates of the Childhood Education and Family Studies (CE&FS) program will possess broad general education and content area

knowledge, remain effective and reflective practitioners and problem solvers, apply innovative learning technologies and participate in opportunities for professional growth.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

In Oregon, students must be listed on the Oregon Central Background Registry (CBR). To begin this process, visit the State of Oregon Early Learning Division to be prepared to complete practicum work in a certified early learning center, apply for a background check, and receive additional information regarding how to comply with fingerprinting requirements.

Students will also be required to have a current immunization record and background check to complete practicum requirements. The requirements will vary per state. Students whose home state is not Oregon, are encouraged to research the requirements for the state regulating organization regarding what will be required to complete the background check.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 91 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Practicum and Student Teaching courses require students to pass CLASS assessments to successfully complete the courses. Twenty four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## CREDIT FOR PRIOR LEARNING

Credit for prior learning options are available for students with a Preschool Child Development Associate (CDA) credential, an Infant Toddler Child Development Associate (CDA) credential, a Step Seven on the Oregon Registry, or a Certificate of Completion for First Connections that includes mentoring in an infant toddler learning environment. Contact [ece@socc.edu](mailto:ece@socc.edu) for more information.

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this degree, students will have knowledge and skills in the following Standards developed by National Association for the Education of Young Children Early Childhood Associate Degree Accreditation (NAEYC) organization:

### 1. Promoting Child Development and Learning

Students develop and use their understanding of child development – including young children's unique characteristics and needs, and the multiple interacting influences on children's development and learning – to create environments that are healthy, respectful, supportive, and challenging for each child.

Key elements of Outcome 1;

- a. Describe young children's diverse characteristics and needs, from birth through age 8.
- b. Explain the multiple influences on early development and learning.
- c. Use knowledge of child development to create healthy, respectful, supportive, and challenging learning environments for young children.

## 2. Building Family and Community Relationships

Students articulate the complex characteristics of children's families and communities and use this understanding to create respectful, reciprocal relationships that support and empower families, and to engage all families in their children's development and learning.

Key elements of Outcome 2;

- a. Describe diverse family and community characteristics.
- b. Develop and implement strategies to support and engage families and communities through respectful, reciprocal relationships.
- c. Develop and implement plans to engage families and communities in young children's development and learning.

## 3. Observing, Documenting, and Assessing to Support Young Children and Families

Students articulate the goals, benefits, and purposes of assessment and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence the development of every child.

Key elements of Outcome 3;

- a. State the goals, benefits, and purposes of assessment – including its use in development of appropriate goals, curriculum, and teaching strategies for young children.
- b. Use observation, documentation, and other appropriate assessment tools and approaches, including the use of technology in documentation, assessment and data collection.
- c. Practice responsible assessment to promote positive outcomes for each child, including an awareness of assistive technology for children with ability differences.
- d. Describe how assessment partnerships with families and with professional colleagues can be used to build effective learning environments.

## 4. Using Developmentally Effective Approaches

Students implement a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning, which will vary depending on children's ages, characteristics, and the early childhood setting.

Key elements of Outcome 4;

- a. Discuss how supportive relationships and positive interactions are the foundation of their work with young children.
- b. List and implement effective instructional and guidance strategies and tools for early education, including appropriate uses of technology.
- c. Use a broad repertoire of developmentally appropriate teaching/ learning and guidance approaches.
- d. Reflect on their own practice to promote positive outcomes for each child.

## 5. Using Content Knowledge to Build Meaningful Curriculum

Students develop and apply their knowledge of developmental domains and academic (or content) disciplines to design, implement,

and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for each child.

Key elements of Outcome 5;

- a. Begin to explain content knowledge and resources in academic disciplines: language and literacy; the arts – music, creative movement, dance, drama, visual arts; mathematics; science; physical education – physical activity, health, and safety; and social studies.
- b. Recognize and apply the central concepts, inquiry tools, and structures of content areas or academic disciplines.
- c. Use their own knowledge, appropriate early learning outcomes, and other resources to design, implement, and evaluate developmentally meaningful and challenging curriculum for each child.

## 6. Becoming a Professional

Students are collaborative learners who continuously demonstrate knowledgeable, reflective and critical perspectives of their work, make informed decisions that integrate knowledge from a variety of sources, including ethical guidelines, and advocate for sound educational practices and policies.

Key elements of Outcome 6;

- a. Identify as a member of the early childhood field and become involved in the professional community.
- b. Locate and apply ethical guidelines and other early childhood professional guidelines.
- c. Engage in continuous, collaborative learning to inform practice; using technology effectively with young children, with peers, and as a professional resource.
- d. Integrate knowledgeable, reflective, and critical perspectives on early education into their work.
- e. Engage in informed advocacy for young children and the early childhood profession.

## 7. Early Childhood Field Experiences

Students engage in field experiences and clinical practice to develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children in a variety of early childhood settings and with multiple age groups.

Key elements of Outcome 7;

- a. Observe and practice in at least two of the three early childhood age groups (birth – age 3, 3-5, 5-8).
- b. Observe and practice in at least two of the three main types of early education settings (primary school grades, child care centers and homes, ECEAP/Head Start programs).

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

# PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ECE150	Introduction and Observation in ECE <sup>1</sup>	4
ECE170	Health and Safety Early Childhood	3

HDFS225	Prenatal Infant and Toddler Development	3
WR121	English Composition	4
MTH60	Algebra I <sup>2</sup>	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
ECE263	Env and Guidance in ECE Inf/Todd <sup>3</sup>	3
ECE263B	Practicum I Infant/Toddler <sup>3</sup>	2
ECE152	Creative Activities in ECE	3
HDFS247	Child Development 0-8	3
ECE151	Guidance and Classroom Management	3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
ECE161	Theory and Practice I Inf/Tod <sup>3</sup>	3
ECE161B	Practicum II Inf/Tod <sup>3</sup>	2
ECE154	Children's Language and Lit Dev	3
CIS120	Concepts of Computing	4
SP218	Interpersonal Communication <sup>7</sup>	3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ECE162	Theory and Practice II Inf/Tod <sup>3</sup>	3
ECE162B	Practicum III Inf/Tod <sup>3</sup>	2
ECE240	Lesson and Curriculum Planning	3
ED169	Overview of Student Special Needs	3
ED135	Teaching Math to Young Children	3
ED101K	Practicum: Grade K-3 <sup>4</sup>	1
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
ECE262	Student Teaching Infants/Toddlers <sup>3</sup>	3
ECE262B	Practicum IV Infants/Toddlers <sup>3</sup>	3
HDFS140	Contemporary American Families	3
HDFS227	Parents as Partners in Education	3
ED258	Multicultural Education	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
HDFS285	Prof Issues in Early Childhood Ed	3
ED134	Children Who are Dual Lang Learners <sup>5</sup>	2
BA285	Human Relations in Organizations <sup>6</sup>	3
PE231	Wellness for Life <sup>8</sup>	3
HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
<b>Credits</b>		<b>14</b>
<b>Total Credits</b>		<b>91</b>

- <sup>4</sup> ECE180HV, ED101P Practicum: Ed Pre-K, or ED101K Practicum: Grade K-3 will satisfy this requirement, depending on Practicum placement. Practicums have specific requirements; please call 541-888-1575 to make an appointment with the program coordinator to schedule site two months prior to term. Students interested in Early Intervention may be placed in an appropriate site. Credits may be taken in any term dependent upon availability.
- <sup>5</sup> For students wishing to pursue a career in Parenting Education and Home Visiting ED134 may be substituted with HDFS297.
- <sup>6</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.
- <sup>7</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- <sup>8</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- \* All Honors courses may substitute for their equivalent requirements.

<sup>1</sup> One criminal background check and fingerprinting is required for ECE150 and all practicum courses.

<sup>2</sup> A higher Math class may be substituted.

<sup>3</sup> ECE263, ECE161, ECE162 and ECE262 must be taken in sequence with their co-requisite practicum courses. A criminal background check must be on file before enrolling in these classes.

# MARINE BIOLOGY, ASSOCIATE OF SCIENCE

The Associate of Science (AS) in Marine Biology is designed for students who intend to transfer to the University of Oregon (UO) and complete their degree at Oregon Institute of Marine Biology (OIMB), majoring in marine biology. The background offered by this major, however, is entirely appropriate for preparation for upper division emphasis in other professional fields such as medical, dental or veterinary school.

The AS degree, as presented, also satisfies the requirements for an AA/OT for ease of transfer to any Oregon public university. By completing general education requirements for the AA/OT, as well as the recommended science courses, students will be able to transfer to UO and complete a BS in Marine Biology or a BS in Biology with a Marine Biology Emphasis.

Career options for marine biology graduates include jobs in state and federal government, advanced training for research and teaching in the marine sciences, and most other careers available to broadly trained biologists.

The following program outline is one of many possible course configurations that would satisfy the requirements for an AS Marine Biology and AA/OT transfer degree and also fulfill basic requirements for graduation from UO. Each student should meet with an advisor to determine appropriate sequence of courses to be taken, depending on placement scores, transfer credits, and other factors.

Upon completion of an AS Marine Biology (and AA/OT) and transfer to UO, additional courses need to be taken at the Eugene campus. These courses include organic chemistry CH331 and CH335, BI214, and physics (unless it was taken at SWOCC) and upper division Biology courses. Additional Biology courses are then taken at OIMB (a minimum of three quarters are required at OIMB in Charleston).

## GRADUATION REQUIREMENTS

Students must complete a minimum of 94 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Fulfill the student learning outcomes for an AA/OT or an AS degree.
- Participate in recommended science courses that could include introductions to oceanography and marine biology in preparation for transfer into a marine biology program.

- Enhance science skills and technical modes of inquiry with recommended elective credits.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
BI201	Introductory Biology	4
MTH111	College Algebra	4
WR121	English Composition	4
Arts and Letters	<sup>1</sup>	3-4
Health, Wellness, and Fitness	<sup>2</sup>	1
<b>Credits</b>		<b>16-17</b>
<b>Winter</b>		
BI202	Introductory Biology	4
MTH112	Trigonometry	4
WR122	English Composition	4
Social Science	<sup>3</sup>	3
Health, Wellness, and Fitness	<sup>2</sup>	1
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
BI111	Marine Habitats of the Oregon Coast	1
BI203	Introductory Biology	4
GS108	Oceanography	4
WR227	Report Writing	4
Social Science	<sup>3</sup>	3
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
MTH251	Calculus I Differential Calculus	4
SP100	Basic Speech Communications (or higher)	<sup>4</sup> 3
Arts and Letters	<sup>1</sup>	3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CHEM222	General Chemistry II	5
MTH252	Calculus II Integral Calculus	4
Arts and Letters	<sup>1</sup>	3
Social Sciences	<sup>3</sup>	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
BI142	Habitats: Marine Biology	4
BI180 or BI280	Internship: Biology or CWE: Biology	<sup>5</sup> 3
CHEM223	General Chemistry III	5

Social Science <sup>3</sup>	3
Health, Wellness, and Fitness <sup>2</sup>	1
<b>Credits</b>	<b>16</b>
<b>Total Credits</b>	<b>94-95</b>

- <sup>1</sup> Select nine (9) credit hours in Arts & Letters from AA/OT Discipline Studies Requirements (p. 27) courses.
- <sup>2</sup> PE231 , HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>3</sup> Select nine (9) credit hours of Social Sciences from Discipline Studies Requirements (p. 27) courses.
- <sup>4</sup> SP111, SP218, or SP219 may be substituted.
- <sup>5</sup> Call 541-888-7405 to schedule with Internship Coordinator one month prior to term.
- \* All Honors courses may substitute for their equivalent requirements.

# MECHANICAL/CIVIL ENGINEERING, ASSOCIATE OF SCIENCE

The Associate of Science (AS) in Mechanical/Civil Engineering program will provide the first two years of the engineering core curriculum for students pursuing civil or mechanical engineering as a transfer degree. The coursework is foundational to the upper division pro-schools and provides the fundamental concepts needed for success and advancement in the civil and mechanical engineering profession.

This degree satisfies the requirements for an AS degree and was designed to transfer to Oregon Institute of Technology's College of Engineering or Oregon State University's College of Engineering. Please consult your advisor for details.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 107 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the AS degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## LEARNING OUTCOMES

- Students will demonstrate the ability to solve engineering problems using a variety of mathematical and computational methods.
- Students will learn and apply the required ethics expected in a professional engineering setting.
- Students will gain fundamental understanding of engineering principles including fundamentals of equilibrium of forces, and moments, an understanding of material responses to applied and reaction loads, and fundamental electrical circuits.
- Students will demonstrate problem solving experience through various methods including use of higher level computer programming 2-D and 3-D CAD modeling.
- Students will demonstrate an ability to think critically and design feasible solutions to proposed design problems.
- Students will be able to communicate designs and results effectively.
- Students will demonstrate an ability to function in interdisciplinary teams.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CHEM221	General Chemistry I	5
MTH251	Calculus I Differential Calculus	4
WR121	English Composition	4
ENGR111	Intro to Engineering	3
ECON201 or ECON202	Microeconomics or Macroeconomics	4
<b>Credits</b>		<b>20</b>
<b>Winter</b>		
CHEM222	General Chemistry II	5
MTH252	Calculus II Integral Calculus	4
SP111	Fundamentals of Public Speaking	3
ENGR112	Engineering Computation	4
Arts & Letters <sup>1</sup>		3
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
BI103	General Biology <sup>2</sup>	4
MTH253	Calculus III Infinite Sequences And Series <sup>6</sup>	4
WR227	Report Writing	4
DRFT110 or DRFT112	Computer Assisted Drafting I or Computer Assisted Drafting III	3
Arts & Letters <sup>1</sup>		3
<b>Credits</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
ENGR211	Statics	3
PH211	General Physics with Calculus I	5
ENGR201	Electrical Fundamentals I <sup>5</sup>	4
MTH254	Vector Calculus I	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
PH212	General Physics with Calculus II	5
ENGR212	Dynamics	3
ENGR202	Electrical Fundamentals II <sup>5</sup>	4
PE231	Wellness for Life <sup>4</sup>	3
Cultural Diversity <sup>3</sup>		3
<b>Credits</b>		<b>18</b>
<b>Spring</b>		
PH213	General Physics with Calculus III	5
ENGR213	Strength of Materials	3
MTH256	Differential Equations	4
MTH260	Matrix Methods and Linear Algebra <sup>6</sup>	4
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>107</b>

<sup>1</sup> Select appropriate course in specific subject area from the course listed in AS Arts & Letters category.

- <sup>2</sup> BI101, BI102, BI103, BI201, BI202, BI203, BI234, ENV235, F250 may be substituted. Transfer to OIT for Civil Engineering should substitute G201.
- <sup>3</sup> Cultural Diversity: ANTH224, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206.
- <sup>4</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>5</sup> GEOG265 may substitute for ENGR201 or ENGR202 for students transferring to OIT Civil Engineering.
- <sup>6</sup> MTH264 and MTH243 may be substituted for MTH253 and MTH260. Students transferring to Oregon State in Civil Engineering must take MTH264 and MTH243.
- \* All Honors courses may substitute for their equivalent requirements.

# MEDICAL ASSISTANT, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Medical Assistant prepares students in the first year of the curriculum to perform initial clerical and administrative duties in medical, clinical, hospitals, and other medical facilities. The student will be prepared to schedule and receive patients, obtain patient data, receive payment, maintain medical records, data processing, perform general office skills, operate office equipment, and assume medical office responsibilities.

The second year adds skills in pharmacology, phlebotomy, and clinical skills with emphasis on the role of the medical assistant as an integral member of the medical care delivery team. This includes performing patient intake, medication documentation, routine diagnostics and recording procedures, pre-examination and examination assistance, preparing and administering medications, and first aid. Students are instructed in basic anatomy and physiology, medical terminology, medical law and ethics, patient psychology and communication, medical office procedures, clinical diagnostic examination, testing and treatment procedures.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Due to the nature of this curriculum and the access to drugs, all students will have to declare themselves "drug free" and be subject to a criminal background check. Any student who is unable, for any reason, to complete the practice parts of this curriculum will not be able to continue in the program. Drug testing will be done prior to clinical practice. Graduates may choose to take a national certification examination at the successful conclusion of the program.

For more information go to myLakerLink at [https://mylakerlink.socc.edu/ICS/Admissions/Program\\_Specific\\_Forms.jnz](https://mylakerlink.socc.edu/ICS/Admissions/Program_Specific_Forms.jnz).

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the AAS Medical Assistant degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate general knowledge of medical terminology, anatomy and physiology, and medical law and ethics.
- Demonstrate proficiency in medical office administrative practices.
- Demonstrate comprehensive knowledge of clinical practice.

## AWARD MAP

### Pathway Option

Career Pathway Certificate of Completion: Basic Allied Health Care

: Medical Assistant

Associate: AAS: Medical Assistant

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
AH100	Introduction to Health Care Careers	2
AH111	Medical Terminology I	3
AH121	Body Structures and Functions I <sup>7</sup>	3
AH152	Medical Law and Ethics	2
WR115	Fundamentals of Report Writing <sup>1</sup>	4
<b>Credits</b>		<b>14</b>
<b>Winter</b>		
AH112	Medical Terminology II	3
AH122	Body Structures and Functions II <sup>7</sup>	3
AH150	Medical Office Coding	3
PHAR5472	Pharmacology I	3
Specific Elective <sup>2</sup>		3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
AH131	Clinical Procedures I	4
CLA100	Clinical Lab Asst Skills I	4
BA285	Human Relations in Organizations	3
MTH98	Math Literacy <sup>3</sup>	4
AH280A	CWE: Allied Health Front Office <sup>4</sup>	2
<b>Credits</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
AH132	Clinical Procedures II	4
AH151	Reimbursement Management	3
SP218	Interpersonal Communication <sup>5</sup>	3
Specific Elective <sup>2</sup>		6
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
CIS120	Concepts of Computing	4
PHAR5473	Pharmacology II	3

AH280B	CWE: Allied Health Back Office <sup>4</sup>	3
Specific Elective <sup>2</sup>		6
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
HIM183	Health Information Systems	3
AH297	NHA Licensure Qualification	2
PE231	Wellness for Life <sup>6</sup>	3
Specific Elective <sup>2</sup>		4
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>90</b>

<sup>1</sup> A higher writing may be substituted, excluding WR241.

<sup>2</sup> Specific Electives - CJ203, HDFS222, PSY201, PSY202, PSY203, PSY231, PSY232, PSY237, PSY239, PSY243, SP100, SP111, SP112, SP219, SP220, WR121, WR122, WR227.

<sup>3</sup> MTH60, MTH65, MTH95, or higher, excluding MTH211, may be substituted for MTH98.

<sup>4</sup> Call 541-888-7405 to schedule with Internship Coordinator one month prior to term. All first year courses must be completed with a 'C' or higher before taking AH280A. All of the first and second year courses must be completed with a grade of 'C' or better before taking AH280B. These courses require an application to be submitted to document requirements such as immunizations, drug screen, current CPR card, and criminal background check. See Oregon Health Authority, Chapter 409, Division 30 for details.

<sup>5</sup> SP100, SP111, or SP219 may be substituted for SP218.

<sup>6</sup> PE231, HE250 or three (3) credits of PE185 sport/activity courses will satisfy this requirement.

<sup>7</sup> BI231, BI232, and BI233 sequence may be substituted for AH121 & AH122.

\* All Honors courses may substitute for their equivalent requirements.

## BASIC ALLIED HEALTH CARE, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Basic Allied Health Care was created in response to the region's need for skilled health care workers. The Pathway Certificate consists of an evidence-based curriculum that gives students a solid foundation in the allied health field. The program supports candidates to move into advanced training programs in the health care profession.

This certificate provides students with the chance to gain entry-level skills in a high demand career field. This Career Pathway also gains 'points' toward Southwestern's Nursing Program application.

### GRADUATION REQUIREMENTS

Students must complete a minimum of 16 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Basic Allied Health Care is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate general knowledge of medical terminology, anatomy and physiology, and medical law and ethics.
- Demonstrate comprehensive knowledge of clinical practice.
- Practice professionalism as it relates to health care.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
AH100	Introduction to Health Care Careers	2
AH111	Medical Terminology I	3
<b>Credits</b>		<b>5</b>
<b>Winter</b>		
AH112	Medical Terminology II	3
AH121	Body Structures and Functions I	3
<b>Credits</b>		<b>6</b>
<b>Spring</b>		
AH122	Body Structures and Functions II	3
AH152	Medical Law and Ethics	2
<b>Credits</b>		<b>5</b>
<b>Total Credits</b>		<b>16</b>

## MEDICAL ASSISTANT, CERTIFICATE OF COMPLETION

The Certificate of Completion Medical Assistant prepares students to perform initial clerical and administrative duties in medical, clinical, hospitals, or health care facilities. The graduate will be prepared to schedule and receive patients, obtain patient data, receive payment, maintain medical records, data processing, perform general office skills, office equipment operation, and assume general medical office responsibilities. The student will demonstrate effective communication skills in dealing with patients, medical personnel and peers.

### GRADUATION REQUIREMENTS

Students must complete a minimum of 48 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. Twenty-four (24) credits must

be completed at Southwestern before the degree is awarded. All courses must be completed with a grade of 'C' or better.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

- Demonstrate comprehensive knowledge of clinical practice.
- Demonstrate general knowledge of medical terminology, anatomy and physiology, and medical law and ethics.
- Demonstrate proficiency in medical office administrative practices.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
AH111	Medical Terminology I	3
AH121	Body Structures and Functions I	3
AH152	Medical Law and Ethics	2
WR115	Fundamentals of Report Writing	4
<b>Credits</b>		<b>12</b>
<b>Winter</b>		
AH112	Medical Terminology II	3
AH122	Body Structures and Functions II	3
AH150	Medical Office Coding	3
PHAR5472	Pharmacology I	3
<b>Credits</b>		<b>12</b>
<b>Spring</b>		
AH131	Clinical Procedures I	4
AH297	NHA Licensure Qualification	2
BA285	Human Relations in Organizations	3
CLA100	Clinical Lab Asst Skills I	4
MTH98	Math Literacy <sup>2</sup>	4
<b>Credits</b>		<b>17</b>
<b>Summer</b>		
AH132	Clinical Procedures II	4
AH280B	CWE: Allied Health Back Office	3
<b>Credits</b>		<b>7</b>
<b>Total Credits</b>		<b>48</b>

<sup>1</sup> WR115 or higher, excluding WR241.

<sup>2</sup> MTH98 or higher, excluding MTH211.

\* All honors courses may substitute for their equivalent requirement.

# NATURAL RESOURCES, ASSOCIATE OF SCIENCE

Southwestern's Natural Resources program provides students with an introduction to the technical and scientific knowledge related to natural resource policy and management. Students can prepare for careers in natural resource planning, management, conservation and education roles with government agencies, non-governmental organizations and in educational settings.

The program guide lists the required courses for the AS degree. The program guide also lists recommended electives appropriate for the field. For more info, view the Southwestern's Forestry/Natural Resources webpage.

Southwestern has a formal articulation agreement with Oregon State University (OSU) aligning this AS Natural Resources degree with OSU's Natural Resources Bachelor of Science degree, Watershed Management option. Students that complete the AS degree with Natural Resources emphasis at Southwestern will satisfy most lower division courses required for the bachelor's in Natural Resources, Watershed Management option.

Following completion of the AS Natural Resources degree, students may transfer to OSU with 90 or more credit hours (up to 124 can be transferred). Southwestern courses in the AS Natural Resources are listed in the articulation agreement. AS Natural Resources graduates transferring to OSU have junior standing with only (a) upper division Synthesis and WIC requirements of the Baccalaureate Core to be completed, and (b) upper division courses associated with the Natural Resources degree program.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 96 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Integrate technical "field" skills with analytical skills to identify important natural resources problems and begin to identify effective solutions for these problems.
- Acquire knowledge regarding a range of natural resources current issues, social and political components of resource management.
- Work with experts in a variety of natural resource fields.

- Apply watershed management principles and practices to actual natural resources issues and problems to develop plans and solutions.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
F111	Introduction to Forestry <sup>1</sup>	3
BI201	Introductory Biology <sup>6</sup>	4
MTH111	College Algebra	4
WR121	English Composition	4
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
PHL102	Ethics	3
BI202	Introductory Biology <sup>6</sup>	4
MTH112	Trigonometry	4
WR227	Report Writing	4
ANTH231	Native North Americans: PNW <sup>5</sup>	3
<b>Credits</b>		<b>18</b>
<b>Spring</b>		
MTH243	Intro to Probability and Statistics	4
BI203	Introductory Biology <sup>6</sup>	4
NR180	Internship: Natural Resources <sup>4</sup>	1
PE231	Wellness for Life	3
<b>Credits</b>		<b>12</b>
<b>Second Year</b>		
<b>Fall</b>		
G201 or G202 or ENV235	Physical Geology I or Physical Geology II or Introduction to Soil Science	4
GEOG265	Intro to Geographical Info Systems	4
CHEM221	General Chemistry I	5
English Literature <sup>3</sup>		3
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
ECON201	Microeconomics	4
F222A	Elementary Forest Surveying	4
F250	Forest Biology	4
SP111	Fundamentals of Public Speaking	3
GEOG209	Physical Geography Weather/Climate	4
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
F241	Dendrology	5
F251	Recreation Resource Management	4
HST203	History of the United States	3

GS108 or NR260	Oceanography or Watershed Processes	4
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>96</b>

- <sup>1</sup> NR201 may be substituted for F111.
- <sup>2</sup> This requires a corequisite G145 or G025 Field Trip course. Ask your advisor for details.
- <sup>3</sup> English Literature options: ENG104, ENG105, or ENG106.
- <sup>4</sup> Call 541-888-7405 to schedule with Internship Coordinator one month prior to term.
- <sup>5</sup> ANTH232 may be substituted for ANTH231.
- <sup>6</sup> BI101, BI102, BI103 may be substituted for BI201, BI202, BI203.
- \* All Honors courses may substitute for their equivalent requirements.

# NURSING, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Nursing is intended for students seeking a career as a Registered Nurse. The program prepares students to practice professional nursing in a variety of settings. Upon completion of the program, students will be awarded an AAS degree and are eligible to sit for the national licensure examination (NCLEX-RN) leading to a licensure as a Registered Nurse.

## ENTRY REQUIREMENTS

This is a restricted-entry program. Students are required to submit an application to the College and a separate application to the nursing program. A total of 52 credits of specific prerequisites must be completed. All prerequisites must be completed with a grade of 'C' or better prior to beginning the nursing program. Thirty (30) of the 52 credits must be completed by the end of fall term preceding application and must include BI231 Human Anatomy and Physiology I. Selection of applicants is based on a point system described in the application/information packet.

Acceptance to the program allows for co-admission to the Oregon Health & Science University (OHSU) nursing program. Students are eligible to complete a bachelor's degree in nursing from OHSU either full-time in three quarters or part-time.

Information about the Nursing program may also be obtained on myLakerLink in the Program Forms section ([https://mylakerlink.socc.edu/ICS/Admissions/Program\\_Specific\\_Forms.jnz](https://mylakerlink.socc.edu/ICS/Admissions/Program_Specific_Forms.jnz)). For more information contact the administrative assistant, 541-888-7443 or the director at 541-888-7342.

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Act personally and professionally based on a set of shared core nursing values.
- Develop insight through reflection, self-analysis, and self-care.
- Engage in ongoing intentional learning.
- Demonstrate leadership in nursing and health care.
- Collaborate as part of a health care team.
- Practice within, utilize, and contribute to the broader health care system.
- Practice relationship-centered care.
- Communicate effectively.
- Make sound clinical judgments.
- Locate, evaluate and use the best available evidence in making practice decisions.

## PRE-PROGRAM COURSES

Thirty (30) credits must be completed by the end of fall term preceding application and must include BI231 Human Anatomy and Physiology I. A student must have eight (8) credits of writing.

Course	Title	Credits
<b>Prerequisites</b>		
<b>Summer</b>		
CHEM110	Foundations of General, Organic, and Biochemistry <sup>1</sup>	4
FN225	Nutrition	4
CIS120	Concepts of Computing (or demonstrated proficiency)	4
ANTH221	Intro to Cultural Anthropology <sup>4</sup>	3
<b>Credits</b>		<b>15</b>
<b>Fall</b>		
BI231	Human Anatomy and Physiology I <sup>2</sup>	4
BI234	Microbiology	4
MTH95	Intermediate Algebra (or higher) <sup>3</sup>	4
WR121	English Composition	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
BI232	Human Anatomy and Physiology II	4
PHL102	Ethics	3
WR122	English Composition	4
<b>Credits</b>		<b>11</b>
<b>Spring</b>		
BI233	Human Anatomy and Physiology III	4
PSY237	Life Span Development	3
SP218 or SP219	Interpersonal Communication or Small Group Discussion	3
<b>Credits</b>		<b>10</b>
<b>Total Credits</b>		<b>52</b>

<sup>1</sup> Students applying for the nursing program must have completed either a 200-level general chemistry sequence or CHEM110 Foundations of General, Organic, and Biochemistry.

<sup>2</sup> Students must have completed BI231 Human Anatomy and Physiology I prior to submitting an application. BI231, BI232, and BI233 must have been completed *within the last seven years*.

<sup>3</sup> MTH95, MTH105, or higher, excluding MTH211 will satisfy this requirement.

<sup>4</sup> ANTH222, ANTH223 may be substituted for ANTH221.

\* All honors courses may substitute for their equivalent requirements.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 91 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Student must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

# PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
NRS110	Foundations of Nursing Health Promotion	9
NRS230	Clinical Pharmacology I	3
BI149	Introduction to Human Genetics	3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
NRS111	Found of Nrsrg in Chronic Illness I	6
NRS232	Pathophysiological Processes I	3
MTH243	Intro to Probability and Statistics	4
<b>Credits</b>		<b>13</b>
<b>Spring</b>		
NRS112	Foundations of Nursing in Acute I	6
NRS231	Clinical Pharmacology II	3
NRS233	Pathophysiological Processes II	3
PHL103	Intro to Logic and Critical Thnkg	3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
NRS222	Found of Nrsrg in Acute Care II and End of Life	9
HE250	Personal Health <sup>2</sup>	3
Humanities/Soc. Sciences or Natural Sciences <sup>1</sup>		6
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
NRS221	Found of Nrsrg in Chronic Illness II and End of Life	9
Humanities/Soc. Sciences or Natural Sciences <sup>1</sup>		6
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
NRS224	Scope of Practice/Integrated Practicum	9
Elective <sup>3</sup>		3
Any 200 level Social Science		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>91</b>

<sup>1</sup> Humanities/Social or Natural Science courses: A minimum of 11 credits of Humanities/Social Science or Natural Science courses must be selected from outside of the student's area of concentration.

College-level courses may be selected from the following: ANTH, ART, ASL (200 level), BI, CHEM, CJ100, CJ101, CJ201, CJ220, CS133WS, CS160, CS161, CS162, CS261, ECON202, ED169, ED258, ENG, G (200 level), GEOG105, GS, HD208, HDFS222, HDFS225, HDFS229, HDFS247, HST, HUM, J, MUS, MUP105, PH, PHL, PS (200 level), PSY (200 level), SOC (200 level), SP, SPAN (200 level), WR (200 level).

<sup>2</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.

<sup>3</sup> Developmental and remedial courses **will not** fulfill elective requirement.

\* All Honors courses may substitute for their equivalent requirements.

# 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 100 and 200-level general education requirements, determined by each Oregon community college, Oregon university institution, 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 Oregon university campus to another public college or university.

The OTM includes coursework chosen from the courses approved for the categories found in the program guide (p. 120) by the institution issuing the credit. In the case of community colleges, these are courses approved for the AAOT degree; in the case of universities and four-year colleges, they are courses approved for the general education portion of a bachelor's degree.

Any student completing an OTM that conforms to the guidelines below will have met the requirements for the OTM at any Oregon community college or public university. At the time of transfer, the receiving institution may specify additional coursework for a major or degree, any additional institution-specific general education requirements not included in the OTM, or to make up the difference between the OTM and the institution's total general education requirements.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 45 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be passed with a grade of 'C' or better. One course must be completed at Southwestern before the Oregon Transfer Module is awarded.

Complete elective courses to reach a total of 45 credits. The courses must be numbered 100 or above. Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

All Honors courses may substitute for their equivalent requirements.

## FOUNDATIONAL SKILLS REQUIREMENTS

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

### WRITING

Eight (8) credits from:

Code	Title	Credits
WR121	English Composition	4
WR122	English Composition	4
or WR227	Report Writing	

*Note: Information Literacy is included through embedding the appropriate content and analytical activity in courses that count toward the writing Foundational Skills Requirement.*

## MATHEMATICS

One (1) course from:

Code	Title	Credits
MTH105	Math in Society (or higher, with a prerequisite of MTH95, excluding MTH211)	4

## COMMUNICATION

One (1) course from:

Code	Title	Credits
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3

## INTRODUCTION TO DISCIPLINE STUDIES REQUIREMENTS

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

## ARTS AND LETTERS

Three (3) courses from:

**Note: A second year foreign language may be included, but not first year.**

Code	Title	Credits
ART115	Basic Design I Intro to Elements of Art and Principles of Design	4
ART116	Basic Design II, Color Theory	4
ART117	Basic Design III, Intro to 3D Design	4
ART131	Introduction to Drawing I	3
ART132	Introduction to Drawing II	3
ART133	Introduction to Drawing III	3
ART191	Beginning Sculpture	3
ART192	Beginning Sculpture	3
ART204	History of Western Art: Introduction to Art History	3
ART205	History of Western Art: Introduction to Art History	3
ART206	History of Western Art: Introduction to Art History	3
ART225	Computer Art I	3
ART244	Bronze Casting	3
ART253	Ceramics I	3
ART256	Ceramics II	3
ART281	Painting I Beginning	3
ART282	Painting II Beginning	3
ART283	Painting III Beginning	3
ART284	Painting I Intermediate	3
ART285	Painting II Intermediate	3
ART286	Painting III Intermediate	3
ASL201	2nd Yr American Sign Language I	4
ASL202	2nd Yr American Sign Language II	4
ASL203	2nd Yr American Sign Language III	4
ENG104	Introduction to Literature Fiction	3
ENG105	Introduction to Literature Drama	3
ENG106	Introduction to Literature Poetry	3

ENG107	World Literature	3	ANTH230	Native North Americans: Oregon	3
ENG108	World Literature	3	ANTH231	Native North Americans: PNW	3
ENG109	World Literature	3	ANTH232	Native North Americans	3
ENG201	Shakespeare	3	CJ101	Intro to Criminology	4
ENG204	Survey of English Literature	3	ECON201	Microeconomics	4
ENG205	Survey of English Literature	3	ECON202	Macroeconomics	4
ENG206	Survey of English Literature	3	ED169	Overview of Student Special Needs	3
ENG253	Survey of American Literature	3	ED258	Multicultural Education	3
ENG254	Survey of American Literature	3	GEOG105	Cultural Geography	3
ENG255	Survey of American Literature	3	HDFS140	Contemporary American Families	3
HUM204	World Mythology & Religion	3	HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
HUM205	World Mythology & Religion	3	HDFS229	Child Development PreK - Adolescent	3
HUM206	World Mythology & Religion	3	HDFS247	Child Development 0-8	3
MUS101	Music Fundamentals	3	HST101	History of Western Civilization	3
MUS111	Music Theory I	3	HST102	History of Western Civilization	3
MUS112	Music Theory II	3	HST103	History of Western Civilization	3
MUS113	Music Theory III	3	HST104	History of the Middle East	3
MUS201	Intro to Music and its Literature	3	HST195	History of the Vietnam War	3
MUS202	Intro to Music and its Literature	3	HST201	History of the United States	3
MUS203	Intro to Music and its Literature	3	HST202	History of the United States	3
MUS205	Intro to Jazz History	3	HST203	History of the United States	3
MUS206	Intro to History of Rock and Roll	3	HST240	Hist of Oregon and the South Coast	3
MUS211	Advanced Music Theory I	3	PS201	American Government: Political Institutions	3
MUS212	Advanced Music Theory II	3	PS202	American Government: Policy Issues	3
MUS213	Advanced Music Theory III	3	PS203	Local Politics and Government	3
PHL101	Introduction to Philosophy: Philosophical Problems	3	PS205	International Relations: US Foreign Policy in the 20th Century	3
PHL102	Ethics	3	PSY100	Introduction to Psychology	4
PHL103	Intro to Logic and Critical Thnkg	3	PSY201	General Psychology	3
SP100	Basic Speech Communications	3	PSY202	General Psychology	3
SP111	Fundamentals of Public Speaking	3	PSY203	General Psychology	3
SP218	Interpersonal Communication	3	PSY216	Social Psychology	3
SP219	Small Group Discussion	3	PSY228	Introduction to Social Science Research	3
SP220	Gender and Communication	3	PSY231	Human Sexuality	3
SPAN201	Second Year Spanish	4	PSY237	Life Span Development	3
SPAN202	Second Year Spanish	4	PSY239	Introduction to Abnormal Psychology	3
SPAN203	Second Year Spanish	4	PSY243	Drugs and Behavior	3
WR241	Imaginative Creative Writing Fiction	3	SOC204	Introduction to Sociology	3
WR242	Imaginative Writing Poetry	3	SOC205	Social Institutions and Change	3
WR243	Imaginative Writing Explorations	3	SOC206	Social Problems and Issues	3
			SOC208	Sociology of Sport	3
			SOC210	Marriage and Family	3
			SOC213	Racial and Ethnic Relations	3
			SOC218	Sociology of Gender	3

## SOCIAL SCIENCES

Three (3) courses from:

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3

## SCIENCE/MATHEMATICS/COMPUTER SCIENCE

Three (3) courses, including at least one (1) biological or physical science with lab:

## Laboratory Courses

Code	Title	Credits
BI101	General Biology	4
BI102	General Biology	4
BI103	General Biology	4
BI142	Habitats: Marine Biology	4
BI201	Introductory Biology	4
BI202	Introductory Biology	4
BI203	Introductory Biology	4
BI231	Human Anatomy and Physiology I	4
BI232	Human Anatomy and Physiology II	4
BI233	Human Anatomy and Physiology III	4
BI234	Microbiology	4
CHEM221	General Chemistry I	5
CHEM222	General Chemistry II	5
CHEM223	General Chemistry III	5
ENV235	Introduction to Soil Science	4
G201	Physical Geology I	4
G202	Physical Geology II	4
G203	Historical Geology	4
GS104	Physical Science	4
GS105	Physical Science	4
GS106	Introduction to Earth Science	4
GS107	Astronomy	4
GS108	Oceanography	4
NR260	Watershed Processes	4
PH201	General Physics I: Mechanics	5
PH202	General Physics II: Heat, Waves, Relativity	5
PH203	Gen Physics III: Elect & Magnetism	5
PH211	General Physics with Calculus I	5
PH212	General Physics with Calculus II	5
PH213	General Physics with Calculus III	5

## Non-Laboratory Courses

Code	Title	Credits
BI140	Practical Ecology	3
BI149	Introduction to Human Genetics	3
CHEM110	Foundations of General, Organic, and Biochemistry	4
CS160	Computer Science Orientation	4
CS161	Introduction to Computer Science I	4
CS162	Introduction to Computer Science II	4
CS261	Data Structures	4
ENV110	Introduction Environmental Science	3
G221	General Geology	3
G246	Geological Hazards And Natural Catastrophes	3
MTH105	Math in Society	4
MTH111	College Algebra	4
MTH112	Trigonometry	4
MTH212	Fundamentals of Elementary Mathematics II	4
MTH213	Fundamentals of Elementary Mathematics III	4
MTH231	Elements of Discrete Mathematics I	4

MTH232	Elements of Discrete Mathematics II	4
MTH241	Calculus for Bus and Soc Science I	4
MTH242	Calculus for Bus and Soc Science II	4
MTH243	Intro to Probability and Statistics	4
MTH244	Probability & Statistics II	4
MTH251	Calculus I Differential Calculus	4
MTH252	Calculus II Integral Calculus	4
MTH253	Calculus III Infinite Sequences And Series	4
MTH254	Vector Calculus I	4
MTH255	Vector Calculus II	4
MTH256	Differential Equations	4
MTH260	Matrix Methods and Linear Algebra	4
MTH264	Introduction to Matrix Algebra and Power Series	4

## ELECTIVES

- All courses must be completed with a grade of 'C' or better.
- Students may take any college-level course that would bring total credits to 45. Courses must be from the Introduction to Disciplines area (Arts & Letters, Social Science, or Science/Mathematics/Computer Science).
- A maximum of nine (9) credits of PE185 sport/activity courses may be applied to the OTM.
- Three (3) credit hours of PE185 sport/activity courses may be granted toward the OTM for completion of military basic training. A copy of the military transcript or DD-214 is required.
- Courses numbered 199/299 will qualify as elective credit only.

## SUPPORTIVE COURSES

*Note: The College has determined that the following supportive courses may be necessary to assist students to successfully complete their program. They count as electives only.*

Code	Title	Credits
CIS120	Concepts of Computing	4
CIS125W	Word Processing Applications Microsoft	3
HD100	College Success and Survival	3
HD102	College Nuts and Bolts	1
HD111	Math Success	2
HD112	Study Skills	3
HD113	Stop Test Anxiety Now	1
HD140	Career/Education Exploration	1
HD152	Stress Management	2
HD208	Career/Life Plan	3
LIB127	Navigating the 24/7 Library	1

*A maximum of 45 credits is allowed for basic, developmental, or supportive courses under federal financial aid guidelines.*

## CULTURAL LITERACY

**Students are encouraged to complete at least one (1) course from any of the discipline studies that meets the statewide criteria for cultural literacy. The credits for such courses will only be counted one time toward the degree.**

Code	Title	Credits
ANTH201	Physical Anthropology and Evolution	3
ANTH202	Introduction to Archaeology	3
ANTH203	Language and Culture	3
ANTH221	Intro to Cultural Anthropology	3
ANTH222	Cultural Anthropology II	3
ANTH223	Cultural Anthropology III	3
ANTH224	Intro to Medical Anthropology	3
ANTH230	Native North Americans: Oregon	3
ANTH231	Native North Americans: PNW	3
ANTH232	Native North Americans	3
ED258	Multicultural Education	3
ENG107	World Literature	3
ENG108	World Literature	3
ENG109	World Literature	3
GEOG105	Cultural Geography	3
HDFS140	Contemporary American Families	3
HUM204	World Mythology & Religion	3
HUM205	World Mythology & Religion	3
HUM206	World Mythology & Religion	3
HST104	History of the Middle East	3
MUS205	Intro to Jazz History	3
MUS206	Intro to History of Rock and Roll	3
PSY216	Social Psychology	3
PSY231	Human Sexuality	3
SOC208	Sociology of Sport	3
SOC210	Marriage and Family	3
SOC213	Racial and Ethnic Relations	3
SOC218	Sociology of Gender	3
SP220	Gender and Communication	3

## PROGRAM NOTES

1. Courses that are designed to prepare students for college-level work (also called developmental courses) are not applicable to the OTM.
2. When choosing courses in science and mathematics, students and advisors should check the specific requirements at receiving schools. Courses that include a laboratory component, or that deal with specific subjects, may be required for majors or degrees. ESPS advisors and the University Center can assist you in planning for a specific major or degree.
3. Computer science courses used in the Science/Mathematics/Computer Science area must meet Oregon Council of Computer Chairs criteria for a science course.
4. In the Arts and Letters category, the second year of a foreign language may be included, but not the first year. American Sign Language (ASL) is considered a foreign language.
5. OTM credits may not match program requirements in the receiving school. The OTM supplements, but does not supplant existing articulation agreements and does not replace effective advising.

# PARAMEDICINE, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Paramedicine is designed for individuals interested in providing care to patients in the pre-hospital setting. The purpose of this program is to prepare competent entry-level paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the advanced emergency medical technician, emergency medical technician, and/or emergency responder levels.

This program will provide the knowledge, skills and attitudes necessary for an entry-level paramedic and allow eligibility to sit for national and state testing for emergency medical technician and paramedic. The program meets or exceeds the required skills and knowledge as set forth by the National EMS Education Standards and the Oregon Health Authority DHS-EMS division.

The program is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP) and the Oregon Health Authority DHS-EMS.

## ENTRY REQUIREMENTS

The EMT and paramedic sequence portions of the program are the only limited-entry components. Students are required to submit an application to the College and a separate application to the EMS program. The application to the EMS program is for the EMT and paramedic licensure courses only. Students must complete all prerequisites listed in the EMT and paramedic application prior to submission of the application. EMT151 Emergency Medical Technician Part A and EMT152 Emergency Medical Technician Part B must be completed in sequence in the same academic year.

For more information contact the program director at [tamara.beardsley@socc.edu](mailto:tamara.beardsley@socc.edu). Due to continually changing laws and regulations, students may be required to add, modify or delete courses and/or hours for the curriculum to meet current standards. See advisor for current requirements.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 99 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. The completion of the following certificates will be required in order to qualify for graduation: ACLS, PHTLS, PALS or equivalent (these are taught as part of the coursework for this degree).

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate personal behaviors consistent with professional and employer expectations of an entry-level paramedic.
- Demonstrate technical proficiency in all of the skills necessary to fulfill the role of an entry-level paramedic.
- Comprehend, apply and evaluate information relative to the role of an entry-level paramedic in the cognitive domain.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PRE-PROGRAM COURSES

Students are required to take the following courses *prior* to the program courses.

Code	Title	Credits
CHEM110	Foundations of General, Organic, and Biochemistry	4
or BI101	General Biology	
or BI201	Introductory Biology	

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
AH111	Medical Terminology I	3
BI231	Human Anatomy and Physiology I	4
EMT175	Intro Emergency Medical Services	3
MTH60	Algebra I <sup>2</sup>	4
WR121	English Composition	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
BI232	Human Anatomy and Physiology II	4
EMT151	Emergency Medical Technician Part A	5
EMT170	Emergency Response & Communication Documentation	2
EMT171	Emergency Response Transport	2
BI234	Microbiology	4
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
BI233	Human Anatomy and Physiology III	4
EMT152	Emergency Medical Technician Part B	5
EMT169	Emergency Medical Technology Rescue	3
SP218	Interpersonal Communication <sup>3</sup>	3
PSY201	General Psychology	3
<b>Credits</b>		<b>18</b>
<b>Second Year</b>		
<b>Fall</b>		
EMT296	EMT Paramedic Part I	12

HE250 or PE231	Personal Health <sup>4</sup> or Wellness for Life	3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
EMT297	EMT Paramedic Part II	12
<b>Credits</b>		<b>12</b>
<b>Spring</b>		
EMT298	EMT Paramedic Part III	9
CJ203	Crisis Intervention	3
<b>Credits</b>		<b>12</b>
<b>Summer</b>		
EMT291	Paramedic Field Practicum	7
<b>Credits</b>		<b>7</b>
<b>Total Credits</b>		<b>99</b>

- <sup>1</sup> PSY202, PSY203, or PSY237 may be substituted for PSY201.
- <sup>2</sup> MTH65, MTH95 or higher, excluding MTH211, may be substituted for MTH60
- <sup>3</sup> SP111, SP218, SP219 will satisfy this requirement.
- <sup>4</sup> PE185 sport/activity courses WILL NOT meet this requirement.
- \* All Honors courses may substitute for their equivalent requirements.

# EMERGENCY MEDICAL SERVICES TECHNICIAN I, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Emergency Medical Services Technician I offers career training for entry-level personnel as an Emergency Medical Technician (EMT) plus additional training/skills employers are seeking. The EMS Technician I offers greater education in ambulance/emergency vehicle operations as well as proper pre-hospital documentation, radio communications, and rescue operations. Successful completion of the EMT151 Emergency Medical Technician Part A and EMT152 Emergency Medical Technician Part B lead to eligibility to sit for the State of Oregon and National Registry of Emergency Medical Technicians (NREMT) certifying exam. EMT151 Emergency Medical Technician Part A and EMT152 Emergency Medical Technician Part B must be completed in sequence in the same academic year.

## ENTRY REQUIREMENTS

Students are required to complete the College's Placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process. Students will also be required to complete a separate EMT program application for the level of Emergency Medical Technician for entry into EMT151 Emergency Medical Technician Part A.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 20 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Emergency Medical Services Technician I is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Demonstrate personal behaviors consistent with professional and employer expectations of an entry-level EMT.
- Operate various radios used in pre-hospital setting.
- Describe the importance of the safety and well-being of the EMT during rescue operations.
- Create an in-depth pre-hospital care report of patient care.

## PROGRAM GUIDE

Course	Title	Credits
<b>Fall</b>		
EMT175	Intro Emergency Medical Services	3
<b>Credits</b>		<b>3</b>
<b>Winter</b>		
EMT151	Emergency Medical Technician Part A	5
EMT170	Emergency Response & Communication Documentation	2
EMT171	Emergency Response Transport	2
<b>Credits</b>		<b>9</b>
<b>Spring</b>		
EMT152	Emergency Medical Technician Part B	5
EMT169	Emergency Medical Technology Rescue	3
<b>Credits</b>		<b>8</b>
<b>Total Credits</b>		<b>20</b>

# EMERGENCY MEDICAL TECHNOLOGY, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Emergency Medical Technician program offers career training for entry-level personnel as an Emergency Medical Technician (EMT) with the added education of a more rich history of Emergency Medical Services and the safety and well-being of the EMT. Successful completion of this EMT Career Pathway Certificate of Completion leads to eligibility to sit for the State of Oregon

and National Registry of Emergency Medical Technicians (NREMT) certifying exam.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process. Students will also be required to complete a separate EMT program application for entry into EMT151 Emergency Medical Technician Part A. EMT151 Emergency Medical Technician Part A and EMT152 Emergency Medical Technician Part B must be completed in sequence in the same academic year.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 13 credit hours with a minimum Grade Point Average (GPA) of 2.0 or better. All courses in the program must be completed with a 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate personal behaviors consistent with professional and employer expectations of an entry-level EMT.
- Explain the origins and history of EMS.
- Describe the importance of the safety and well-being of the EMT during rescue operations.

## PROGRAM GUIDE

Course	Title	Credits
<b>Fall</b>		
EMT175	Intro Emergency Medical Services	3
<b>Credits</b>		<b>3</b>
<b>Winter</b>		
EMT151	Emergency Medical Technician Part A	5
<b>Credits</b>		<b>5</b>
<b>Spring</b>		
EMT152	Emergency Medical Technician Part B	5
<b>Credits</b>		<b>5</b>
<b>Total Credits</b>		<b>13</b>

# PHARMACY TECHNICIAN, CERTIFICATE OF COMPLETION

The Certificate of Completion Pharmacy Technician program prepares individuals for employment in hospital and retail pharmacies. Pharmacy Technician is a category of support personnel and denotes a skilled worker who has been trained to assist the pharmacist in preparing and dispensing medications. This category of support personnel is spelled out in Oregon Administrative Rules 855-41-205 under the auspices of the Oregon State Board of Pharmacy.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Due to the nature of this curriculum and the access to drugs, all students will have to declare themselves "drug free" and be subject to a criminal background check. Any student who is unable, for any reason, to complete the practicum parts of this curriculum will not be able to continue in the program. Drug testing will be done prior to clinical practicum. Graduates may choose to take a national certification examination at the successful conclusion of the program.

For more information contact the administrative assistant, Sumner Hall, Rm 4 541-888-7443.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 52 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion Pharmacy Technician is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Function as a professional in a pharmacy environment either in a hospital or retail setting.
- Assist the pharmacist in the preparation and dispensing of medications.
- Be aware of the duties and limitations of a pharmacy technician as per Oregon Administrative Rules 855-41-205.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>Fall</b>		
AH111	Medical Terminology I	3
AH121	Body Structures and Functions I	3
MTH60	Algebra I <sup>1</sup>	4
PHAR5470	Introduction to Pharmacy: Practice And Law	4
WR121	English Composition	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
AH112	Medical Terminology II	3
AH122	Body Structures and Functions II	3
BA285	Human Relations in Organizations	3
PHAR5472	Pharmacology I	3
PHAR5474	Pharmacy Calculations	2
PHAR5475	Pharmacy Technician Procedures I	4
<b>Credits</b>		<b>18</b>
<b>Spring</b>		
PHAR280	CWE: Pharmacy <sup>3</sup>	3
PHAR5473	Pharmacology II	3
PHAR5476	Pharmacy Technician Procedures II	4
PHAR5477	Pharmacy Records Management	3
SP100	Basic Speech Communications <sup>2</sup>	3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>52</b>

<sup>1</sup> MTH65, MTH82, MTH95, or higher, excluding MTH211, may be substituted for MTH60.

<sup>2</sup> SP111, SP218, SP219 will satisfy this requirement.

<sup>3</sup> Call 541-888-7405 to schedule with Internship Coordinator **three months** prior to term. The student will need to receive their Temporary License from the Oregon Board of Pharmacy (<https://www.oregon.gov/pharmacy/pages/licensing.aspx>) before registering for the internship.

\* All Honors courses may substitute for their equivalent requirements.

# PHYSICS, ASSOCIATE OF SCIENCE

The Associate of Science degree with physics emphasis is designed to give students interested in pursuing STEM programs in physics a more complete transfer path than the existing AAOT bulk transfer degree.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 92 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the AS degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

1. Apply foundational conceptual knowledge and models of physical principles to analyze and/or predict phenomena.
2. Understand and apply proper mathematical interpretation of physical principles and computation methods to analyze and/or predict phenomena
3. Interpret and communicate scientific information via written, spoken, and/or visual representations
4. Describe the relevance of specific scientific principles to the human experience.
5. Form and test a hypothesis in the laboratory or field using discipline-specific tools and techniques for data collection and/or analysis.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
WR121	English Composition	4
CHEM221	General Chemistry I	5
MTH251	Calculus I Differential Calculus	4
HD102	College Nuts and Bolts	1
<b>Credits</b>		<b>14</b>
<b>Winter</b>		
WR227	Report Writing	4
CHEM222	General Chemistry II	5
MTH252	Calculus II Integral Calculus	4

SP111	Fundamentals of Public Speaking	3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
CHEM223	General Chemistry III	5
BI203	Introductory Biology	4
MTH253	Calculus III Infinite Sequences And Series <sup>6</sup>	4
Difference, Power, and Discrimination <sup>2</sup>		3
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
PH211	General Physics with Calculus I	5
MTH254	Vector Calculus I	4
Social Processes and Institutions <sup>3</sup>		3
Literature and Arts <sup>5</sup>		3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
PH212	General Physics with Calculus II	5
MTH255	Vector Calculus II	4
ENGR112	Engineering Computation	4
or CS161 or Introduction to Computer Science I		
Cultural Diversity <sup>4</sup>		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
PH213	General Physics with Calculus III	5
MTH256	Differential Equations	4
PE231	Wellness for Life	3
Western Culture <sup>1</sup>		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>92</b>

<sup>1</sup> Western Culture: ART204, ART205, ART206, ENG201, ENG204, ENG205, ENG206, HST101, HST102, HST103, HST201, HST202, HST203, PHL101, PHL102.

<sup>2</sup> Difference, Power, and Discrimination: SOC206, SOC213, HST201, HST202, OR HST203.

<sup>3</sup> Social Processes and Institutions: ANTH221, ANTH222, ANTH223, ECON201, ECON202, HST101, HST102, HST103, PS201, PS205, PSY201, PSY202, PSY203, SOC204, SOC205.

<sup>4</sup> Cultural Diversity: ANTH224, ANTH230, ANTH231, ANTH232, HST104, HUM204, HUM205, HUM206.

<sup>5</sup> Literature and the Arts: ART204, ART205, ART206, ENG104, ENG105, ENG106, ENG107, ENG108, ENG109, ENG201, ENG204, ENG205, ENG206, ENG262, MUS201, MUS202, MUS203.

<sup>6</sup> MTH264 may be substituted for MTH253 for students transferring to OSU.

\* All Honors courses may substitute for their equivalent requirements.

# POLICE SCIENCE, ASSOCIATE OF APPLIED SCIENCE

Students pursuing a career in criminal justice have several career options in public and private corrections, security, and law enforcement arenas. Law enforcement officers may be responsible for protection of life and property, prevention of crimes, and the arrest of violators. Security personnel may be responsible for the protection of property, the prevention of crimes and the detection of those violating laws. Corrections officers may be responsible for maintaining discipline and order in prisons, jails, detention centers, and halfway houses through the supervision and control of residents. Management opportunities in criminal justice and criminal justice administration can include local, state and federal agency work. Persons competing for entry-level criminal justice employment will generally be required to complete an employment application, written and oral exam, drug and psychological screening, background investigation, polygraph, medical exam and physical ability/agility testing.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program the student will be able to:

- Identify the characteristics of professional integrity and ethical standards for Oregon criminal justice professionals.
- Describe and relate the constitutional rights and responsibilities of citizens, offenders, and victims as they apply to state, federal, and procedural laws.
- Describe the processes and technology used to gather, investigate, manage, and report information in the criminal justice field.
- Identify the legal responsibilities of criminal justice professionals as they relate to cultural diversity and establishing positive community relationships.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
CJ100	Intro to Criminal Justice	4
WR121	English Composition	4
CIS120	Concepts of Computing	4
Elective <sup>3</sup>		3
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
CJ110	Intro to Policing	4
CJ125	The American Court System <sup>4</sup>	3
CJ130	Corrections <sup>4</sup>	4
MTH98	Math Literacy <sup>6</sup>	4
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
CJ204	Cmty Policing in a Diverse Society	4
CJ213	Interview and Interrogation Skills <sup>4</sup>	3
PHL103	Intro to Logic and Critical Thnkg	3
PSY100	Introduction to Psychology <sup>2</sup>	4
Elective <sup>3</sup>		3
<b>Credits</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
CJ210	Criminal Investigation of Crimes Against Property <sup>4</sup>	3
CJ220	Introduction to Criminal Law <sup>8</sup>	4
BA285	Human Relations in Organizations <sup>1</sup>	3
SOC204	Introduction to Sociology <sup>2</sup>	3
<b>Credits</b>		<b>13</b>
<b>Winter</b>		
CJ214	Criminal Investigations of Crimes Against Persons <sup>4</sup>	3
CJ226	Constitutional Law <sup>9</sup>	4
CJ231	Forensic Photography <sup>4</sup>	2
SP219	Small Group Discussion <sup>5</sup>	3
SOC205	Social Institutions and Change <sup>2</sup>	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
CJ240	Police Report Writing	3
CJ247	Ethics in Criminal Justice <sup>4</sup>	3
SOC206	Social Problems and Issues <sup>2</sup>	3
PE231	Wellness for Life <sup>7</sup>	3
Elective <sup>3</sup>		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>90</b>

<sup>1</sup> BA110 or BA120 may substitute for BA285.

<sup>2</sup> SOC204, SOC205, SOC206 are recommended. Any course with ANTH, HST, PS, PSY, SOC numbered 100 or higher except 180/280 courses will satisfy this requirement.

<sup>3</sup> Any course 100 level or higher not required for the degree.

- <sup>4</sup> Specific Elective options: Any CJ, EM, EMT, or FS course not required for the degree.
- <sup>5</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- <sup>6</sup> MTH60, MTH65, MTH95, MTH98, or higher, excluding MTH211 will satisfy this requirement.
- <sup>7</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>8</sup> CJ155 may be substituted for CJ220 \*this substitution may result in needing more credits for the degree, speak to your advisor.
- <sup>9</sup> CJ156 may be substituted for CJ226 \*this substitution may result in needing more credits for the degree, speak to your advisor.
- <sup>10</sup> HE252 or EMT260 may be substituted for CJ162.
- \* All Honors courses may substitute for their equivalent requirements.

# PRESCHOOL CHILD DEVELOPMENT, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) in Preschool Child Development degree prepares students to work in a variety of educational and childcare settings, including preschools, public schools, private schools, Head Start, Relief Nurseries, and family home settings that serve preschool children. This degree offers students the opportunity to gain enhanced practical experience through practicum and student teaching courses. This degree program is fully articulated with Southern Oregon University's early childhood development program. Students who transfer to Southern Oregon University, and are accepted into the program, should be able to complete requirements for the bachelor's degree. All coursework specific to childhood education and family studies degrees and certificates is offered online through Southwestern. Transfer courses that meet Southwestern's course outcomes are readily accepted into the program.

The A.S. Childhood Education and Family Studies and A.A.S. Preschool Child Development at Southwestern are accredited by the Commission on the Accreditation of Early Childhood Higher Education Programs of the National Association for the Education of Young Children, 1313 L Street NW, Suite 500, Washington DC 20005. (800) 424-2460 ext. 8007. <https://www.naeyc.org> The accreditation runs from July 2018 through July 2025.

## CHILDHOOD EDUCATION & FAMILY STUDIES PRINCIPLES & GOALS

Main principles in the Childhood Education & Family Studies Program include:

- Understanding that children lead their own learning based on the level of their development
- Focusing on the importance of families in their roles with their young children
- Respecting diversity
- Addressing the needs of children with diverse abilities in inclusive settings
- Themes of inclusion, bilingual and multicultural education and care
- Critical thinking
- Reflective teaching

These principles are infused throughout the Childhood Education and Family Studies coursework. Coursework and field experiences at every level recognize the social, historical, political, and cultural contexts that have impacted the profession.

Southwestern's Childhood Education & Family Studies (CE&FS) program goals include:

- The CE&FS program seeks to empower its graduates by enabling them to acquire the knowledge and skills that will allow them to excel in their careers or further educational goals.
- The CE&FS program seeks to provide opportunities for teacher candidate-child, teacher candidate-classroom teacher, teacher

candidate-content and teacher candidate-faculty interaction supporting teacher's professional growth and development.

- The CE&FS program seeks to provide model early care and education programs and staff for teacher candidates to develop effective knowledge, skills and attitudes.
- Graduates of the Childhood Education and Family Studies (CE&FS) program will possess broad general education and content area knowledge, remain effective and reflective practitioners and problem solvers, apply innovative learning technologies and participate in opportunities for professional growth.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

In Oregon, students must be listed on the Oregon Central Background Registry (CBR). To begin this process, visit the State of Oregon Early Learning Division to be prepared to complete practicum work in a certified early learning center, apply for a background check, and receive additional information regarding how to comply with fingerprinting requirements.

Students will also be required to have a current immunization record and background check to complete practicum requirements. The requirements will vary per state. Students whose home state is not Oregon, are encouraged to research the requirements for the state regulating organization regarding what will be required to complete the background check.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 91 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Practicum and Student Teaching courses require students to pass CLASS assessments to successfully complete the courses. Twenty four (24) credits must be completed at Southwestern before the degree is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Students must complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## CREDIT FOR PRIOR LEARNING

Credit for prior learning options are available for students with a Preschool Child Development Associate (CDA) credential, an Infant Toddler Child Development Associate (CDA) credential, a Step Seven on the Oregon Registry, or a Certificate of Completion for First Connections that includes mentoring in an infant toddler learning environment. Contact [ece@socc.edu](mailto:ece@socc.edu) for more information.

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this degree, students will have knowledge and skills in the following Standards developed by National Association

for the Education of Young Children Early Childhood Associate Degree Accreditation (NAEYC) organization:

**1. Promoting Child Development and Learning**

Students develop and use their understanding of child development – including young children’s unique characteristics and needs, and the multiple interacting influences on children’s development and learning – to create environments that are healthy, respectful, supportive, and challenging for each child.

Key elements of Outcome 1;

- a. Describe young children’s diverse characteristics and needs, from birth through age 8.
- b. Explain the multiple influences on early development and learning.
- c. Use knowledge of child development to create healthy, respectful, supportive, and challenging learning environments for young children.

**2. Building Family and Community Relationships**

Students articulate the complex characteristics of children’s families and communities and use this understanding to create respectful, reciprocal relationships that support and empower families, and to engage all families in their children’s development and learning.

Key elements of Outcome 2;

- a. Describe diverse family and community characteristics.
- b. Develop and implement strategies to support and engage families and communities through respectful, reciprocal relationships.
- c. Develop and implement plans to engage families and communities in young children’s development and learning.

**3. Observing, Documenting, and Assessing to Support Young Children and Families**

Students articulate the goals, benefits, and purposes of assessment and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence the development of every child.

Key elements of Outcome 3;

- a. State the goals, benefits, and purposes of assessment – including its use in development of appropriate goals, curriculum, and teaching strategies for young children.
- b. Use observation, documentation, and other appropriate assessment tools and approaches, including the use of technology in documentation, assessment and data collection.
- c. Practice responsible assessment to promote positive outcomes for each child, including an awareness of assistive technology for children with ability differences.
- d. Describe how assessment partnerships with families and with professional colleagues can be used to build effective learning environments.

**4. Using Developmentally Effective Approaches**

Students implement a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child’s development and learning, which will vary depending on children’s ages, characteristics, and the early childhood setting.

Key elements of Outcome 4;

- a. Discuss how supportive relationships and positive interactions are the foundation of their work with young children.

- b. List and implement effective instructional and guidance strategies and tools for early education, including appropriate uses of technology.

- c. Use a broad repertoire of developmentally appropriate teaching/ learning and guidance approaches.

- d. Reflect on their own practice to promote positive outcomes for each child.

**5. Using Content Knowledge to Build Meaningful Curriculum**

Students develop and apply their knowledge of developmental domains and academic (or content) disciplines to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for each child.

Key elements of Outcome 5;

- a. Begin to explain content knowledge and resources in academic disciplines: language and literacy; the arts – music, creative movement, dance, drama, visual arts; mathematics; science; physical education – physical activity, health, and safety; and social studies.

- b. Recognize and apply the central concepts, inquiry tools, and structures of content areas or academic disciplines.

- c. Use their own knowledge, appropriate early learning outcomes, and other resources to design, implement, and evaluate developmentally meaningful and challenging curriculum for each child.

**6. Becoming a Professional**

Students are collaborative learners who continuously demonstrate knowledgeable, reflective and critical perspectives of their work, make informed decisions that integrate knowledge from a variety of sources, including ethical guidelines, and advocate for sound educational practices and policies.

Key elements of Outcome 6;

- a. Identify as a member of the early childhood field and become involved in the professional community.

- b. Locate and apply ethical guidelines and other early childhood professional guidelines.

- c. Engage in continuous, collaborative learning to inform practice; using technology effectively with young children, with peers, and as a professional resource.

- d. Integrate knowledgeable, reflective, and critical perspectives on early education into their work.

- e. Engage in informed advocacy for young children and the early childhood profession.

**7. Early Childhood Field Experiences**

Students engage in field experiences and clinical practice to develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children in a variety of early childhood settings and with multiple age groups.

Key elements of Outcome 7;

- a. Observe and practice in at least two of the three early childhood age groups (birth – age 3, 3-5, 5-8).

- b. Observe and practice in at least two of the three main types of early education settings (primary school grades, child care centers and homes, ECEAP/Head Start programs).

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more

information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ECE150	Introduction and Observation in ECE <sup>1</sup>	4
ECE170	Health and Safety Early Childhood	3
HDFS225	Prenatal Infant and Toddler Development	3
WR121	English Composition	4
MTH60	Algebra I <sup>6</sup>	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
ECE163	Environments and Guidance in ECE <sup>2</sup>	3
ECE163B	Practicum I ECE <sup>2</sup>	2
ECE152	Creative Activities in ECE	3
HDFS247	Child Development 0-8	3
ECE151	Guidance and Classroom Management	3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
ECE209	Theory and Practice I Pre-K <sup>2</sup>	3
ECE209B	Practicum II Pre-K <sup>2</sup>	2
CIS120	Concepts of Computing	4
ECE154	Children's Language and Lit Dev	3
SP218	Interpersonal Communication <sup>3</sup>	3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
<b>Fall</b>		
ECE102	Theory and Practice II Pre-K <sup>2</sup>	3
ECE102B	Practicum III Pre-K <sup>2</sup>	2
ECE240	Lesson and Curriculum Planning	3
ED169	Overview of Student Special Needs	3
ED135	Teaching Math to Young Children	3
ED101K	Practicum: Grade K-3 <sup>5</sup>	1
<b>Credits</b>		<b>15</b>
<b>Winter</b>		
ECE261	Student Teaching Pre-K <sup>2</sup>	3
ECE261B	Practicum IV Pre-K <sup>2</sup>	3
HDFS140	Contemporary American Families	3
HDFS227	Parents as Partners in Education	3
ED258	Multicultural Education	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
HDFS285	Prof Issues in Early Childhood Ed	3
ED134 or HDFS297	Children Who are Dual Lang Learners <sup>4</sup> or Parenting Ed and Early Childhood Home Visitor Capstone	2
BA285	Human Relations in Organizations <sup>8</sup>	3
HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3

PE231	Wellness for Life <sup>7</sup>	3
<b>Credits</b>		<b>14</b>
<b>Total Credits</b>		<b>91</b>

- <sup>1</sup> One criminal background check and fingerprinting is required for ECE150 and all practicum courses.
- <sup>2</sup> ECE163, ECE209, ECE102 and ECE261 must be taken in sequence with their co-requisite practicum courses. A criminal background check must be on file prior to enrolling in these courses.
- <sup>3</sup> SP100, SP111, SP218, SP219 will satisfy this requirement.
- <sup>4</sup> For students wishing to pursue a career in Parenting Education and Home Visiting ED134 may be substituted with HDFS297
- <sup>5</sup> ED101K, ED101P, ECE180HV will satisfy this requirement, depending on Practicum placement. Practicums have specific requirements; please call 541-888-1575 to make an appointment with the program coordinator to schedule site two months prior to term. Students interested in Early Intervention may be placed in an appropriate site. Credits may be taken in any term dependent upon availability.
- <sup>6</sup> A higher math class can be substituted. Students considering the pursuit of K-12 teaching will be required to take MTH211, MTH212 and MTH213.
- <sup>7</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>8</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, or PSY203 will satisfy this requirement.
- \* All Honors courses may substitute for their equivalent requirements.

## CHILDHOOD EDUCATION AND FAMILY STUDIES, PRESCHOOL CHILDREN, EDUCATION AND DEVELOPMENT I, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Childhood Education and Family Studies, Preschool Children, Education and Development, is intended to provide students with the skills needed to begin a career in Childhood Education and Family Studies. This certificate can also assist the student in earning a Child Development Associate (CDA) credential. Students enroll in this program for a variety of reasons including upgrading skills and knowledge, obtaining a degree or retraining for a new profession. The credits earned can lead into a Certificate of Completion Childhood Education and Family Studies, an AAS Preschool Child Development or an AS with an emphasis in Childhood Education and Family Studies which will transfer to a university. All courses are offered online.

### ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of

their training program, students must begin with the courses within their skill level as determined by the placement process.

Students will also be required to have a current immunization record and state background check to complete practicum requirements. The requirements will vary per state. Students whose home state is not Oregon, are encouraged to research the requirements for the state regulating organization regarding what will be required to complete the background check.

In Oregon, students must be listed on the Oregon Central Background Registry (CBR). To begin this process, visit the State of Oregon Early Learning Division to be prepared to complete practicum work in a certified early learning center, apply for a background check, and receive additional information regarding how to comply with fingerprinting requirements.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 30 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Practicum and student teaching courses require students to pass CLASS assessments to successfully complete the courses. One course must be completed at Southwestern before this Career Pathway Certificate of Completion is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## CREDIT FOR PRIOR LEARNING

Credit for prior learning options are available for students with a Preschool Child Development Associate (CDA) credential, an Infant Toddler Child Development Associate (CDA) credential, a Step Seven on the Oregon Registry, or a Certificate of Completion for First Connections that includes mentoring in an infant toddler learning environment. Contact [ece@socc.edu](mailto:ece@socc.edu) for more information.

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will have knowledge and skills in the following Standards developed by National Association for the Education of Young Children Early Childhood Associate Degree Accreditation (NAEYC). Click [here](#) for the complete list of Standards.

- Standard 3 a, b, c, d
- Standard 4 a, b, c, d
- Standard 5 c
- Standard 6 a, b, c, d, e
- Standard 7 a, b

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ECE150	Introduction and Observation in ECE <sup>1</sup>	4

ECE170	Health and Safety Early Childhood	3
WR121	English Composition	4
<b>Credits</b>		<b>11</b>
<b>Winter</b>		
ECE163	Environments and Guidance in ECE	3
ECE163B	Practicum I ECE	2
HDFS247	Child Development 0-8	3
ECE151	Guidance and Classroom Management	3
<b>Credits</b>		<b>11</b>
<b>Spring</b>		
ECE209	Theory and Practice I Pre-K <sup>2</sup>	3
ECE209B	Practicum II Pre-K <sup>2</sup>	2
ECE154	Children's Language and Lit Dev	3
<b>Credits</b>		<b>8</b>
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> A criminal background check and fingerprinting is required for these courses and all Childhood Education and Family Studies practicum courses.

<sup>2</sup> ECE209 and ECE209B must be taken together. A criminal background check and fingerprinting must be on file before enrolling in these courses.

# CHILDHOOD EDUCATION AND FAMILY STUDIES, PRESCHOOL CHILDREN, EDUCATION AND DEVELOPMENT II, CERTIFICATE OF COMPLETION

The Certificate of Completion Childhood Education and Family Studies, Preschool Children, Education and Development II is a one-year certificate that prepares students for entry-level positions as child care workers, preschool attendants, preschool teacher assistants, and daycare assistants.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Students will also be required to have a current immunization record and background check to complete practicum requirements. The requirements will vary per state. Students whose home state is not Oregon, are encouraged to research the requirements for the state regulating organization regarding what will be required to complete the background check.

In Oregon, students must be listed on the Oregon Central Background Registry (CBR). To begin this process, visit the State of Oregon Early Learning Division to be prepared to complete practicum work in a certified

early learning center, apply for a background check, and receive additional information regarding how to comply with fingerprinting requirements.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 46 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Practicum and student teaching courses require students to pass CLASS assessments to successfully complete the courses. One course must be completed at Southwestern before the Certificate of Completion is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## CREDIT FOR PRIOR LEARNING

Credit for prior learning options are available for students with a Preschool Child Development Associate (CDA) credential, an Infant Toddler Child Development Associate (CDA) credential, a Step Seven on the Oregon Registry, or a Certificate of Completion for First Connections that includes mentoring in an infant toddler learning environment. Contact ece@socc.edu for more information.

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will have knowledge and skills in the following Standards developed by National Association for the Education of Young Children Early Childhood Associate Degree Accreditation (NAEYC). Click here for a complete list of Standards.

- Standard 1 a, b, c
- Standard 2 a, b, c
- Standard 3 a, b, c, d
- Standard 4 a, b, c, d
- Standard 5 a
- Standard 6 a, b, c, d, e
- Standard 7 a, b

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ECE150	Introduction and Observation in ECE <sup>1</sup>	4
ECE170	Health and Safety Early Childhood	3
HDFS225	Prenatal Infant and Toddler Development	3
WR121	English Composition	4
<b>Credits</b>		<b>14</b>
<b>Winter</b>		
ECE163	Environments and Guidance in ECE <sup>2</sup>	3
ECE163B	Practicum I ECE <sup>2</sup>	2
ECE151	Guidance and Classroom Management	3

ED258	Multicultural Education	3
HDFS140	Contemporary American Families	3
HDFS247	Child Development 0-8	3
<b>Credits</b>		<b>17</b>
<b>Spring</b>		
ECE209	Theory and Practice I Pre-K <sup>2</sup>	3
ECE209B	Practicum II Pre-K <sup>2</sup>	2
ECE154	Children's Language and Lit Dev	3
MTH60	Algebra I (or higher)	4
HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>46</b>

<sup>1</sup> A criminal background check and fingerprinting is required before taking ECE150 and all Childhood Education and Family Studies practicum courses.

<sup>2</sup> ECE163 and ECE209 must be taken in sequence with their corequisite practicum courses. A criminal background check and fingerprinting check is required for these courses and all Childhood Education and Family Studies practicum courses.

\* All Honors courses may substitute for their equivalent requirements.

## PARENTING EDUCATOR AND EARLY CHILDHOOD HOME VISITOR, CAREER PATHWAY CERTIFICATE OF COMPLETION

This program provides students with an understanding of child development, family systems, parent-child relations, and working with diverse populations in an educational setting. The program builds the firm foundational knowledge necessary to be a prepared and effective parenting education facilitator and/or home visitor.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin in courses within their skill level as determined by the placement process.

Parenting Educator and Early Childhood Home Visitor students are required to maintain a current background check and complete an approved course in 'Recognizing and Reporting Child Abuse and Neglect'. The requirements will vary per state. Students whose home state is not Oregon, are encouraged to research the requirements for the state regulating organization regarding what will be required to complete the background check.

In Oregon, students must be listed on the Oregon Central Background Registry (CBR). To begin this process, visit the State of Oregon Early Learning Division to be prepared to complete practicum work in a certified early learning center, apply for your background check, and receive

additional information regarding how to comply with fingerprinting requirements.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 30 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion is awarded.

Courses that are developmental in nature, (designed to prepare students for college transfer courses), are not applicable to this degree.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## CREDIT FOR PRIOR LEARNING

Credit for prior learning options are available for students with a Preschool Child Development Associate (CDA) credential, an Infant Toddler Child Development Associate (CDA) credential, a Step Seven on the Oregon Registry, or a Certificate of Completion for First Connections that includes mentoring in an infant toddler learning environment. Contact [ece@socc.edu](mailto:ece@socc.edu) for more information.

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Articulate an understanding of child development, family systems, parent-child relations, and working with diverse populations in an educational setting as the firm foundational knowledge necessary to be a prepared and effective parenting education facilitator or home visitor.
- Articulate how curriculum for parenting education is developed and facilitated based on child development, family systems, parent-child relations and working with diverse populations.
- Articulate how home visitors in early childhood and family programs base their work on child development, family systems, parent-child relations and working with diverse populations.
- Develop a personal professional development plan related to career development as a parent facilitator and/or home visitor.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
HDFS225	Prenatal Infant and Toddler Development	3
ECE150	Introduction and Observation in ECE <sup>1</sup>	4
<b>Credits</b>		<b>7</b>
<b>Winter</b>		
ED258	Multicultural Education	3
HDFS140	Contemporary American Families	3
HDFS227	Parents as Partners in Education	3
HDFS247	Child Development 0-8	3
<b>Credits</b>		<b>12</b>

### Spring

HDFS222	Understanding Families: Supporting Diversity Disability and Risk	3
HDFS229	Child Development PreK - Adolescent	3
HDFS297	Parenting Ed and Early Childhood Home Visitor Capstone	2
ECE180HV	Internship: ECE Home Visitor	3
<b>Credits</b>		<b>11</b>
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> A criminal background check and fingerprinting is required for this course and all Childhood Education and Family Studies practicum courses.

# RETAIL MANAGEMENT, LESS THAN ONE YEAR CERTIFICATE OF COMPLETION

The Less Than One Year Certificate of Completion Retail Management is recommended for students who would like to work in retail sales or students who are currently working in retail sales and are interested in advancing in their careers. Upon completion of this certificate, students will demonstrate skills necessary to successfully work in the field of retail sales and be in a position to advance to higher levels of responsibility including supervisory management. Career opportunities include retail clerks, management trainees, sales associates and other similar retail positions.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 30 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade 'C' or better. One course must be completed at Southwestern before the Less Than One Year Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate effective communication skills including both verbal and written.
- Operate as a team member and/or leader using effective communication strategies.
- Demonstrate computer skills: Word processing, electronic spreadsheet, database management, general accounting applications, presentation software and Internet research techniques.
- Describe the marketing methods including the analysis and inter-relationship of the marketing mix: Product, price, place and promotion.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>Fall</b>		
BA249	Retailing	3
CIS120	Concepts of Computing	4
WR115	Fundamentals of Report Writing <sup>3</sup>	4
<b>Credits</b>		<b>11</b>

<b>Winter</b>		
BA120	Leadership Development <sup>1</sup>	3
BA223	Principles of Marketing	4
MTH82	Business Mathematics <sup>2</sup>	4
<b>Credits</b>		<b>11</b>
<b>Spring</b>		
BA206	Management Fundamentals	4
BA224	Human Resource Management	4
<b>Credits</b>		<b>8</b>
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.

<sup>2</sup> MTH60, MTH65, MTH95 or higher, excluding MTH211, may be substituted for MTH82.

<sup>3</sup> A higher writing may be substituted excluding WR241, WR242, WR243, WR250.

\* All Honors courses may substitute for their equivalent requirements.

# WELDING, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) Welding provides the training for entry-level employment and offers the technical knowledge necessary for career advancement. Coupled with experience, the program prepares students for manufacturing employment opportunities in industry, private enterprise, supervision, and/or advanced welding technologies. The program will guide the students in developing basic pipe welding and fitting skills and introduces advanced techniques aligned with industry standards. These opportunities include welding, fabrication, inspection, estimating, and technical sales.

According to the American Welding Society, by the year 2020 there will be a skills shortage of 291,000 jobs in the welding and fabrication and related fields.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and able to stand, stoop, kneel and bend without difficulty and be able to lift and carry at least 50 pounds. Good eyesight, especially depth perception, is necessary for a welder.

By the second week of the term, students will need to purchase the proper PPE (personal protective equipment) required for the term. Required PPE includes: Welding hood, leathers or welding jacket, gauntlet gloves, safety glasses (clear and shade 5), and leather boots (steel toe is preferred).

The AAS Welding is an American Welding Society (AWS) entry-level welding certified program. Successfully completing the AWS portion of each welding course also qualifies the student for a Certificate of Completion from the AWS as an entry-level welder – a nationally recognized certificate.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 91 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Set up and operate manual and semi-automatic welding and cutting equipment used in the metal fabrication industry.

- Perform basic layout and fabrication skills to produce welded metal parts and projects.
- Read and interpret blueprints and American Welding Society standard welding symbols.
- Perform as a team member and practice skills that reflect professional and ethical behavior in the workplace.
- Demonstrate ability to fit, layout, and weld pipe in accordance to industry AWS and API standards.

## AWARD MAP

### Pathway Option

Career Pathway Certificate of Completion: Welding Assistant  
 Career Pathway Certificate of Completion: Welding Technician  
 Certificate of Completion: Welding  
 Career Pathway Certificate of Completion: Pipe Fitting  
 Associate: Welding

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
DRFT105	Blueprint Reading	3
WLD100	Welding Process I	3
WLD101	Shielded Metal Arc Welding	6
WR115	Fundamentals of Report Writing <sup>1</sup>	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
MTH80	Technical Mathematics I	4
WLD102	Welding Lab A	3
WLD103	Gas Metal Arc Welding	3
WLD104	Flux Cored Arc Welding	3
WLD110	Welding Cert for 1st Year	3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
BA285	Human Relations in Organizations <sup>2</sup>	3
WLD105	Pipe Fitting and Welding I	3
WLD106	Welding Lab B	3
WLD107	Gas Tungsten Arc Welding	3
WLD150	Welding & Joining Processes	3
WLD202	Forklift Operator Training and Cert	1
<b>Credits</b>		<b>16</b>
<b>Second Year</b>		
<b>Fall</b>		
CIS120	Concepts of Computing	4
MT101	Machine Tool Processes I	3
WLD201	Pipe Fitting and Welding II	3

WLD4155	Fitting & Fabrication	3
<b>Credits</b>		<b>13</b>
<b>Winter</b>		
MFG4102	Mechanical Systems	3
MT102	Machine Tool Processes II	3
PE231	Wellness for Life <sup>3</sup>	3
WLD203	Advanced Individual Welding	3
WLD4152	Advanced Pipe Fitting and Fab	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
WLD205	The Welding Business	3
WLD210	Welding Cert for 2nd Year	3
WLD4153	Pipe Fitting Workshop: Certification	3
Specific Elective <sup>4</sup>		3
Required Program Course - Speech <sup>5</sup>		3
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>91</b>

- <sup>1</sup> A higher writing may be substituted excluding WR241, WR242, WR243, WR250.
- <sup>2</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.
- <sup>3</sup> PE231, HE250, or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- <sup>4</sup> Any MFG, MT, WLD, or DRFT course not otherwise included in the degree to meet the requirement.
- <sup>5</sup> SP100, SP111, SP218, or SP219 will satisfy this requirement.
- \* All Honors courses may substitute for their equivalent requirements.

## PIPE FITTING, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Pipe Fitting prepares students for entry-level careers in pipe fitting, welding and fabrication. The program also introduces advanced techniques aligned with industry API and AWS standards.

### ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and able to stand, stoop, kneel and bend without difficulty and be able to lift and carry at least 50 pounds. Good eyesight, especially depth perception, is necessary for a welder.

By the second week of the term, students will need to purchase the proper PPE (personal protective equipment) required for the term. Required PPE includes: Welding hood, leathers or welding jacket, gauntlet

gloves, safety glasses (clear and shade 5), and leather boots (steel toe is preferred).

### GRADUATION REQUIREMENTS

Students must complete a minimum of 12 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Pipe Fitting is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

### PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Demonstrate ability to fit, layout, and weld pipe in accordance to industry AWS and API standards.

### PRE-PROGRAM COURSES

Students are required to take the following courses *prior to* the program courses, depending on students' college placement information. See advisor for details:

Code	Title	Credits
WLD100	Welding Process I	3
WLD101	Shielded Metal Arc Welding	6
WLD105	Pipe Fitting and Welding I	3

### PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
WLD201	Pipe Fitting and Welding II	3
<b>Credits</b>		<b>3</b>
<b>Winter</b>		
WLD4152	Advanced Pipe Fitting and Fab	3
<b>Credits</b>		<b>3</b>
<b>Spring</b>		
WLD150	Welding & Joining Processes	3
WLD4153	Pipe Fitting Workshop: Certification	3
<b>Credits</b>		<b>6</b>
<b>Total Credits</b>		<b>12</b>

## WELDING ASSISTANT, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Welding Assistant prepares students for entry-level jobs in a welding operation as a welder's

assistant. Required courses are applicable toward the AAS Welding degree.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and able to stand, stoop, kneel and bend without difficulty and be able to lift and carry at least 50 pounds. Good eyesight, especially depth perception, is necessary for a welder.

By the second week of the term, students will need to purchase the proper PPE (personal protective equipment) required for the term. Required PPE includes: Welding hood, leathers or welding jacket, gauntlet gloves, safety glasses (clear and shade 5), and leather boots (steel toe is preferred).

## GRADUATION REQUIREMENTS

Students must complete a minimum of 18 credit hours with a minimum Grade Point Average (GPA) of 2.0 or better. All courses in this program must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Welding Assistant is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Assist with set-up and operation of manual and semi-automatic welding and cutting equipment used in the metal fabrication industry.
- Perform rudimentary layout and fabrication skills to help produce welded metal parts.
- Read and interpret simple blueprints and some American Welding Society standard welding symbols.

## PROGRAM GUIDE

Course	Title	Credits
<b>Fall</b>		
WLD100	Welding Process I	3
WLD101	Shielded Metal Arc Welding	6
		<b>Credits</b>
		<b>9</b>
<b>Winter</b>		
WLD102	Welding Lab A	3
WLD103	Gas Metal Arc Welding	3
WLD104	Flux Cored Arc Welding	3
		<b>Credits</b>
		<b>9</b>
<b>Total Credits</b>		<b>18</b>

# WELDING TECHNICIAN, CAREER PATHWAY CERTIFICATE OF COMPLETION

The Career Pathway Certificate of Completion: Welding Technician prepares students for entry-level jobs in welding fields employing shielded metal, fluxed core, and gas metal arc welding techniques. Required courses are applicable toward the Associate of Applied Science (AAS) Welding degree.

## ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and able to stand, stoop, kneel and bend without difficulty and be able to lift and carry at least 50 pounds. Good eyesight, especially depth perception, is necessary for a welder.

By the second week of the term, students will need to purchase the proper PPE (personal protective equipment) required for the term. Required PPE includes: Welding hood, leathers or welding jacket, gauntlet gloves, safety glasses (clear and shade 5), and leather boots (steel toe is preferred).

## GRADUATION REQUIREMENTS

Students must complete a minimum of 24 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Career Pathway Certificate of Completion: Welding Technician is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Set-up and operate of manual and semi-automatic welding and cutting equipment used in the welding industry.
- Perform rudimentary layout and fabrication skills to help produce welded metal parts.
- Read and interpret simple blueprints and some American Welding Society standard welding symbols.
- Perform as a team member and practice skills that reflect professional and ethical behavior in the workplace.

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
DRFT105	Blueprint Reading	3
WLD100	Welding Process I	3
WLD101	Shielded Metal Arc Welding	6
<b>Credits</b>		<b>12</b>
<b>Winter</b>		
WLD102	Welding Lab A	3
WLD103	Gas Metal Arc Welding	3
WLD104	Flux Cored Arc Welding	3
WLD110	Welding Cert for 1st Year	3
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>24</b>

## WELDING, CERTIFICATE OF COMPLETION

The Certificate of Completion Welding prepares students for entry-level jobs in metal working fields. Required courses are applicable toward the AAS Welding degree. Click here to learn how this Career Pathway Certificate of Completion can lead to an AAS Welding.

### ENTRY REQUIREMENTS

Students are required to complete the College's placement process to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with the courses within their skill level as determined by the placement process.

Because a variety of working conditions exist in the welding field, a person generally should be in good physical condition and able to stand, stoop, kneel and bend without difficulty and be able to lift and carry at least 50 pounds. Good eyesight, especially depth perception, is necessary for a welder.

The Certificate of Completion Welding is an American Welding Society (AWS) entry-level welding certified program. Successfully completing the AWS portion of each welding course also qualifies the student for a Certificate of Completion from the AWS as an entry-level welder – a nationally recognized certificate.

By the second week of the term, students will need to purchase the proper PPE (personal protective equipment) required for the term. Required PPE includes: Welding hood, leathers or welding jacket, gauntlet gloves, safety glasses (clear and shade 5), and leather boots (steel toe is preferred).

### GAINFUL EMPLOYMENT DISCLOSURE

Southwestern is required by federal regulations to disclose information related to the College's educational programs that lead to gainful employment in a recognized occupation. This information is intended to provide students the opportunity to measure employment outcomes associated with certificate programs.

Gainful employment information for the Certificate of Completion Welding can be found online at <https://www.socc.edu/images/ge/welding.html>.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 48 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. One course must be completed at Southwestern before the Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Set-up and operate manual and semi-automatic welding and cutting equipment used in the metal fabrication industry.
- Perform basic layout and fabrication skills to produce welded metal parts and projects.
- Read and interpret blueprints and American Welding Society standard welding symbols.
- Perform as a team member and practice skills that reflect professional and ethical behavior in the workplace.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree. For more information on placement methods used, visit our college placement policy here (p. 11).

## PROGRAM GUIDE

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
DRFT105	Blueprint Reading	3
WLD100	Welding Process I	3
WLD101	Shielded Metal Arc Welding	6
WR115	Fundamentals of Report Writing <sup>1</sup>	4
<b>Credits</b>		<b>16</b>
<b>Winter</b>		
MTH20	Basic Mathematics (or higher) <sup>3</sup>	4
WLD102	Welding Lab A	3
WLD103	Gas Metal Arc Welding	3
WLD104	Flux Cored Arc Welding	3
WLD110	Welding Cert for 1st Year	3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
BA285	Human Relations in Organizations <sup>2</sup>	3
WLD105	Pipe Fitting and Welding I	3
WLD106	Welding Lab B	3
WLD107	Gas Tungsten Arc Welding	3

WLD202	Forklift Operator Training and Cert	1
WLD150	Welding & Joining Processes	3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>48</b>

<sup>1</sup> A higher writing may be substituted, excluding WR241, WR242, WR243, and WR250.

<sup>2</sup> BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.

<sup>3</sup> MTH60, 65, 95, or higher, excluding MTH211, may be substituted.

\* All Honors courses may substitute for their equivalent requirements.

# PROGRAMS, DEGREES, CERTIFICATES AND PATHWAYS

## SOUTHWESTERN OFFERS MANY KINDS OF PROGRAMS TO SERVE YOUR NEEDS!

Career Pathways allow students to gain skills and build toward a degree or certificate program in stages.

Certificates of Completion provide a more in-depth experience in a discipline or field. Often Career Pathways are steps toward Certificates of Completion.

Full degree programs provide students with a well-rounded background to pursue advanced industry and professional training or to transfer to a four-year institution. In some cases, students can earn certificates along the way to their degrees. In other cases, a Southwestern degree is articulated with specific four-year universities.

Take a look at the components of programs, degrees, certificates, and career pathways that Southwestern offers!

## ARTICULATED (TRANSFER) DEGREES

### Transferring to Another Institution

Transfer without a degree is an option for Southwestern students. A student may select a major and transfer school, then take only the specific courses required for that major and/or college. Students in certain majors may need to transfer after one year to take advantage of critical major courses offered in the sophomore year at the transfer institution. When a student opts for direct transfer, Southwestern courses are evaluated and accepted on a course-by-course basis by the transfer institution.

Direct transfer students must meet the transfer schools' "freshman" or "transfer admission" requirements. Catalogs from transfer institutions contain information about credit hour and Grade Point Average (GPA) requirements, as well as transfer application procedures.

### Successful Transfer

Success in the transfer process is largely the result of careful planning. It is each student's responsibility to learn the program requirements of any prospective transfer school and to keep up-to-date on changes in those requirements. Therefore, students should periodically contact their advisor and/or the transfer institution for updates. Prudent use of available resources and advising can help ensure smooth transition to a four-year institution.

Students can benefit from following these tips for successful transfer:

- **Plan Ahead:** Consider enrolling in HD100 College Success and Survival and/or contact an advisor during your first term at Southwestern to develop an education plan. If you need help with choosing a major or career, consider enrolling in HD102 College Nuts and Bolts or HD208 Career/Life Plan.

- **Maintain Contact:** Establish early contact with admissions representatives and major advisors at Southwestern and transfer institutions. Keep in touch with them in order to keep up-to-date on major and transfer requirements.
- **Know the Rules:** Pay attention to GPA and transfer credit policies, application deadlines and both general education and major course requirements of transfer institutions.
- **Confirm Transferability of Courses:** Not all 100-200 level courses transfer to all four-year schools. Transfer colleges have the "last say" on transferability. Transfer course policies and articulation information can often be found on the transfer school's registrar or admissions webpage.
- **Utilize Transfer Resources:** This catalog, the Student Success Center, quarterly Transfer Days and Southwestern advisors are key sources of information and guidance.
- **Ask for Help:** Make sure you have current and complete information; ask for what you need to complete the transfer process successfully.

### Transfer Problems?

If a student has a problem transferring classes to a college or university, the student should first try to resolve the problem through contact with the transfer institution. Southwestern advisors may be of assistance in such cases.

The following degrees are designed with a transfer agreement between Southwestern Oregon Community College and the receiving institution. Students planning to transfer should contact an advisor at their transfer college early on and work with their advisor at SWOCC.

Emphasis	Degree or Direct Transfer	Articulated Agreement
Associate of Arts Oregon Transfer (p. 27)	AAOT	Eastern Washington University Oregon Public Universities
Business (p. 44)	ASOT-BUS	Oregon Public Universities
Computer Science (p. 61)	ASOT-CS	Oregon Public Universities
Chemical Engineering (p. 48)	AS	Oregon State University
Chemistry (p. 49)	AS	Southern Oregon University
Childhood Education and Family Studies (p. 51)	AS	Southern Oregon University
Criminal Justice (p. 65)	AS	Southern Oregon University
Electrical/Computer Engineering (p. 74)	AS	Oregon Institute of Technology Oregon State University
Elementary Education (p. 78)	AS	Southern Oregon University
Elementary Education (p. 76)	AAOT	Oregon Public Universities
Environmental Engineering (p. 80)	AS	Oregon State University

Fire Science (p. 87)	AS	Eastern Oregon University
Forest Engineering (p. 88)	AS	Oregon State University
Forest Renewable Materials/Advanced Manufacturing (p. 90)	AS	Oregon State University
Forest Renewable Materials/Art and Design (p. 92)	AS	Oregon State University
Forest Renewable Materials/Marketing and Management (p. 94)	AS	Oregon State University
Forest Renewable Materials/Science and Engineering (p. 96)	AS	Oregon State University
Forestry Management (p. 99)	AS	Oregon State University University of Idaho
Forestry Management/Forest Restoration and Fire (p. 101)	AS	Oregon State University
Forestry Management/Operations Management (p. 103)	AS	Oregon State University
Infant and Toddler Development (p. 106)	AAS	Southern Oregon University
Mechanical/Civil Engineering (p. 111)	AS	Oregon Institute of Technology Oregon State University
Marine Biology (p. 109)	AAOT	University of Oregon
Natural Resources (p. 116)	AS	Oregon State University
Nursing (p. 118)	AAS	Oregon Health & Science University
Oregon Transfer Module (p. 120)	OTM	Oregon Community Colleges Oregon Public Universities
Preschool Child Development (p. 131)	AAS	Southern Oregon University

## ASSOCIATE OF APPLIED SCIENCE (AAS) GENERAL EDUCATION REQUIREMENTS

The Associate of Applied Science (AAS) is a state approved type of associate's degree that is intended to prepare graduates for direct entry into the workforce. An AAS may also help to prepare students for career advancements, occupational licensure, or further study toward a baccalaureate degree. Below are the general education requirements that make up an AAS program. All Honors courses may substitute for their equivalent requirements.

Students must declare an AAS in a specific subject, they cannot be awarded an AAS with no specialization. The following shows the basis of AAS degrees, and for a list of degrees go here: <https://ecatalog.socc.edu/programsaz/>

## RELATED INSTRUCTION REQUIREMENTS

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

### WRITING

Four (4) credit hours from:

Code	Title	Credits
WR115	Fundamentals of Report Writing	4
WR121	English Composition	4
WR122	English Composition	4

### COMMUNICATION

One (1) course taken from:

Code	Title	Credits
SP100	Basic Speech Communications	3
SP111	Fundamentals of Public Speaking	3
SP218	Interpersonal Communication	3
SP219	Small Group Discussion	3

### COMPUTATION

Select four (4) credit hours of college-level mathematics from MTH60 or higher, excluding MTH211:

Code	Title	Credits
MTH60	Algebra I	4
MTH65	Algebra II	4
MTH80	Technical Mathematics I	4
MTH81	Applied Mathematics for Culinary Arts	4
MTH82	Business Mathematics	4
MTH86	Computer Technology Mathematics	4
MTH98	Math Literacy	4
MTH105	Math in Society	4
MTH111	College Algebra	4
MTH112	Trigonometry	4
MTH212	Fundamentals of Elementary Mathematics II	4
MTH213	Fundamentals of Elementary Mathematics III	4
MTH231	Elements of Discrete Mathematics I	4
MTH232	Elements of Discrete Mathematics II	4
MTH241	Calculus for Bus and Soc Science I	4
MTH242	Calculus for Bus and Soc Science II	4
MTH243	Intro to Probability and Statistics	4
MTH244	Probability & Statistics II	4
MTH251	Calculus I Differential Calculus	4
MTH252	Calculus II Integral Calculus	4
MTH253	Calculus III Infinite Sequences And Series	4
MTH254	Vector Calculus I	4
MTH255	Vector Calculus II	4

MTH256	Differential Equations	4	are considered to place students initially into college courses and a placement test may not be required.
MTH260	Matrix Methods and Linear Algebra	4	

## HEALTH, WELLNESS, AND FITNESS

**Three (3) credits of health/PE:** Three (3) credits of PE185 sport/activity courses or HE250 Personal Health or PE231 Wellness for Life.

## HUMAN RELATIONS

**Three (3) credits or as specified in AAS degree program:**

Code	Title	Credits
BA120	Leadership Development	3
BA285	Human Relations in Organizations	3
PSY100	Introduction to Psychology	4
PSY201	General Psychology	3
PSY202	General Psychology	3
PSY203	General Psychology	3

## ELECTIVES

The balance of the requirements may not be a prerequisite course to the degree/program requirements and may not include remedial or developmental courses. Prerequisites are designated in each program.

# CAREER PATHWAYS

### What is a Career Pathway Certificate of Completion?

A Career Pathway Certificate of Completion is an Oregon community college credential comprised of 12-44 credits that are wholly contained in an approved Associate of Applied Science (AAS) degree/option or an independent Certificate of Completion (45+ credits). The Career Pathway Certificate provides a state-sanctioned credential for a course of study that: 1) acknowledges a specific skill proficiency to help students qualify for a job or enhanced employment opportunities; 2) is centered on the needs of students by providing educational options; and 3) provides the flexibility to achieve specific competencies within a longer term career path. These certificates lead to an AAS degree - or even beyond.

### How do Students Enroll in a Career Pathway?

All courses included in a Pathway are college courses. Students register for courses through the usual Southwestern registration process.

See Southwestern's application here: <https://mylakerlink.socc.edu/ICS/Admissions/>.

### When are Courses Offered?

Courses included in Career Pathway Certificates of Completion are offered at a variety of times including daytime, evenings, and online. See Southwestern's schedule of classes on myLakerLink.

### How do Students Learn More?

Students can find more information about Southwestern certificates by visiting the Student First Stop Center in Coos Bay, 541-888-7352; Curry, 541-813-1667.

### Do Students Take a Placement Test?

Students who will be full-time, who will be pursuing a degree or certificate program, or receiving financial aid must complete the placement process prior to registration. The placement process determines the student's entry-level for reading, writing and math. Multiple components

If students have prior college work, have taken a placement test at another college, or have recent ACT or SAT scores, check with Educational Support Programs and Services (ESPS) in Stensland Hall on the Coos Bay campus, 541-888-7405. Placement testing, if required, is offered at all Southwestern sites.

### How do Students Pay for College Credit While in High School?

Check with the guidance counselor at your high school for specific options! These include College Now options including: Dual Credit, Expanded Options, Enhanced Options, personal payment and other opportunities.

### Are Employers Willing to Assist Employees in Attaining the Courses Necessary for the Certificate?

Some employers are willing to provide flexible schedules, partial tuition, and other support. For example, hospitals and other health care businesses are funding professional development at higher levels now than in previous years. Larger retail chains are willing to assist employees who show management potential. See the individual employer for more information.

### Is Financial Aid Available for Students Studying Toward a Certificate?

Financial Aid may be available. If you have any questions, please email the Financial Aid Office or call 541-888-7352.

### How Much Does it Cost to Earn a Certificate?

The cost varies depending upon how many courses are in the certificate. The cost of tuition and fees can be found on Southwestern's website.

For more information contact the Student First Stop Center in Dellwood Hall or on the Brookings campus.

### What is a Career Pathway Roadmap?

A Career Pathway Roadmap is a graphic display of the path from the first Certificate of Completion to the two-year degree and beyond with career opportunities. This program is being discontinued.

# CERTIFICATE OF COMPLETION

A Certificate of Completion is awarded for a specific curriculum of fewer than 90 credits and is approved by the Office of Community Colleges and Workforce Development in accordance with the Higher Education Coordinating Commission (HECC) policy. Programs that are at least 45 credits are considered One-Year Certificates of Completion and are eligible for federal financial aid. Programs that are fewer than 45 credits are considered Less Than One-Year Certificates of Completion. These programs are state approved but may not be eligible for federal financial aid.

# GRADUATION REQUIREMENTS

- The One-Year Certificate of Completion will be awarded to students who satisfy the following requirements:
  - Complete the credit hours indicated with a cumulative minimum Grade Point Average (GPA) of 2.0 or better. Complete one credit-bearing course at Southwestern before the Certificate of Completion is awarded.

- b. Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).
- The Less Than One-Year Certificate of Completion and Career Pathway Certificate of Completion will be awarded to students who satisfy the following requirements:
  - a. Complete the credit hours indicated with a cumulative minimum Grade Point Average (GPA) of 2.0 or better. Complete one credit-bearing course at Southwestern before the Certificate of Completion is awarded.
  - b. Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## GENERAL EDUCATION

### PHILOSOPHY OF GENERAL EDUCATION

Southwestern holds that general education should accomplish two major objectives. The first objective is to provide students with knowledge which will help them attain their full potential as informed and responsible members of society. General education courses offer knowledge which enables students to communicate effectively, to explain relationships among societies, to articulate what it is to be human, to develop artistic expression, to analyze the natural world, and to make informed decisions about physical and mental health.

The second objective of general education is to equip students with the mental skills they must possess if they are to learn independently. Mental skills such as listening, speaking, writing, computing, analyzing, synthesizing, and deliberating logically will enable students to learn on their own throughout their lives.

Southwestern intends for students who complete general education classes shall possess the knowledge and the mental skills essential if they are to develop their potential as individuals and as citizens. General education requirements are aimed at conveying to students the knowledge that each person is valuable and that communities of people are valuable. They are designed to prepare students to promote their own personal well-being and that of society.

A core of general education instruction permeates each of the College's transfer degrees (AAS, AGS, AAOT, AS, ASOT-BUS, ASOT-CS, AS-Ed), offering students many opportunities to acquire the knowledge and mental skills they must possess to become lifelong learners and responsible citizens.

## STUDENT LEARNING OUTCOMES

Student learning outcomes are incorporated into all of Southwestern's degrees and programs. All graduates of Southwestern programs will have gained the appropriate discipline, program, foundational, and general student outcomes.

Students graduating from Southwestern with a two-year degree are expected to have gained the knowledge, skills and attitudes

(dispositions) and to demonstrate competency for the following institutional general learning outcomes:

### COMMUNICATION

Students completing a degree will be able to demonstrate effective knowledge, skills, and attitudes in reading, writing, speaking, and listening, presentation of self and information.

### COMPUTATION

Students completing a degree will be able to demonstrate effective knowledge, skills, and attitudes in technology skills, computer proficiency, math proficiency, decision analysis (synthesis & evaluation), understanding of and ability to apply mathematical concepts and reasoning, analyzing and using numerical data.

### CREATIVE, CRITICAL AND ANALYTICAL THINKING

Students completing a degree will be able to demonstrate effective knowledge, skills and attitudes using curiosity, learning strategies, information gathering, analysis, synthesis, evaluation, creativity, research, and problem solving.

### COMMUNITY/GLOBAL CONSCIOUSNESS AND RESPONSIBILITY

Students completing a degree will be able to demonstrate effective knowledge, skills, and attitudes involving respect, citizenship, cultural awareness, interpersonal skills, ethics, lifelong learning, community service, self-esteem, integrity, and empathy.

### DISCIPLINE CONTENT

Students completing a degree will be able to demonstrate effective skills and attitudes that are specific to a discipline or career.

### 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.
- Demonstrate appropriate reasoning in response to complex issues.

### INFORMATION LITERACY

- Formulate a problem statement.
- Determine the nature and extent of the information needed to address the problem.
- Access relevant information effectively and efficiently.
- Evaluate information and its source critically.
- Understand many of the economic, legal and social issues surrounding the use of information.

### COMMUNICATION

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

## **MATHEMATICS**

- Use appropriate mathematics to solve problems.
- 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.

## **HEALTH, WELLNESS, AND FITNESS**

- Evaluate and assess physical fitness needs.
- Create an effective physical training program.
- Evaluate how well a physical training program works and how to make adjustments to improve it.
- Understand strength, flexibility, speed and power.

## **ARTS & LETTERS**

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

## **SOCIAL SCIENCE**

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

## **SCIENCE/MATHEMATICS/COMPUTER SCIENCE**

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

## **CULTURAL LITERACY**

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

Upon successful completion of a certificate the student will be able to:

## **COMMUNICATION**

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

## **COMPUTATION**

- Analyze and evaluate real-world problems in a logical manner.
- Model, analyze, and solve real-world problems in a mathematical context.
- Utilize technology for analyzing and evaluating real-world problems.

## **HUMAN RELATIONS**

- Understand the importance of goal setting, planning, and the impact of a positive mental outlook in both one's personal and professional life.
- Recognize and respect diversity as a vital component of effective human relation skills.

# COURSE DESCRIPTIONS

---

## A

- Allied Health (AH) (p. 150)
- American Sign Language (ASL) (p. 151)
- Anthropology (ANTH) (p. 152)
- Art (ART) (p. 153)

## B

- Biology (BI) (p. 156)
- Business Administration (BA) (p. 157)

## C

- Chemistry (CHEM) (p. 159)
- Clinical Laboratory Assistant (CLA) (p. 160)
- Computer Information Systems (CIS) (p. 161)
- Computer Science (CS) (p. 163)
- Criminal Justice (CJ) (p. 164)
- Culinary Arts (CRT) (p. 169)

## D

- Dental (DEN) (p. 173)
- Digital Design (DD) (p. 175)
- Drafting (DRFT) (p. 175)

## E

- Early Childhood Education (ECE) (p. 176)
- Economics (ECON) (p. 179)
- Education (ED) (p. 179)
- Emergency Management (EM) (p. 181)
- Emergency Medical Technician (EMT) (p. 181)
- Engineering (ENGR) (p. 183)
- English (ENG) (p. 184)
- Environmental Technology (ENV) (p. 185)

## F

- Fire Science Technology (FS) (p. 185)
- Food and Nutrition (FN) (p. 187)
- Forest Resources Technology (F) (p. 188)

## G

- General Science (GS) (p. 188)
- Geography (GEOG) (p. 189)
- Geology (G) (p. 189)

## H

- Health (HE) (p. 191)
- Health Information Management (HIM) (p. 191)
- History (HST) (p. 192)
- Honors Program (HON) (p. 192)

- Human Development (HD) (p. 193)
- Human Development and Family Studies (HDFS) (p. 194)
- Human Services (HS) (p. 195)
- Humanities (HUM) (p. 195)

## L

- Library Science (LIB) (p. 195)

## M

- Machine Tool (MT) (p. 196)
- Manufacturing Technology (MFG) (p. 196)
- Mathematics (MTH) (p. 197)
- Music (MUS) (p. 199)
- Music Performance (MUP) (p. 202)

## N

- Natural Resources (NR) (p. 204)
- Nursing (NRS) (p. 205)
- Nursing - CNA (NUR) (p. 207)

## P

- Pharmacy Tech (PHAR) (p. 207)
- Philosophy (PHL) (p. 208)
- Physical Education (PE) (p. 208)
- Physics (PH) (p. 213)
- Political Science (PS) (p. 213)
- Psychology (PSY) (p. 214)

## S

- Sociology (SOC) (p. 215)
- Spanish (SPAN) (p. 216)
- Speech (SP) (p. 216)

## W

- Welding (WLD) (p. 217)
- Writing (WR) (p. 219)

## COURSE/CREDIT TYPES

**Lower Division Collegiate Transfer (LDC)** courses are those that will transfer to four-year schools in Oregon, four-year public institutions, and apply towards a bachelor's degree. Generally, transfer courses will have a departmental prefix and a three-digit number 100 through 299.

**Developmental Education (DEV)** courses are designed to help a student gain skill and knowledge before taking college-level courses. These courses will generally have a departmental prefix and a two- or four-digit number.

**Career Technical Education (CTE)** courses will vary, but will have a departmental prefix and a two-, three-, or four-digit number. Because course numbers vary, students planning to transfer to four-year institutions should follow the course selections shown under the Associate of Arts Oregon Transfer (AA/OT) requirements, as well as

consult with their advisor. Career Technical Education courses may have limitations in degrees.

**Non-credit** courses are generally offered for community interest, personal enrichment, and professional development. The content is generally not applicable toward a certificate, diploma, or degree, and courses are not always transcribed.

**Continuing Education Units (CEU)** are a nationally recognized unit granted for educational experiences to upgrade a person's skills in a particular profession or occupation. Courses developed to meet these needs are often approved through a professional licensing agency or a state or regional board. The units are not convertible to college credit.

**Professional Development Units (PDU)** activities may include a program, course, workshop, seminar, or other pre-approved learning experience. For a course to be eligible for PDU credit and for the activity to be transcribed by the College, it must meet specific criteria.

**Foreign Language Requirement** effective for everyone graduating from high school in 1997 (and thereafter). All Oregon four-year public institutions require two years of high school second language for admission. This admission requirement can also be satisfied by two quarters (or semesters) of a college-level second language or demonstrated proficiency in a second language. For additional information, contact an advisor.

Code	Description
ABE	Academic Skills
AC	Accounting/Bookkeeping
AH	Allied Health
ANTH	Anthropology
ART	Art
ASL	American Sign Language
BA	Business Administration
BI	Biology
CHEM	Chemistry
CIS	Computer Information Systems
CJ	Criminal Justice
CLA	Clinical Laboratory Assistant
CRT	Culinary Arts
CS	Computer Science
DEN	Dental
DRFT	Drafting
ECE	Early Childhood Education
ECON	Economics
ED	Education
EM	Emergency Management
EMT	Emergency Medical Technician
ENG	English/Literature
ENGR	Engineering
ENV	Environmental Technology
ESL	English as a Second Language
F	Forestry
FE	Forest Engineering
FN	Nutrition

FS	Fire Science
FW	Fish and Wildlife
G	Geology
GEOG	Geography
GER	German
GS	General Science
HD	Human Development
HDFS	Human Development & Family Studies
HE	Health & First Aid/Health Occupations
HIM	Health Information Management
HON	Honors Program
HS	Human Services
HST	History
HUM	Humanities
LIB	Library
MFG	Manufacturing Technology
MLT	Medical Laboratory Technology
MT	Machine Tool Technology
MTH	Mathematics
MUP	Music Performance
MUS	Music
NR	Natural Resources
NRS	Nursing
NUR	Nursing - CNA
OA	Office Administration
PE	Physical Education
PH	Physics
PHAR	Pharmacy Technician
PHL	Philosophy
PS	Political Science
PSY	Psychology
RD	Reading
SOC	Sociology
SP	Speech
SPAN	Spanish
TA	Theatre
WLD	Welding Technology
WR	Writing

## COURSE NUMBERING SYSTEM

**COURSES NUMBERED 0100-0499** (not section numbers) do not carry grades or credit. Tuition is charged per clock hour.

**COURSES NUMBERED 0500-1999** may be graded (letter grade) or ungraded (pass/fail) or audit only. These courses may be credit or noncredit. Courses numbered 0500-1999 may not be applied toward a Southwestern degree or certificate unless stated in specific AAS curriculums.

**COURSES NUMBERED 2000-9999**, without a career technical alpha prefix (see list below) and that carry credit, may be used only as an elective for

an AAS or certificate (excluding those listed as Developmental Education courses).

**COURSES NUMBERED 2000-9999** may be graded or ungraded and may carry credit applicable to a Southwestern career technical degree or certificate. Career technical certificate/degree programs provide up to two years of specialized education designed to prepare the student for career-entry.

**COURSES NUMBERED 100-299** are acceptable for a Southwestern degree or certificate and may or may not be eligible for transfer to four-year institutions. However, students should be aware the course or courses may be accepted as elective credit only or not at all if the credits do not fit in the student's major discipline or major. Transfer acceptability is at the discretion of the receiving institution.

Career Technical Education (CTE) courses identified by the following course alpha prefixes *may* not transfer to a four-year institution. Specific transfer articulation agreements may exist. The interested student should consult with the appropriate staff at the four-year institution. Up to 12 credits of CTE courses numbered 100 and above may be used as elective credit toward the AAOT degree.

The following departments are known to have career technical education courses at Southwestern Oregon Community College:

## DEVELOPMENTAL EDUCATION COURSES

Developmental Education (DEV) courses, although they may be required by placement scores, do not fulfill any Southwestern degree or certificate requirements. Developmental Education courses build appropriate skills enabling students to be successful in college-level courses.

## COURSE NUMBER CHANGE

In the event a course number has been changed from a career technical number to a college-level number, the college-level number will appear on the permanent record only for those who took the class after the change was approved.

## ALLIED HEALTH (AH)

**AH100 Introduction to Health Care Careers** 2 credits (2 lec hrs/wk)

This course will expose students to a variety of health care professions and the primary professional competencies required for a career in health care.

This course may be taken 1 time for credit.

Course classification: LDC

**AH101 Introduction to Professionalism In Health Care** 2 credits (2 lec hrs/wk)

This course provides an introduction to the professional core competencies required in most careers in health care including patient safety, confidentiality, communication, relationship, teamwork, critical thinking, and ethics. This course will be taught online with two face-to-face seminars in which students will apply their learning in small group discussions and case study scenarios.

This course may be taken 1 time for credit.

Course classification: CTE

**AH111 Medical Terminology I** 3 credits (3 lec hrs/wk)

This course provides the student with the basic knowledge of building medical terms with root words, suffixes and prefixes. Also provides medical terminology related to the body as a whole; the skeletal, muscular, cardiovascular, lymphatic and immune, respiratory and digestive systems.

This course may be taken 1 time for credit.

Course classification: LDC

**AH112 Medical Terminology II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( AH111 )

Medical Terminology II is a continuation of Medical Terminology I; to include terminology and abbreviations related to the urinary, nervous, integumentary, endocrine, and reproductive systems as well as special senses, diagnostic procedures and pharmacology. Each system outline will include functions and components, suffixes, prefixes, anatomic reference points, and terminology (diagnostic, symptomatic, and operative) pertinent to that system.

This course may be taken 1 time for credit.

Course classification: LDC

**AH121 Body Structures and Functions I** 3 credits (3 lec hrs/wk)

This course is an introduction to human anatomy and physiology. It is designed for medical office students, pharmacy technicians and other students who desire a broad review of body systems. Normal structure and functions of the human body system, characteristics of the cell as the basis for life and organization of tissues and organs will be covered.

This course may be taken 1 time for credit.

Course classification: CTE

**AH122 Body Structures and Functions II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( AH121 )

This course is an introduction to human anatomy and physiology. It is designed for medical office students, pharmacy technicians and other students who desire a broad review of body systems. Normal structure and functions of the human body systems, characteristics of the cell as the basis for life and organization of tissues and organs will be covered.

This course may be taken 1 time for credit.

Course classification: CTE

**AH131 Clinical Procedures I** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( AH112 and AH122 )

This course is to provide clinical orientation, initial instruction, and basic skills for a medical/clerical assistant. It will also provide in-depth simulation of office nurse duties. This will prepare the medical office assistant to substitute for the physician's nurse, without major changes in office routine for the safety, security, and comfort of the patient, physician and the medical assistant.

This course may be taken 1 time for credit.

Course classification: CTE

**AH132 Clinical Procedures II** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( AH131 )

This course provides theoretical knowledge, skills and practical experience which enables the student to attain and maintain safe, intelligent, quality patient care under supervision of licensed personnel. Emphasis on medical and surgical aspects in preparation for office surgery is stressed. Primarily for students already employed in the health care field.

This course may be taken 1 time for credit.

Course classification: CTE

**AH150 Medical Office Coding** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( AH111 )

Medical Office Coding provides the student with a basic knowledge of the fundamental coding systems used between the medical community and the insurance carriers, private and government. Includes coding health related conditions and diseases, descriptive terms, and abbreviations of reporting medical services and procedures performed by physicians and other coding systems.

This course may be taken 1 time for credit.

Course classification: CTE

**AH151 Reimbursement Management** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( AH111 )

This course teaches students medical insurance terminology and provides familiarity with various types of insurance programs. Content covers insurance claim processing with an introduction to forms, assignment and coordination of benefits, credit and collection procedures with federal and Oregon laws credit applications, basic billing cycles, and an introduction to coding.

This course may be taken 1 time for credit.

Course classification: CTE

**AH152 Medical Law and Ethics** 2 credits (2 lec hrs/wk)

Medical Law and Ethics is a survey of the manner in which the law and codes of ethics affect the practice of health occupations paraprofessionals. An introduction to the concepts of litigation, consent, introduction to law, ethics and bioethics, genetic, engineering, sterilization, abortion, and death and dying.

This course may be taken 1 time for credit.

Course classification: CTE

**AH180 Internship: Allied Health** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**AH280 CWE: Allied Health** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**AH280A CWE: Allied Health Front Office** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**AH280B CWE: Allied Health Back Office** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**AH297 NHA Licensure Qualification** 2 credits (2 lec hrs/wk)

This instructor supported online seminar will prepare MA's who have, or are successfully completing a state-approved medical assistant program but still need to take a national certification exam. The seminar will lead the student through a review of program topics, and impart updated information on topics that may be included in a national certification exam. Participants will learn the preparation and test-taking techniques required to complete a certification type exam. The course end point will be to successfully complete a national certification exam.

This course may be taken 1 time for credit.

Course classification: CTE

## AMERICAN SIGN LANGUAGE (ASL)

**ASL101 1st Yr American Sign Language I** 4 credits (4 lec hrs/wk)

Introduces the natural, signed language of American Deaf people. Includes instruction in proper sign formation, American Sign Language (ASL) grammar and vocabulary, expressive and receptive skills. Emphasis on history of ASL, the Deaf community in North America, and Deaf education. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**ASL102 1st Yr American Sign Language II** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( ASL101 )

Continues instruction in the natural, signed language of American Deaf people. Includes instruction in proper sign formation American Sign Language (ASL) grammar and vocabulary, expressive and receptive skills. Emphasis on history of ASL, the Deaf community in North America, and Deaf education. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**ASL103 1st Yr American Sign Language III** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( ASL102 )

Continues instruction in the natural, signed language of American Deaf people. Includes instruction in proper sign formation American Sign Language (ASL) grammar and vocabulary, expressive and receptive skills. Emphasis on history of ASL, the Deaf community in North America and Deaf education. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**ASL180 Internship: American Sign Language** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**ASL201 2nd Yr American Sign Language I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( ASL103 )

Continues instruction in culturally-appropriate use of American Sign Language (ASL) to communicate in the Deaf community. Introduces advanced vocabulary and grammatical aspects of ASL, including temporal aspect and locative and semantic classifiers. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**ASL202 2nd Yr American Sign Language II** 4 credits (4 lec hrs/wk)  
Prerequisite(s): ( ASL201 )  
Continues instruction in American Sign Language (ASL). Includes interactive events and everyday use of the language. Introduces new vocabulary; descriptive locative and instrument classifiers; and description and identification of objects. Must be taken in sequence. This course may be taken 1 time for credit.  
Course classification: LDC

**ASL203 2nd Yr American Sign Language III** 4 credits (4 lec hrs/wk)  
Prerequisite(s): ( ASL202 )  
Continues instruction in American Sign Language (ASL). Introduces new vocabulary; durative and temporal aspects; and element classifiers. Further practice of everyday use of the language. Must be taken in sequence. This course may be taken 1 time for credit.  
Course classification: LDC

**ASL280 CWE: American Sign Language** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge. This course may be taken 12 times for credit.  
Course classification: LDC

## ANTHROPOLOGY (ANTH)

**ANTH180 Internship: Anthropology** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to explore workplace environments and career options. This course may be taken 12 times for credit.  
Course classification: LDC

**ANTH201 Physical Anthropology and Evolution** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( WR90R )  
This course is an introduction to the field of physical/biological anthropology, with an emphasis on the evolution of and analysis of human variation. The course discusses the perspectives and methods of heredity, paleoanthropology, and primatology in order to trace and explain human evolution from the first primates and hominids to the development of bipedalism and the emergence of anatomically modern humans (*Homo sapiens*). This course may be taken 1 time for credit.  
Course classification: LDC

**ANTH202 Introduction to Archaeology** 3 credits  
Prerequisite(s): ( WR90R )  
This course introduces students to the archaeology and prehistory of the world and archaeological method and theory. It examines the transition of human societies from hunting and gathering to farming and the beginning of urban life through prehistoric and historic archaeology; techniques of fieldwork; analysis and dating; development of cultural stages; and civilizations of the Old and New Worlds. This course may be taken 1 time for credit.  
Course classification: LDC

**ANTH203 Language and Culture** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( WR90R )  
This course is an introduction to the anthropological sub-field of linguistics. It explores how language shapes the relationship between individuals and society; the ways in which language constitutes thought, power relations, identity, and communities; and how language and culture change over time and space. This course may be taken 1 time for credit.  
Course classification: LDC

**ANTH208 Ethnographic Methods** 3 credits (3 lec hrs/wk)  
This course introduces students to ethnographic methods through an experiential approach to learning. We explore the connection between anthropological theory and method, while examining the politics and possibilities associated with engaged ethnographic research. Students will select a research topic and field site, develop a research design, conduct fieldwork, code and analyze data, and summarize their findings. Throughout, they will gain a comparative understanding of cultural values and practices and how people's everyday lives are mutually constituted through global and local relations. This course may be taken 1 time for credit.  
Course classification: LDC

**ANTH221 Intro to Cultural Anthropology** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( WR90R )  
Introduction to Cultural Anthropology. This course discusses the meaning of culture, its processes of growth and expansion, its significance for human beings, and its diverse forms and degrees of elaboration among different groups of people. The course introduces students to the theories, concepts, and methods used in cultural anthropology to understand and explain the cultural diversity seen around the world. May be taken independently of ANTH 222/223. This course may be taken 1 time for credit.  
Course classification: LDC

**ANTH222 Cultural Anthropology II** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( WR90R )  
Cultural Anthropology II - Cultural Identities and Relations of Power. A continuation of the major topics explored in ANTH 221/223, including cultural identities, family and gender relations, race and ethnicity, poverty and inequality, and cultural production and change over time. May be taken independently of ANTH 221/223. This course may be taken 1 time for credit.  
Course classification: LDC

**ANTH223 Cultural Anthropology III** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( WR90R )  
Cultural Anthropology III - Development and Globalization A continuation of the major topics explored in ANTH 221/222, including colonialism; the meaning of progress and development; globalization, neoliberalism and the state; identity; migration; climate change; and applied anthropology. May be taken independently of ANTH 221/222. This course may be taken 1 time for credit.  
Course classification: LDC

**ANTH224 Intro to Medical Anthropology** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

Medical Anthropology is concerned with the cross-cultural study of culture, health, and illness. The course introduces student to theoretical orientations and key concepts of medical anthropology; the cross-cultural diversity of health beliefs and practices; cultural aspects of ethnomedicine and biomedicine; and contemporary issues and special populations such as AIDS, homelessness, cancer, women's health, and children at risk.

This course may be taken 1 time for credit.

Course classification: LDC

**ANTH230 Native North Americans: Oregon** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

A survey of prehistoric and historic cultures in Oregon and contemporary Native American issues. This course introduces various tribes of Native Americans in Oregon. Cultural practices; survival strategies; migrations; trade; and cultural change are explored through the findings of archaeology, linguistics, ethnology, historical documents, and contemporary tribal members. May be taken independently of ANTH 231/232.

This course may be taken 1 time for credit.

Course classification: LDC

**ANTH231 Native North Americans: PNW** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

Examines Native American cultures in the Pacific Northwest from prehistoric to modern times. Archaeological findings and recent developments are discussed including the origins and development of art forms and fishing technology. May be taken independently of ANTH 230/232.

This course may be taken 1 time for credit.

Course classification: LDC

**ANTH232 Native North Americans** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

A broad overview of the earliest inhabitants of North America, including the traditional lifestyles, languages, and customs of selected Native American cultures on the continent. Emphasis is placed on Native American peoples and cultures; diversity of cultural adaptation; European contact; and Native American history (ancient and contemporary). May be taken independently of ANTH 230/231.

This course may be taken 1 time for credit.

Course classification: LDC

**ANTH250 Field Studies - Anthropology** 3 credits (3 lec hrs/wk)

This course provides students with hands on experience conducting social science research in a field setting. Fieldsites will vary annually and will include opportunities for international travel. Students will study a range of topics in the respective locations including rural and urban livelihood strategies, ecological sustainability, and efforts in achieving social and economic justice. Research will be conducted collaboratively with international students, providing Southwestern students the opportunity to interact with and learn from people with diverse cultural backgrounds.

This course may be taken 1 time for credit.

Course classification: LDC

**ANTH280 CWE: Anthropology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course offers career exploration and workplace experience within a widely defined number of supervised settings. The course provides professional experience in the field of anthropology.

This course may be taken 12 times for credit.

Course classification: LDC

## ART (ART)

**ART110 Digital Photography I** 3 credits (2 lec, 3 lab hrs/wk)

This course introduces students to digital photography and basic photographic post-production. Students will gain hands-on experience with digital cameras, while simultaneously exploring core photographic principles, including: Composition, focus, exposure, and lighting.

Through discussions, critiques, and readings, students will expand their conceptual foundation and hone their ability to evaluate photographs.

This course may be taken 1 time for credit.

Course classification: LDC

**ART115 Basic Design I Intro to Elements of Art and Principles of Design** 4 credits (3 lec, 3 lab hrs/wk)

Addresses two-dimensional, black and white design issues in the context of the contemporary visual world. Explores the elements (line, shape, texture, value, space) and principles (composition, harmony, pattern, rhythm) of visual design.

This course may be taken 1 time for credit.

Course classification: LDC

**ART116 Basic Design II, Color Theory** 4 credits (3 lec, 3 lab hrs/wk)

Addresses color theory, relationship and organization in the context of the contemporary visual world. Explores the elements (line, shape, texture, value, space) and principles (composition, harmony, pattern, rhythm) of visual design.

This course may be taken 1 time for credit.

Course classification: LDC

**ART117 Basic Design III, Intro to 3D Design** 4 credits (3 lec, 3 lab hrs/wk)

Addresses three-dimensional design (space, forms, materials and methods) in the context of the contemporary visual world. Explores the elements (line, shape, texture, value, space) and principles (composition, harmony, pattern, rhythm) of visual design.

This course may be taken 1 time for credit.

Course classification: LDC

**ART131 Introduction to Drawing I** 3 credits (2 lec, 3 lab hrs/wk)

Students are introduced to the basic techniques and approaches to drawing with an emphasis on the development of perceptual skills and observational study. Assigned creative projects explore a variety of media, subject matter, and conceptual problems inspired by historical and contemporary artistic practice. Intro to Drawing series 131, 132, 133 may be taken in any sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**ART132 Introduction to Drawing II** 3 credits (2 lec, 3 lab hrs/wk)  
Students are introduced to the basic techniques and approaches to drawing the human figure with an emphasis on the development of perceptual skills and observational study. Assigned creative projects explore a variety of media with a focus on proportion, foreshortening, anatomy, and the application of techniques inspired by historical and contemporary artistic practice. Intro to Drawing series 131, 132, 133 may be taken in any sequence.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART133 Introduction to Drawing III** 3 credits (2 lec, 3 lab hrs/wk)  
Students are introduced to the basic techniques and approaches to drawing with an emphasis on the development of meaningful content and personal expression. Assigned creative projects are inspired by historical and contemporary artistic practice, and explore a variety of media, as well as thematic development and organization of the picture plane. Intro to Drawing series 131, 132, 133 may be taken in any sequence.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART180 Internship: Art** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to explore workplace environments and career options.  
This course may be taken 12 times for credit.  
Course classification: LDC

**ART181A Introduction to Painting A** 1 credit (1 lec, 2 lab hrs/wk)  
These courses continue to explore visual representation on a two-dimensional surface. It uses oil or acrylic paints for space, division, color, and surface treatment. Both lecture and studio activity are involved weekly.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART181B Introduction to Painting B** 1 credit (1 lec, 2 lab hrs/wk)  
These courses continue to explore visual representation on a two-dimensional surface. It uses oil or acrylic paints for space, division, color, and surface treatment. Both lecture and studio activity are involved weekly.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART181C Introduction to Painting C** 1 credit (1 lec, 2 lab hrs/wk)  
These courses continue to explore visual representation on a two-dimensional surface. It uses oil or acrylic paints for space, division, color, and surface treatment. Both lecture and studio activity are involved weekly.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART184A Watercolor Basics I** 1 credit (1 lec, 2 lab hrs/wk)  
Introduces principles and concepts of watercolor at a beginning level.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART184B Watercolor Basics II** 1 credit (1 lec, 2 lab hrs/wk)  
Prerequisite(s): (ART184A)  
A continuation of introductory principles and concepts of beginning watercolor. The study of color, composition, and value control are emphasized.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART184C Watercolor Basics III** 1 credit (1 lec, 2 lab hrs/wk)  
Prerequisite(s): (ART184B)  
A continuation of introductory principles and concepts of beginning watercolor. Special attention given to experimental techniques and history and use of egg as a binder.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART191 Beginning Sculpture** 3 credits (2 lec, 4 lab hrs/wk)  
Demonstrates techniques, processes and materials in sculpture. Explores a variety of media and sculptural concepts, emphasizing the discipline and process of handling the tools and additive materials of clay and wire, subtractive qualities of stone and clay.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART192 Beginning Sculpture** 3 credits (2 lec, 4 lab hrs/wk)  
Further develop aesthetic awareness and perceptions about three dimensional form. Demonstrates techniques, processes, and materials in sculpture. Concentration on figure study of human form.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART204 History of Western Art: Introduction to Art History** 3 credits (3 lec hrs/wk)  
The History of Western Art is a survey of the traditions, movements, and developments in art and architecture of the western world. Introduces the study of art history and the elements of art then surveys the history of Western Art from prehistory through Early Christian Art.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART205 History of Western Art: Introduction to Art History** 3 credits (3 lec hrs/wk)  
The History of Western Art is a survey of the traditions, movements, and developments in art and architecture of the western world. Emphasizes a survey of the history of art form from the Early Middle Ages through the Baroque.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART206 History of Western Art: Introduction to Art History** 3 credits (3 lec hrs/wk)  
The History of Western Art is a survey of the traditions, movements, and developments in art and architecture of the western world. Surveys Western Art from Neoclassicism to the Present.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART210 Digital Photography II** 3 credits (2 lec, 3 lab hrs/wk)  
This course covers digital raw capture and post-production techniques. Students will gain hands-on experience with interchangeable lens digital cameras and explore editing raw files in Adobe Lightroom Classic. The course will deepen students' understanding of the history of photography and popular genres of contemporary photographic practice.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART225 Computer Art I** 3 credits (6 lec lab hrs/wk)  
Basics of design elements, drawing, composition, and color are used in presentations that use the computer as the creative medium. Includes planning, design sketches, functional and aesthetic tests, leading to a portfolio of work that showcases the artist/designer.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART231 Drawing I** 3 credits (2 lec, 3 lab hrs/wk)  
Explores principles of drawing and visual problemsolving using various media and subjects.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART232 Drawing II** 3 credits (2 lec, 3 lab hrs/wk)  
Explores principles of drawing and visual problem solving using various media and subjects. Emphasis on composition and understanding of visual form including hand-eye-mind coordination. Departing somewhat from the still life, landscape, linear perspective, and non-objective subjects may be covered. A variety of dry and wet drawing media, including colored pencil, may be covered.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART237 Life Drawing** 3 credits (2 lec, 3 lab hrs/wk)  
A studio experience with supporting slides, lectures, and occasional films. Covers studying and drawing the human form, using professional models. Presents the structure, form and proportions of human figure, applying various drawing techniques and concepts. Emphasizes personal artistic growth with attention to composition.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART244 Bronze Casting** 3 credits (2 lec, 4 lab hrs/wk)  
All aspects of the bronze casting process will be covered including mold making, wax pattern production, investment/ceramic shell processes, bronze casting, welding and metal chasing, bronze patina, and final installation of the finished sculpture.  
This course may be taken 3 times for credit.  
Course classification: LDC

**ART253 Ceramics I** 3 credits (2 lec, 4 lab hrs/wk)  
Presents all aspects of introductory clay processes: Development of ideas, care and preparation of clay, skills and understanding related to clay work on and off the potter's wheel, glazes and firing procedures.  
This course may be taken 3 times for credit.  
Course classification: LDC

**ART256 Ceramics II** 3 credits (2 lec, 4 lab hrs/wk)  
Prerequisite(s): ( ART253 )  
Allows students to further explore all aspects of clay processes: Development of ideas, care and preparation of clay, skills and understanding related to clay work on and off the potter's wheel, glazes and firing procedures.  
This course may be taken 3 times for credit.  
Course classification: LDC

**ART280 Field Experience** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience in art education graphics or art related areas under the joint supervision of an advisor and the sponsoring professional. (Museum & gallery experience, retail art supply experience, professional studio artist, and art educator apprenticeship.)  
This course may be taken 33 times for credit.  
Course classification: LDC

**ART281 Painting I Beginning** 3 credits (6 lec lab hrs/wk)  
Offers visual observation and composition of selected subjects using oil or acrylic media. Second and third quarter continues technique and color control on a two-dimensional surface.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART282 Painting II Beginning** 3 credits (2 lec, 4 lab hrs/wk)  
Offers visual observation and composition of selected subjects using oil or acrylic media. Second and third quarter continues technique and color control on a two-dimensional surface.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART283 Painting III Beginning** 3 credits (2 lec, 3 lab hrs/wk)  
Offers visual observation and composition of selected subjects using oil or acrylic media. Second and third quarter continues technique and color control on a two-dimensional surface.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART284 Painting I Intermediate** 3 credits (2 lec, 3 lab hrs/wk)  
Offers visual observation and composition of selected subjects using oil or acrylic media. Emphasis will be given to individual needs and interests in painting.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART285 Painting II Intermediate** 3 credits (2 lec, 3 lab hrs/wk)  
Offers visual observation and composition of selected subjects using oil or acrylic media. Emphasis will be given to individual needs and interests in painting.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART286 Painting III Intermediate** 3 credits (2 lec, 3 lab hrs/wk)  
Offers visual observation and composition of selected subjects using oil or acrylic media. Emphasis will be given to individual needs and interests in painting.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART291 Sculpture** 3 credits (2 lec, 4 lab hrs/wk)  
Prerequisite(s): ( ART191 ) or ( ART192 ) or ( ART193 )  
Explores three-dimensional shapes and forms in greater depth and intensity from previous year. Students assess personal strengths and weaknesses to establish a plan for building skills. They become mentors to new sculpture students thereby strengthening the critical eye.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART292 Sculpture** 3 credits (2 lec, 4 lab hrs/wk)  
Explores three-dimensional shapes and forms in greater depth and intensity from previous year. Intermediate human figure study.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ART293 Sculpture** 3 credits (2 lec, 4 lab hrs/wk)

Explores three-dimensional shapes and forms. Students achieve full independence in studio processes. They have a greater role in communicating their design understanding beyond the studio to improve the visual aesthetics of a larger community.

This course may be taken 1 time for credit.

Course classification: LDC

## BIOLOGY (BI)

**BI101 General Biology** 4 credits (3 lec, 3 lab hrs/wk)

An introductory course in the principles and methods of biology, intended for majors in fields other than the biological sciences. Topics include cell chemistry, structure, and metabolism, as well as cell reproduction, chromosomes, and Mendelian genetics. Unifying themes include evolution and applications to human health.

This course may be taken 1 time for credit.

Course classification: LDC

**BI102 General Biology** 4 credits (3 lec, 3 lab hrs/wk)

An introductory course in the principles and methods of biology, intended for majors in fields other than the biological sciences. Topics include molecular genetics and biotechnology, evolutionary mechanisms, population biology, and diversity of life (viruses, bacteria, protists, and animals).

This course may be taken 1 time for credit.

Course classification: LDC

**BI103 General Biology** 4 credits (3 lec, 3 lab hrs/wk)

An introductory course in the principles and methods of biology, intended for majors in fields other than the biological sciences. Topics will include an introduction to the anatomy and physiology of plants, fungi, and animals. Ecology and population biology principles will also be explored.

This course may be taken 1 time for credit.

Course classification: LDC

**BI111 Marine Habitats of the Oregon Coast** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MTH60 ) or ( MTH98 )

This course provides an introduction to marine habitats, the Oregon Institute of Marine Biology (OIMB), and the field of study for marine biology majors or other interested students. Low tide field trips are conducted to study animals and plants in their habitats. An introduction to courses and research conducted at OIMB is provided.

This course may be taken 1 time for credit.

Course classification: LDC

**BI140 Practical Ecology** 3 credits (3 lec hrs/wk)

An introduction to the basic concepts of ecology, using examples from the ecology of the local area, with a consideration of impacts made by different types of land use.

This course may be taken 1 time for credit.

Course classification: LDC

**BI142 Habitats: Marine Biology** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH60 ) or ( MTH98 )

Examines the marine environment and the ecology, physiology, and morphology of marine plants and animals emphasizing Oregon. Laboratory focuses on environmental testing and identification.

This course may be taken 1 time for credit.

Course classification: LDC

**BI149 Introduction to Human Genetics** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MTH65 ) or ( MTH98 )

Covers the basic concepts of genetics as they have developed since the nineteenth century. Discusses current techniques that are being developed and applied to problems of inheritance patterns, genetic disorders, and genetic therapy. Behavior and population genetics are included.

This course may be taken 1 time for credit.

Course classification: LDC

**BI180 Internship: Biology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**BI201 Introductory Biology** 4 credits (3 lec, 3 lab hrs/wk)

For biological science majors in programs which will require students to complete a series in introductory biology. Topics include inorganic, organic, and biochemistry; cellular structure, chemistry, metabolism and reproduction; and Mendelian genetics.

This course may be taken 1 time for credit.

Course classification: LDC

**BI202 Introductory Biology** 4 credits (3 lec, 3 lab hrs/wk)

For biological science majors in programs which will require students to complete a series in introductory biology. Topics include molecular genetics and biotechnology; evolutionary mechanisms and population genetics; and an introduction to the diversity of life.

This course may be taken 1 time for credit.

Course classification: LDC

**BI203 Introductory Biology** 4 credits (3 lec, 3 lab hrs/wk)

For biological science majors in programs which will require students to complete a series in introductory biology. Topics include the anatomy and physiology of plants, animals, and fungi. Ecology, population biology and methods used in field studies will also be explored.

This course may be taken 1 time for credit.

Course classification: LDC

**BI231 Human Anatomy and Physiology I** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( BI101 ) or ( BI201 ) or ( CHEM110 ) or ( CHEM223 )

The curriculum of the first term of Human Anatomy and Physiology will include the study of body organization, tissues, and a study of the integumentary, skeletal, and muscular systems. The course will include the study of molecules, cells, tissues, organs and organ systems in humans. Some pathological conditions will be covered.

This course may be taken 1 time for credit.

Course classification: LDC

**BI232 Human Anatomy and Physiology II** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( BI231 )

The curriculum of the second term of Human Anatomy and Physiology will include the study of: The nervous system including nervous tissue, the spinal chord and spinal nerves, the brain and cranial nerves, sensory and motor and integrative nervous systems, the special senses and the autonomic nervous system; the endocrine system with emphasis on hormone activity, the major hormones of each gland, hormones involved in growth and the stress response; the cardiovascular system including blood, the heart, blood vessels and hemodynamics.

This course may be taken 1 time for credit.

Course classification: LDC

**BI233 Human Anatomy and Physiology III** 4 credits (3 lec, 3 lab hrs/wk)  
Prerequisite(s): ( BI232 )

The curriculum of the third term of Human Anatomy and Physiology will include the study structure and function of the: Respiratory system; digestive system; metabolism; urinary system; fluid, electrolyte, and acid base balance; the reproductive system; and human development and inheritance.

This course may be taken 1 time for credit.  
Course classification: LDC

**BI234 Microbiology** 4 credits (3 lec, 3 lab hrs/wk)  
Prerequisite(s): ( BI101 ) or ( BI201 ) or ( CHEM110 )

Microbiology principles are applied to health-related fields. Includes characteristics, physiology, and growth requirements of microorganisms, sterilization principles, infection, and immunity. Pathogenic microbes, infections and host resistance will be a consideration.

This course may be taken 1 time for credit.  
Course classification: LDC

**BI280 CWE: Biology** 1-6 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.  
Course classification: LDC

## BUSINESS ADMINISTRATION (BA)

**BA101 Introduction to Business** 4 credits (4 lec hrs/wk)

This course surveys American business organization, operation, and management. This course develops an awareness of the nature of business in the capital system. Introduction of the basic concepts of management, marketing, human resources, and financial management. Utilizing a business simulation gives students the opportunity to develop critical thinking and analytic skills.

This course may be taken 1 time for credit.  
Course classification: LDC

**BA120 Leadership Development** 3 credits (3 lec hrs/wk)

This course introduces leadership and group dynamics theory and skills to identify and develop the qualities of effective leadership that are essential for career, organizational, and personal success. The course will integrate leadership models and theories with current leadership practices within a multicultural context.

This course may be taken 1 time for credit.  
Course classification: LDC

**BA145 Business Field Trip** 2 credits (5 lec hrs/wk)

The activities in this course are designed to inspire future business leaders with ideas of some of the exciting academic and career choices they can make. Students will visit non-profits, multi-national firms, and the offices of state legislators in Salem.

This course may be taken 1 time for credit.  
Course classification: CTE

**BA150 Introduction to Entrepreneurship** 3 credits (3 lec hrs/wk)

Entrepreneurship is an exciting opportunity for students to learn about potential business ownership, becoming the creator of jobs in the community. The Introduction to Entrepreneurship course will focus on the leadership skills and entrepreneurial traits needed to be successful. This course may be taken 1 time for credit.

Course classification: CTE

**BA156 Essentials of Economics** 3 credits (3 lec hrs/wk)

This course introduces the subject of economics in a practical business-oriented sense. The course relies on current events and practical applications. The content includes a survey of economic concepts including: microeconomics, macroeconomics, the history of economic ideas, international trade and a variety of economic issues.

This course may be taken 1 time for credit.  
Course classification: LDC

**BA177 Payroll Records and Accounting** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA111 ) or ( BA211 )

Become familiar with the basic knowledge and skills of payroll accounting. Provides practice in all payroll operations such as calculation of gross pay and of applicable withholding and deductions, journalizing and posting payroll transactions, and reporting various federal and state obligations.

This course may be taken 1 time for credit.  
Course classification: LDC

**BA180 Internship: Business Administration** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.  
Course classification: LDC

**BA203 Intro. to International Business** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA223 and WR115 ) or ( BA223 and WR121 )

Explores the broad field of international trade. It forms a foundation for future study and specialization in the international business field. Students will gain an understanding of the institutions, environments, forces, and problems that are involved when businesses operate in foreign economies.

This course may be taken 1 time for credit.  
Course classification: LDC

**BA205 Solving Communication Problems With Technology** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( WR115 ) or ( WR121 )

Focuses on using current technology to create, revise, and design business documents: letters, memos, e-mail, reports, minutes, simple instructions, and resumes. Students will use library and Internet resources to collect information. Includes oral presentations using technology presentation tools.

This course may be taken 1 time for credit.  
Course classification: LDC

**BA206 Management Fundamentals** 4 credits (4 lec hrs/wk)

Introduces business management theory, including the basic functions of planning, organizing, directing, leading, and controlling as well as factors contributing to change in current management approaches. The course focuses on the four key responsibilities of management: planning, organizing, leading and control. Recommended: BA 101, Introduction to Business.

This course may be taken 1 time for credit.

Course classification: LDC

**BA211 Principles of Accounting I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( BA101 and MTH60 ) or ( BA101 and MTH82 )

This is the first term of the accounting principles sequence. Introduces financial accounting theory, including the accounting cycle, analysis and recording of transactions, and reporting financial information in accordance with Generally Accepted Accounting Principles (GAAP). The course emphasizes the theoretical foundations of accounting and analytical skills needed by business and accounting students.

This course may be taken 1 time for credit.

Course classification: LDC

**BA212 Principles of Accounting II** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( BA111 ) or ( BA211 )

This is the second term of the accounting principles sequence. Introduces financial accounting theory, including accounting systems, management control, depreciation, merchandise inventory, evaluation, partnership and corporate accounting, capital stock, investments, statement of cash flow and financial statement analysis. The course continues emphasis on the theoretical foundations of accounting and analytical skills needed by business and accounting students.

This course may be taken 1 time for credit.

Course classification: LDC

**BA213 Principles of Accounting III** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( BA101 ) or ( BA111 ) or ( BA211 )

This is the third term of the accounting principles sequence. Covers accounting information from management perspective for planning, performance evaluation and for decision making purposes. Includes cost concepts, product costing, cost-volume-profit relationships, profit planning, variance analysis, responsibility accounting and capital budgeting.

This course may be taken 1 time for credit.

Course classification: LDC

**BA215 Cost Accounting** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA111 ) or ( BA212 )

This course develops techniques for determining product costs under job order, process and standard costing, and introduces cost analysis for decision making.

This course may be taken 1 time for credit.

Course classification: LDC

**BA217 Accounting Process** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA111 ) or ( BA211 )

Introduces fully integrated accounting software. Additionally, the student will review and apply basic accounting systems in practical applications. These will range from working with journals and ledgers, to the application of accounting systems on a microcomputer and analyzing financial statements.

This course may be taken 1 time for credit.

Course classification: LDC

**BA220 Tax Accounting: Personal Income Tax** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA111 ) or ( BA211 )

A beginning course in federal income tax preparation. Designed to introduce students to the Federal tax system for individuals and businesses. Students will learn how to complete basic schedules and forms, including the W-2, W-3, and W-4 forms.

This course may be taken 1 time for credit.

Course classification: LDC

**BA222 Finance** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MTH60 )

Covers basic financial concepts and practices and includes analysis of company resources, types and sources of financing, forecasting and planning methods, and the roles of capital markets. It includes key financial topics such as analysis of financial statements, cash flow, and break-even calculations., working capital management, time value of money, and capital budgeting.

This course may be taken 1 time for credit.

Course classification: LDC

**BA223 Principles of Marketing** 4 credits (4 lec hrs/wk)

Develops skills in understanding and developing strategies in the marketing environment. Covers principles and techniques of market research, consumer behavior, product development, pricing, distribution and promotion. Establishes basis for creating a marketing plan.

This course may be taken 1 time for credit.

Course classification: LDC

**BA224 Human Resource Management** 4 credits (4 lec hrs/wk)

The student will be introduced to personnel functions as they relate to the management of the human resources of an organization. Areas of concentration will include employee selection, training, and compensation.

This course may be taken 1 time for credit.

Course classification: LDC

**BA230 Business Law** 4 credits (4 lec hrs/wk)

Introduces the student to the legal environment of business. Students will explore/understand the specific legal issues in conducting business. Includes the function and operation of the courts, business crimes, torts, contract law, intellectual property, the application of the Uniform Commercial Code to business activities and recent developments in business law, such as cyberlaw and electronic commerce.

This course may be taken 1 time for credit.

Course classification: LDC

**BA233 E-Marketing** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA223 )

Learn the practical applications of diverse online marketing components such as searches and optimization, tracking, reporting, and social media. Online marketing strategies will be introduced to guide creation, promotion, and tracking of an online presence for a person, brand, or company.

This course may be taken 1 time for credit.

Course classification: LDC

**BA238 Sales** 3 credits (3 lec hrs/wk)

This course involves the role of sales as an integral part of the total marketing function. The application of selling to the behavioral science will be included with special emphasis on sales psychology, sales techniques and the fundamental principles of sales communication.

This course may be taken 1 time for credit.

Course classification: LDC

**BA239 Advertising** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA223 )

A detailed examination of the purpose, preparation, placement, and analysis of the various types of advertisements and relative merits of media such as television, internet, radio and the newspaper. Involves practice in the planning and analysis of complete advertising campaigns and their coordination with other marketing strategies.

This course may be taken 1 time for credit.

Course classification: LDC

**BA240 Fund Accounting** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA111 ) or ( BA211 )

This course presents accounting for governmental and non-profit organizations. It includes budgetary and expenditure control, as well as considerations, reporting and operations of general, special revenue, and capital projects.

This course may be taken 1 time for credit.

Course classification: LDC

**BA249 Retailing** 3 credits (3 lec hrs/wk)

A study of retail strategy, structure, and management. The course stresses the role of the supervisor in the daily operation of retail work.

This course may be taken 1 time for credit.

Course classification: LDC

**BA250 Small Business Management Entrepreneurship** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA150 )

Covers the basic principles of business entrepreneurship, including planning, organizing, innovation, staffing, and controlling, stressing those elements needed for financial achievement and personal reward. It specifically prepares the student to develop a business plan for opening a business.

This course may be taken 1 time for credit.

Course classification: LDC

**BA277 Business Ethics** 3 credits (3 lec hrs/wk)

Presents the ethical issues currently facing business. Provides a framework for identifying, analyzing, and resolving ethical dilemmas encountered in daily life.

This course may be taken 1 time for credit.

Course classification: LDC

**BA280 CWE: Business Admin** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**BA285 Human Relations in Organizations** 3 credits (3 lec hrs/wk)

This course explores interactions in organizations by examining human perceptions, communications, small group dynamics and leadership. Includes the dynamics of change, cultural diversity, substance abuse, work stress, ethics and social responsibility, career development, and the challenges of globalization.

This course may be taken 1 time for credit.

Course classification: LDC

**BA292 Entrepreneurship Capstone** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BA101 and BA150 and BA205 and BA206 and BA222 and BA239 )

Students develop an ePortfolio highlighting their program completion achievements. Throughout this course the student will be guided towards integrating their learning using a variety of activities such as reflecting, documenting, interviewing, volunteering, or taking part in other academic or community based events.

This course may be taken 1 time for credit.

Course classification: CTE

## CHEMISTRY (CHEM)

**CHEM110 Foundations of General, Organic, and Biochemistry** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH60 ) or ( MTH98 )

This is a survey of chemistry from atomic structure through biochemistry. CHEM 110 is primarily for students in pre-nursing, some allied health fields, and students who need a brief introduction to chemistry that includes organic and biochemistry. The course does not have an associated lab.

This course may be taken 1 time for credit.

Course classification: LDC

**CHEM180 Internship: Chemistry** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**CHEM221 General Chemistry I** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH95 )

The first course in the general chemistry sequence for science, engineering and health pre-professional students. Topics include: measurement, atomic structure, molecular structure, chemical reactions, stoichiometry, and thermochemistry. This course includes a laboratory component.

This course may be taken 1 time for credit.

Course classification: LDC

**CHEM222 General Chemistry II** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( CHEM221 )

The second course in the general chemistry sequence for science, engineering and health pre-professional students. Topics include: states of matter (gases, liquids, and solids), solutions, chemical kinetics, chemical equilibrium, and acid/base chemistry. This course has a laboratory component.

This course may be taken 1 time for credit.

Course classification: LDC

**CHEM223 General Chemistry III** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( CHEM222 )

The third course in the general chemistry sequence for science, engineering and health pre-professional students. Topics include: Acid / Base equilibrium, ionic equilibrium, thermodynamics, electrochemistry, nuclear chemistry, coordination chemistry, and organic chemistry. This course includes a laboratory component.

This course may be taken 1 time for credit.

Course classification: LDC

**CHEM245 Organic Chemistry I** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): (CHEM223)

The first course of a three-term sequence in organic chemistry for students interested in the sciences, chemical engineering, and professional health programs. Topics include the structure of organic molecules, organic functional groups, stereochemistry, reaction mechanisms, and spectroscopy. Includes laboratory component. May be eligible for upper division credit at a four-year institution.

This course may be taken 1 time for credit.

Course classification: LDC

**CHEM246 Organic Chemistry II** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): (CHEM245)

The second course of a three-term sequence in organic chemistry for students interested in the sciences, chemical engineering, and professional health programs. Topics include nucleophilic substitution at the carbonyl group and saturated carbons, organometallic compounds, elimination and addition reactions, and electrophilic and nucleophilic aromatic substitution. Includes a laboratory component. May be eligible for upper division credit at a four-year institution.

This course may be taken 1 time for credit.

Course classification: LDC

**CHEM247 Organic Chemistry III** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): (CHEM246)

The third course of a three-term sequence in organic chemistry for students interested in the sciences, chemical engineering, and professional health programs. Topics include the chemistry of enols and enolate ions, radical chemistry, selectivity in chemical synthesis, retrosynthetic analysis, symmetric synthesis, and biological macromolecules. Includes a laboratory component. May be eligible for upper division credit at a four-year institution.

This course may be taken 1 time for credit.

Course classification: LDC

**CHEM280 CWE: Chemistry** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

## CLINICAL LABORATORY ASSISTANT (CLA)

**CLA100 Clinical Lab Asst Skills I** 4 credits (3 lec, 2 lec lab hrs/wk)

This course is designed to prepare students to work in a clinical laboratory by giving students a thorough background of the concepts, basic responsibilities and skills that are unique to phlebotomy and by defining the role of the clinical assistant in the healthcare delivery system. This course will provide an overview of clinical laboratory work including organizational structures, regulatory standards, quality assurance practices and basic clinical laboratory procedures. Infections control principles, work place safety, laboratory terminology, behaviors for success, procedures to collect specimens, methods for preparing blood and body fluid specimens for analysis and the performance of basic tests at the clinical assistant level will be addressed. A thorough background in blood collection will be addressed, including demonstration of venipuncture and skin puncture techniques.

This course may be taken 1 time for credit.

Course classification: CTE

**CLA105 Clinical Lab Asst Skills II** 4 credits (3 lec, 2 lec lab hrs/wk)

This course introduces the basics of laboratory tests related to hematology, urinalysis and body fluids. Safety procedures, suitability of specimens, standards and controls, slide preparation, test performance, technical errors and inventory supplies will be discussed. Students will perform tests on cells in the blood and body fluids. Spinal fluid, amniotic fluid, serous fluid, synovial fluid, sputum, semen and feces will be discussed. Also covered are the principles and procedures for coagulation studies. Included will be an overview of the urinary system including abnormalities and disease. Collection, handling, storage of, analysis of physical and chemical properties, and identification of morphological elements of urine is also integrated.

This course may be taken 1 time for credit.

Course classification: CTE

**CLA110 Clinical Lab Asst Administrative** 2 credits (2 lec hrs/wk)

This course provides a foundation in the technical and non-technical aspects of clinical laboratory testing services within the current health care delivery system. Topics covered in this course include accreditation of laboratories, financial management, information systems management, management of the quality of clinical laboratory testing, the role and responsibilities of a supervisor, personnel management, leadership and communication skills, and ethics in the clinical laboratory testing environment. The emphasis of the course is on the knowledge, skills, and attitudes needed to work successfully in a health care setting at the entry-level and beyond. Laboratory billing administrative duties, vital signs, and EKG techniques will be discussed.

This course may be taken 1 time for credit.

Course classification: CTE

**CLA115 Clinical Lab Assistant Skills III** 4 credits (3 lec, 2 lec lab hrs/wk)  
This course will provide an introduction to clinical chemistry, immunology, and microbiology. An emphasis is placed on basic chemical laboratory technique, safety, electrolytes, acid-base balance, proteins, carbohydrate, lipids, enzymes, endocrine function, TDM, and toxicology. This course will also demonstrate how the immune system develops, prevents infectious diseases and interacts with other bodily systems to limit or cause tissue damage. In addition, principles of clinical microbiology with an emphasis on microorganisms and human disease.

This course may be taken 1 time for credit.

Course classification: CTE

**CLA180 Internship: CLA** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options

This course may be taken 12 times for credit.

Course classification: LDC

**CLA280A Clinical Lab Assistant/Practicum I** 3 credits (9 lab hrs/wk)

Prerequisite(s): Instructor consent

Supervised experience in a medical center laboratory that will allow students to test knowledge learned in the classroom, apply psychomotor skills and gain practical experience.

This course may be taken 1 time for credit.

Course classification: CTE

**CLA280B Clinical Lab Assistant/Practicum II** 4 credits (12 lab hrs/wk)

Prerequisite(s): Instructor consent

Supervised experience in a medical center laboratory that will allow students to test knowledge learned in the classroom, apply psychomotor skills and gain practical experience.

This course may be taken 1 time for credit.

Course classification: CTE

## COMPUTER INFORMATION SYSTEMS (CIS)

**CIS120 Concepts of Computing** 4 credits (4 lec hrs/wk)

This course introduces students to topics in critical areas of computer technology, information security, and productivity applications as they relate to the workplace. Subjects include hardware, networking, cyber security and privacy, social media, ethics, and cloud computing. Productivity applications are introduced through hands-on activities and projects using the Microsoft Office suite of applications including Word (text documentation), Excel (spreadsheets), Access (database), and PowerPoint (presentation) including examples of their use in everyday businesses.

This course may be taken 1 time for credit.

Course classification: LDC

**CIS125DB Database Applications** 3 credits (2 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( CIS120 ) or ( CS160 )

Databases are at the heart of commercial application development and their use extends to other environments where large amounts of data must be stored for efficient update, retrieval, and analysis. The purpose of this course is to provide a comprehensive introduction to the use of data management systems for applications. Topics covered include data models, query languages, transactions, data processing, and database as a service.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125DM Digital Media Applications** 3 credits (2 lec, 2 lec lab hrs/wk)

Concepts-centered course encompasses beginning and intermediate concepts of multimedia applications, punctuated by hands-on projects. Utilizing current digital tools, course covers developing bit-mapped images, vector images, animation, sound, and video. Concepts include managing media, importing and exporting between applications, converting file types, controlling file sizes, and legal and ethical issues.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125DW Computer Applications: Dreamweaver** 3 credits (3 lec hrs/wk)

This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Adobe Dreamweaver.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125ID Computer Applications: Indesign** 3 credits (3 lec hrs/wk)

Students learn to use paragraph and character styles, layout features, and panels that enable customized text and graphics. Course demonstrates how to build tables and prepare documents for delivery in print or on the Web. Students gain experience with advanced features like creating interactive documents using buttons, animations/transitions, movies, audio files, hyperlinks, and advanced page layouts.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125IL Computer Applications: Illustrator** 3 credits (3 lec hrs/wk)

This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Adobe Illustrator.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125MA Computer Applications: Maya** 3 credits (3 lec hrs/wk)

This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Autodesk Maya.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125P Presentation Applications** 1 credit (1 lec hrs/wk)

This course introduces intermediate to advanced features of presentation software for the efficient development of effective presentations. Using word processing skills and presentation theories, students will enhance their skills to develop professional looking and effective presentations complete with outline, speaker notes and audience handouts.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125PH Computer Applications: Photoshop** 3 credits (3 lec hrs/wk)

This course offers students the opportunity to learn contemporary industry software, beginning and intermediate level techniques, and related design principles. The integrated curriculum will guide students through design principles and project management techniques as they are introduced to Adobe Photoshop.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125S Spreadsheet Applications** 3 credits (2 lec, 2 lec lab hrs/wk)

Introduces the basic features of Microsoft Excel and spreadsheet concepts to design and create accurate professional worksheets for use in business, industry, and academic environments. Includes entering data; creating formulas; professional formatting. Focuses on ways to ensure accuracy including proofreading techniques and critical thinking to determine what data to include and how to present it.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS125W Word Processing Applications Microsoft** 3 credits (2 lec, 2 lec lab hrs/wk)

Computers are used to create the majority of our documents. It is impossible to avoid word-processing software in many areas of the business world. Managers, lawyers, clerks, reporters, and editors rely on this software to do their jobs. Whether you are an executive secretary or a website designer, you will need to know the ins and outs of electronic word processing. Microsoft Word is filled with features and tools designed to help you move smoothly through the task of creating professional-looking documents making your work easy.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS140U Intro to Operating Systems: Unix** 4 credits (4 lec hrs/wk)

This course introduces the student to Unix/Linux operating systems and aides in preparing students for an industry-based certification such as Comp TIA's Linux+ exam. The course includes installation and administration of a linux operating system as well as management, troubleshooting, and optimizing techniques. Students will learn the fundamental Unix/Linux command set, file security, text editors, and scripting.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS145 Hardware Installation Support** 4 credits (4 lec hrs/wk)

The course will cover computer hardware, associated peripherals, configuration, optimization, and repair. Customization and personalization of PC components are encouraged. Students will develop critical thinking and troubleshooting skills through an emphasis on hands-on experience in installing, maintaining, and troubleshooting computer hardware. Topics include mobile devices and virtualization.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS151 Network Essentials** 4 credits (4 lec hrs/wk)

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. This is the first of a two-course sequence that prepares students for the CCENT (Cisco Certified Networking Technician) certification.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS152 Network Routing & Switching Config** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS151 )

This is the second of a two-course sequence that prepares students for the CCENT (Cisco Certified Networking Technician) certification.

This course covers dynamic and static routing, VLAN management, trunking and inter-VLAN routing, access control lists (ACLs), Dynamic Host Configuration Protocol (DHCP), and Network Address Translation (NAT) in IPv4 and IPv6 environments developed by the Cisco Networking Academy.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS180 Internship: CIS** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options

This course may be taken 12 times for credit.

Course classification: LDC

**CIS185 Introduction To Cyber Security** 3 credits (2 lec, 3 lab hrs/wk)

Today's interconnected world makes everyone more susceptible to cyber-attacks. Whether you're attracted to the relativity new world of cybersecurity as a professional, or just interested in protecting yourself online and in social media, this introductory course is the answer. It explores cyber trends, threats—along with the broader topic of cybersecurity in a way that will matter to YOU. Learn how to protect your personal privacy online while gaining additional insight on the challenges companies, and governmental and educational institutions face today.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS188 Wireless Networking** 3 credits (6 lec lab hrs/wk)

Prerequisite(s): ( CIS151 )

Fundamentals of wireless communication and embedded computing devices in the Internet of Things (IoT) landscape focusing on design, planning, implementation, operation, and troubleshooting of wireless networks. Topics include technologies in networking, cloud computing, programming, electronics, microcontrollers, and security through hands-on and discovery techniques.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS225 End User Support** 4 credits (3 lec, 3 lab hrs/wk)

Effective end-user support is a key element in a successful business. Understanding needs, prioritizing demands, analyzing efficiency, managing expectations and clear communication are all part of the process. This course introduces the skills and abilities needed by IT professionals who support customers, clients, co-workers, and other categories of end users.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS279 Network Server Administration** 4 credits (3 lec, 3 lab hrs/wk)

Students are introduced to the installation, storage, and virtualization functionalities available in Windows Server. Course covers content for the Windows Server and Network Infrastructure certification exams by focusing on necessary administrative responsibilities, such as implementing server images, planning and configuring storage solutions, and monitoring virtual machine installations.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS280 CWE: Computer Information Systems** 1-12 credits (3 lab hrs/wk/ cr)

Prerequisite(s): Instructor consent

The CIS internship is designed to complement a student's formal education with practical and meaningful IT-related work experience.

It is a unique opportunity for students to clarify employment goals, develop a professional network, and learn about a particular industry. Participating businesses are expecting to receive high-quality work and active participation from the students they sponsor. Experience directly related to a student's CIS major makes the student more marketable when seeking for full-time positions after graduating.

This course may be taken 12 times for credit.

Course classification: LDC

**CIS285 Cyber Security Essentials** 4 credits (4 lec hrs/wk)

A single breach can have huge consequences for a company's ability to function, hurting the bottom line and causing disruption in the daily lives of millions of people. This is why the demand for security professionals continues to grow. Get onboard—and develop an understanding of cybercrime, security principles, technologies, and procedures used to defend networks. Then decide whether you want to pursue an entry-level networking or security role professionally. Recommended for students planning to study for the Cisco Networking and Security Certifications. Introduction to Cybersecurity or equivalent knowledge recommended.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS286 Cyber Security Operations I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( CIS140U and CIS152 and CIS285 )

Uncovering cybercrime, cyber espionage and other threats to the integrity of networks is an exciting new area that spans all industries. Learn the skills to qualify for exciting and growing opportunities in security operation centers as an analyst or incident responder. And most importantly, help make the world a safer place. This two-part course focuses on how to monitor, detect and respond to cybersecurity threats. Plus, covers cryptography, host-based security analysis, security monitoring, computer forensics, attack methods and incident reporting and handling.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS287 Cyber Security Operations II** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( CIS286 )

Uncovering cybercrime, cyber espionage and other threats to the integrity of networks is an exciting new area that spans all industries.

Learn the skills to qualify for exciting and growing opportunities in security operation centers as an analyst or incident responder. And most importantly, help make the world a safer place. This two-part course focuses on how to monitor, detect and respond to cybersecurity threats. Plus, covers cryptography, host-based security analysis, security monitoring, computer forensics, attack methods and incident reporting and handling.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS297 IT Professional Capstone** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( CIS151 and CIS279 )

This is an Associate Level Capstone Course for the Computer Information Systems concentration and should be taken in the student's last term.

The course is an in-depth, student-centered experience which requires the integration and application of what they have learned into a single project. The project could relate to the development, implementation, and/or analysis of a practical, hands-on project that has an educational and/or administrative focus. The broad goal of the project is to bring improvement to the student's current professional sphere of influence, by addressing a problem or issue.

This course may be taken 1 time for credit.

Course classification: CTE

**CIS90 Computer Basics** 2 credits (2 lec hrs/wk)

This is a course in digital literacy and is intended for the novice user with little to no previous computer experience. Course content includes Microsoft Windows basic word processing, web browser/internet searches, computer file management, and email. Students will gain exposure to an online learning management system (LMS).

This course may be taken 1 time for credit.

Course classification: DEV

## COMPUTER SCIENCE (CS)

**CS133WS Computer Language I: Web Scripting** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( CS160 ) or ( CS195 )

This programming course introduces basic concepts of client-side and server-side scripting languages emphasizing concepts of good website design and construction with the use of scripting languages. Programming focus is on modern event-driven client-server software concepts using HTML/XHTML and JavaScript and PHP. Prior HTML/XHTML knowledge is required for success.

This course may be taken 1 time for credit.

Course classification: LDC

**CS160 Computer Science Orientation** 4 credits (3 lec, 2 lec lab hrs/wk)

This course introduces students to the computer science field and profession. Students will be introduced to computer science, programming and careers, as well as societal and ethical issues surrounding the use of computers. Students will have the opportunity to participate in team problem solving.

This course may be taken 1 time for credit.

Course classification: LDC

**CS161 Introduction to Computer Science I** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( CS160 ) or ( ENGR112 )

Introduction to Computer Science is a first year computer science course designed to teach the basic concepts of computer science and object-oriented programming. Topics can include simple data types, algorithmic problem solving, conditional and iterative structures, function definition, object-oriented programming design, analysis of algorithms, programming security, and proper code documentation.

This course may be taken 1 time for credit.

Course classification: LDC

**CS162 Introduction to Computer Science II** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( CS161 )

This is a second course in a series for CIS/CS/ENGR majors and anyone seeking a rigorous introduction. The course covers algorithm development and program design using an object-oriented language such as C++ and Python. Topics include logical operators, control structures, program testing and debugging, secure coding techniques, documentation, user-defined methods and classes, parameter passing, graphical user interfaces, one and two-dimensional arrays, simple sorting and searching, graphs of functions, and string manipulation.

This course may be taken 1 time for credit.

Course classification: LDC

**CS180 Internship: Computer Science** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**CS195 Web Development I** 3 credits (2 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( CIS120 ) or ( CS160 )

This class introduces the basic elements of beginning webpage creation using a text editor and HTML/XHTML. This class will focus on web terminology basic HTML/XHTML coding to include hyperlinks anchors tables forms and frames design principles and accessibility issues. Students will explore the availability of tools for webpage creation site management validation and accessibility checks.

This course may be taken 1 time for credit.

Course classification: LDC

**CS244 Systems Analysis** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( CIS125DB ) or ( CS275 )

This course will introduce methods and modeling tools used in the systems development process. Emphasis is on structured analysis of computer information systems. Assignments will include the use of project management software CASE tools and graphic tools applied to problems similar to those found in systems in business and industry.

This course may be taken 1 time for credit.

Course classification: LDC

**CS261 Data Structures** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( CS162 )

This course covers complexity analysis, approximation methods, trees and graphs, file processing, binary search trees, hashing, and storage management.

This course may be taken 1 time for credit.

Course classification: LDC

**CS275 Database Management** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( CS133WS ) or ( CS161 ) or ( CS165 )

This course is designed to be broader than teaching specific database products. It will address database development, a concept which includes data modeling, database design, and database implementation. It will identify the entity-relationship and object data modeling techniques, and the importance of normalizing data models. Techniques of implementing these models into a relational database scheme will be presented.

This course may be taken 1 time for credit.

Course classification: LDC

**CS280 CWE: Computer Science** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge

This course may be taken 12 times for credit.

Course classification: LDC

## CRIMINAL JUSTICE (CJ)

**CJ100 Intro to Criminal Justice** 4 credits (4 lec hrs/wk)

This survey course is designed to provide students with a general introduction to the concepts, phenomenon, and issues of concern in the scientific study of crime, criminal justice agencies and criminal justice practices. It provides the student with an overview of the nature, dynamics, etiological theories of crime and criminal behavior; it also seeks to establish a rudimentary level of understanding of the major issues of concern in criminal justice and the major agencies. Special emphasis is given to current research findings in crime policy and criminal practice.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ101 Intro to Criminology** 4 credits (4 lec hrs/wk)

An interdisciplinary and introductory overview of the study of crime, criminal behavior, and the application of theory to crime prevention and offender treatment. Examines the uses and limitations of empirical research methods to the study of crime. Reviews the principal political, economic, social, cultural, psychological, biological and ideological theories of criminal behavior. Identifies the major categories of crime and discusses the relevance of crime classification. Explores the influence of criminological theory on public policy.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ102A Operations Rush Criminal Patrol** 1 credit (1 lec hrs/wk)

Operation RUSH (Recognizing Understanding Substances on the Highways) is a criminal interdiction course developed to challenge both new and experienced officers to look beyond the traffic stop and recognize criminal activity.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102C Spanish for Law Enforcement/Correct** 1-7 credits (7 lec hrs/wk/ cr)

This course places emphasis on drug terminology, field interrogations, executing arrests, and specialized Spanish vocabulary that indicates impending danger. Considerable attention is given to action scenarios and role-playing. In addition to Spanish language training, a special cross-culture component addresses the elimination of non-verbal communication barriers that will enhance officer safety and effectiveness when dealing with Spanish-speaking persons.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102D Basic SWAT** 3 credits (3 lec hrs/wk)

Basic Special Weapons And Tactics (SWAT) training provides new SWAT officers the opportunity to learn basic tactical operations theory and develop a level of proficiency in common SWAT operations. The course provides participants with a solid understanding of basic SWAT concepts and operations.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102E OLCC Academy** 14 credits (14 lec hrs/wk)

Prepare new regulatory agents with the skills, knowledge, and abilities to enforce Oregon Liquor Control Laws.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102F Advanced Roadside Impaired Driving** 1 credit

This course will train law enforcement officers to observe, identify, and articulate the signs of impairment related to drugs, alcohol or a combination of both, in order to reduce the number of impaired drivers and impaired driving related traffic collisions. This course will train other criminal justice professionals (prosecutors, toxicologists, etc.) to understand the signs of impairment related to drugs, alcohol, or a combination of both and enable them to effectively work with law enforcement in order to reduce the number of impaired drivers and impaired driving related traffic collisions.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102G School Resource Officer** 3 credits (3 lec hrs/wk)

The course will provide a working knowledge of the School Resource Officer concept and how to establish a lasting partnership with their schools.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102H CMV Level II Inspector** 3 credits (3 lec hrs/wk)

Oregon Standard Level 2 - Walk-Around Vehicle / Driver Inspection. Designed for regulatory and law enforcement personnel, this course provides the training needed to conduct a walk-around truck inspection after a routine probable cause stop. Inspectors learn what to look for and how to inspect certain component parts while in uniform.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102I RADAR/LIDAR Course** 2 credits (2 lec hrs/wk)

The purpose is to provide the knowledge and skills necessary to perform speed enforcement activities. To be able to describe the association between higher speeds, crashes, deaths, injuries, and the traffic safety benefits of effective speed management. As well as describe the principles of estimating vehicular speed, identify and discuss laws and court decisions affecting speed enforcement. Identify and discuss policies and procedures affecting speed enforcement. Demonstrate the ability to estimate the speed of vehicles and demonstrate the ability to prepare and present testimony relating to speed estimating and enforcement.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102J Oregon Dispatch Academy** 7 credits (7 lec hrs/wk)

The purpose of this class is to provide the knowledge and skills necessary to perform the duties of a 911 telecommunicator.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102K Emergency Medical Dispatch** 2 credits (2 lec hrs/wk)

This course teaches emergency call-takers how to provide lifesaving assistance in more than 40 types of medical emergencies.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ102L Fire Service Dispatch** 2 credits (2 lec hrs/wk)

This course teaches emergency call-takers how to provide lifesaving assistance in more than 40 types of medical emergencies.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ110 Intro to Policing** 4 credits (4 lec hrs/wk)

The course explores the principles and practices of policing, introduces students to the history, administration, and day-to-day work of the police in the United States. The course presents a balanced perspective, provides students with the basic framework for understanding contemporary police issues while presenting some of the myths and preconceptions commonly associated with the profession. Ethics, responsibility, liability and information on how police work interfaces with forensic science and modern technology are also presented.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ125 The American Court System** 3 credits (3 lec hrs/wk)

This broad-based course will make the students aware of the varying court systems in the United States, the functions of each court, the types of cases they handle, and what professions play a part in each system.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ130 Corrections** 4 credits (4 lec hrs/wk)

This course introduces the philosophy and history of corrections in the United States. Sentencing, correctional institutions, and community corrections are addressed along with critical issues in the field.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ140 Intro to Forensics** 3 credits (2 lec, 2 lec lab hrs/wk)

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 officers or teams as well as activities of forensic scientists in the crime lab.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ155 ROTA 1: Legal Concepts I** 3 credits (3 lec hrs/wk)

Prerequisite(s): Instructor consent

Legal Concepts I is the first module of the Reserve Officer Training Academy. The course offers a basic overview of the criminal justice system in Oregon to reserve police officers and focuses on the Oregon Criminal Code and laws police officers enforce while carrying out their responsibilities. Course content is based on material local law enforcement agency heads want their reserves to be familiar with.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ156 ROTA 2: Legal Concepts II** 3 credits (3 lec hrs/wk)

Prerequisite(s): Instructor consent

Legal Concepts II is the second module of the Reserve Officer Training Academy. The course exposes reserve officers to Oregon constitutional law concepts and the impact for failure to follow those guidelines. The course also exposes the reserve officer to potential civil liability issues and the necessity to be aware of and follow department policy. Course content is based on material local law enforcement agency heads want their reserves to be aware of.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ157 ROTA 3: Human Behavior** 3 credits (3 lec hrs/wk)

Prerequisite(s): Instructor consent

Human Behavior is the third module of the Reserve Officer Training Academy. The course focuses on a variety of topics related to the variety of incidents and people encountered in policing. Topics addressed include professionalism, domestic conflict management, cultural dynamics, communication strategies, traumatic incident awareness and dealing with mentally ill persons. Course content is based on Oregon Department of Public Safety Standards and Training (DPSST) performance objectives.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ158 ROTA 4: Patrol Procedures** 3 credits (3 lec hrs/wk)

Patrol Procedures is the fourth module of the Reserve Officer Training Academy. The course focuses on procedures and practices used in carrying out law enforcement responsibilities. Topics covered include patrol and traffic enforcement procedures, hazardous materials awareness, officer safety while responding to unknown and known incidents and contemporary issues in community policing. Course content is based on Oregon Department of Public Safety Standards and Training (DPSST) performance objectives.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ159 ROTA 5: Investigations** 3 credits (3 lec hrs/wk)

Investigations is the fifth module of the Reserve Officer Training Academy. The module focuses primarily on aspects of preliminary investigations of crimes and introduces students to death investigations. Students are also exposed to accident investigation, investigation concepts related to controlled substances, and report writing. Course content is based on Oregon Department of Public Safety Standards and Training (DPSST) performance objectives.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ160 ROTA 6: Skill Proficiency** 3 credits (1 lec, 4 lec lab hrs/wk)

Skills Proficiency is the sixth module of the Reserve Officer Training Academy. The module focuses primarily on skills needed by police officers to carry out their responsibilities related to defensive tactics and high risk vehicle stops, and on topics related to personal health. Course content is based on Oregon Department of Public Safety Standards and Training (DPSST) performance objectives.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ161 Unarmed Private Security Officer Tr** 1 credit (1 lec hrs/wk)

This course covers training required for unarmed private security providers to become certified in Oregon by the Oregon Department of Public Safety Standards and Training.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ180 Internship: Criminal Justice** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**CJ201 Juvenile Justice and Delinquency** 3 credits (3 lec hrs/wk)

This course will cover the history and philosophy of juvenile justice in America and the impact of present societal reforms on the juvenile system. An array of theoretical positions will be discussed and debated (e.g. social structure theories, social process theories, social reaction theories, etc.). The influence of the family, media, peers, socioeconomic status, drugs, gang affiliation, and schools will be covered in detail. An overview of the legal framework in which the juvenile justice system operates will highlight the differences in adult and juvenile law. Study will include the known the landmark juvenile court cases and current trends impacting juvenile court. The systemic role of the police, the juvenile court and juvenile institutions will be explored. Child abuse and neglect, status offenders, and the unique needs of young people will also be examined. Students will obtain a working knowledge of the juvenile system and issue of juvenile delinquency.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202A Taser Instruction** 1 credit

This course provides the basic operational theory and practical training to instruct users to reasonably, safely, and effectively operate TASER Conducted Electrical Weapons (CEW). This course covers the TASER X26, X26P and X2 CEWs, and will certify those who successfully complete the course as TASER instructors for a period of 2 years. This course is open to sworn law enforcement officers, military personnel, and licensed professional security employees.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ202C ALICE Instructor Training** 1 credit (1 lec hrs/wk)

ALICE (Alert, Lockdown, Inform, Counter, Evacuate) Instructor Training is For response to violent critical incidents (VCI). VCI are man-made forms of violent disaster, including: active shooter, violent intruder, mass shooting, terrorism, workplace violence, and other unexpected tragedies. This course may be taken 1 time for credit.

Course classification: CTE

**CJ202D Less Lethal Instructor Development** 3 credits (3 lec hrs/wk)

This course covers OC Aerosols, Impact Munitions, Chemical Munitions and Distraction Device Munitions. The student will acquire instructor level knowledge of Defense Technology products, both technically and tactically, along with the skills necessary to conduct in-service training. This course may be taken 1 time for credit.

Course classification: CTE

**CJ202E Crisis Intervention Team Training** 3 credits (3 lec hrs/wk)

The program is designed to resolve police encounters with people who have mental illnesses safely and, when appropriate, link them to mental health supports and services that reduce the chances for future inter actions with the criminal justice system. CIT sworn personnel will work in conjunction with trained dispatchers, Crisis Assistance advocates and mental health providers.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202F Basic Hostage Negotiations** 3 credits

This course will address the fundamental needs of a successful hostage negotiator. This course will prepare students to handle a variety of crisis situations, including hostage takers, barricaded subjects, and potential suicide victims.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202G Oregon Executive Development Instit** 3 credits (3 lec hrs/wk)

Designed for current and future public safety executives, military leaders and managers and executives from the private sector and Higher Ed with a nexus to public safety. The training emphasizes scenario-based, hands-on executive leadership through relationship building and interpersonal skills development to enhance personal and organizational performance. The underlying theme of the program is servant leadership, which is woven throughout the fabric of the curriculum.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202M Milo Range 3000 Instructor** 1 credit (1 lec hrs/wk)

This Course is to train and certify officers on the operations and use of the Range 3000/MILO simulation training system, enabling them to independently use it to provide training to police officers.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202N Field Training and Evaluation Progr** 2 credits (2 lec hrs/wk)

The Field Training & Evaluation Program (FTEP) course is designed to provide formal training and practical information for personnel who will become Field Training Officers in their police department. The course, through reference to the "San Jose Model", will consider specific teaching methods applicable to adult learners, performance evaluations using standardized rating procedures, remedial training techniques, and legal issues in recruit training, as well as ethics, leadership, communication, evaluation, retention and dismissal. The instructors for the program are seasoned law enforcement practitioners with advanced academic experiences.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202O Firearms Instructor** 3 credits

This course is designed for new and current firearms instructors. The course provides instruction on becoming an effective firearms instructor both in the classroom and on the range. The firearms instructor's role in the classroom and on the range is discussed. The development and implementation of appropriate firearms training programs is presented together with the knowledge and techniques necessary to instruct firearms to new and current officers. Both general and specific knowledge is presented on a variety of topics necessary for the firearms instructor to become effective in teaching and coaching firearms. Instruction regarding the handgun and the carbine are specifically addressed as well as a review of recent developments in firearms and related matters associated with firearms instruction.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202P Tactical Firearms Instructor** 3 credits (3 lec hrs/wk)

The course represents one of the oldest and most traditional courses necessary for firearms instructors. The course is generally regarded as the first and foremost course for all new instructors. The course is also used to re-certify current instructors. The course is designed as a teachers or coach's course with emphasis placed on teaching techniques while imparting general and specific knowledge concerning firearms. Officers attending this course should have basic firearms knowledge and above average shooting proficiency.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202Q PepperBall Instructor** 1 credit

The PepperBall® Instructor/Armorer Certification Course certifies students as PepperBall Instructors and Armorer for their individual agency, allowing the attendee to design a course in the safe and effective use of the PepperBall® system, as well as service and maintain their agency's PepperBall® Launchers. Students will develop the skills needed for the safe operation, deployment, and maintenance of the PepperBall® system. They are also given the knowledge and materials to build a custom PepperBall® course, that fits within their specific agency, and adheres to their policies and procedures.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202R Advanced Defensive Tactics instruct** 3 credits (3 lec hrs/wk)

This program is designed for those who want a complete defensive tactics system of handheld defense, groundfighting, and weapon retention with advanced techniques.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202S Basic Defensive Tactics instructor** 3 credits (3 lec hrs/wk)

This program is designed for those who want a complete defensive tactics system of handheld defense, groundfighting, and weapon retention.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202T Basic Armorers Course** 3 credits (3 lec hrs/wk)

This course gives students a broad based understanding of specific firearms, their real world applications, and the knowledge necessary to keep these weapons operational under all conditions.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ202U Drug Recognition Expert** 8 credits (7 lec, 3 lab hrs/wk)

The Drug Evaluation and Classification (DEC) Program trains law enforcement officers and other approved public safety officials as Drug Recognition Experts (DRE) through a three-phase training process. The training relies heavily on Standardized Field Sobriety Tests (SFSTs), which provide the foundation for the DEC Program. Once trained and certified, DREs become highly effective officers skilled in the detection and identification of persons impaired by alcohol and/or drugs. DREs are trained to conduct a systematic and standardized 12-step evaluation consisting of physical, mental and medical components.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ203 Crisis Intervention** 3 credits (3 lec hrs/wk)

An examination of crisis intervention techniques for the public safety and emergency response professional, covering initial intervention, communication strategies, assessment, and referral. Includes situation-specific approaches and explores the impact of intervention on the public safety and emergency response worker.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ204 Cmty Policing in a Diverse Society** 4 credits (4 lec hrs/wk)

An examination of popular innovations in policing and law enforcement with emphasis on community policing, broken windows policing, problem-oriented policing, pulling levers policing, hot spots policing, third-party policing, Compstat, and evidence-based policing. An analysis of current research and its applicability to policing and law enforcement will be performed in the context of a diverse society.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ210 Criminal Investigation of Crimes Against Property** 3 credits (3 lec hrs/wk)

Students are introduced to the elements of an effective investigation; and to the equipment, technology and procedures that facilitate investigation. Crime scene responsibilities are identified such as documentation, photographing and sketching. Specific crimes against property (theft, burglary, fraud, white-collar crime, arson, cyber crime, narcotics and terrorism) are identified as well as the methods of investigating.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ211 Basic Arson Investigations** 3 credits (3 lec hrs/wk)

This course will provide the student with a basic understanding of arson scene investigations. This includes national standards for certification and training, how first responders impact fire scene investigations and the laws relating to scene investigations.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ212 Basic Fire Investigation** 3 credits (3 lec hrs/wk)

This course will provide the student with a basic understanding of various types of fires. Topics covered include explosion dynamics; youth set fires; fatal fires; motor vehicle fires; wildland fires; and issues surrounding vacant or abandoned buildings.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ213 Interview and Interrogation Skills** 3 credits (3 lec hrs/wk)

A study of the dynamics of psychological persuasion as they are applied through the course of interviews and criminal interrogations. Examines the deliberate, refined processes and techniques of psychological persuasion with an emphasis on the practical and legal limitations.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ214 Criminal Investigations of Crimes Against Persons** 3 credits (3 lec hrs/wk)

An examination of specialized investigative issues specific to a variety of contemporary crime scenes and criminal events. Surveys the specialized investigative approaches unique to homicides and assaults, crimes against children, elder abuse, domestic violence, sex crimes and stalking.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ215 Criminal Justice Administration** 3 credits (3 lec hrs/wk)

An overview of law enforcement administration to include operational and personal management, first-line supervision, and organizational leadership. Explores the historical development of administrative theory and practice as it relates to police operations. Examines policy and procedure formulation, planning and budgeting, personnel recruitment and selection, labor issues and liability.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ220 Introduction to Criminal Law** 4 credits (4 lec hrs/wk)

A study of substantive criminal law. Examines the development and nature of common, constitutional, statutory, and case law in America. Surveys the classification, definition, and essential elements of key crimes as well as defenses to criminal liability. Includes an overview of parties to crimes, inchoate offenses, the distinctions between criminal and civil law, and the philosophy of law as a social force. Exposes students to legal research methods and the study of case law.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ226 Constitutional Law** 4 credits (4 lec hrs/wk)

A study of U.S. constitutional, statutory, and case law as it relates to procedural aspects of criminal law. Examines the rights of persons and the obligations of criminal justice practitioners with an emphasis on the role of the courts and constitutional case interpretation. Explores legal procedure and due process considerations related to the investigation of crime, processing of accused persons, and maintenance of order in American society, including provisions related to detention, arrest, search and seizure, interviews, admissions, use of force, right to counsel, and post-conviction remedies.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ230 Juvenile Justice System** 3 credits (3 lec hrs/wk)

A survey of the U.S. juvenile justice system through an examination of its structure, functions, processes, historical origins and development. Emphasizes the philosophical basis for a separate juvenile justice system. Examines the functional role of law enforcement, the courts, and corrections within that system.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ231 Forensic Photography** 2 credits (1 lec, 2 lec lab hrs/wk)

This course is designed to assist in the development of skills necessary to create and evaluate forensic photo documentation. Students will be exposed to a variety of photographic concepts and equipment. Particular emphasis is placed on the ability to evaluate a photograph for potential evidentiary value and for its accurate depiction of the object or event being photographed.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ232 Corrections Counseling and Casework** 3 credits (3 lec hrs/wk)

A survey of correctional philosophy and approaches to behavior modification through specific interviewing and counseling techniques, interpersonal communication skills, client assessment, and programmatic treatment. Explains the role of both criminological and counseling theory to correctional supervision. Describes the role of various corrections employees in the rehabilitative process.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ233 Homicide Investigation** 3 credits (3 lec hrs/wk)

This course presents a thorough overview of how to conduct a proper homicide investigation. Such an investigation will lead to the correct identification and successful prosecution of the person responsible for the homicide. Emphasis will be placed on necessary investigative components such as scene and evidence identification, preservation, and collection. Further emphasis will be placed on the proper identification of suspects and preparing the case for prosecution. The ultimate goal of the course will be to teach the homicide investigator how to develop the truth about what happened so the guilty party can be held accountable for the homicide.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ240 Police Report Writing** 3 credits (3 lec hrs/wk)

The study and application of the process of effective police report writing. Proper formal written communications formats with an emphasis on report writing techniques, including the latest electronic formats used by law enforcement agencies.

This course may be taken 1 time for credit.

Course classification: CTE

**CJ247 Ethics in Criminal Justice** 3 credits (3 lec hrs/wk)

The course will examine ethical dilemmas pertaining to the administration of criminal justice, focusing on law enforcement, the courts, corrections, research and crime policy dealing with specific ethical issues related to the criminal justice system. An introduction to ethical decision making through the perspectives of virtue ethics, formalism, and utilitarianism.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ270 Research Methods in Criminal Justice and Criminology** 3 credits (3 lec hrs/wk)

Prerequisite(s): (WR115)

This course introduces students to all phases of research including conceptualization of the research question to the interpretation of the results. Students will complete an original and independent research paper and professional oral presentation.

This course may be taken 1 time for credit.

Course classification: LDC

**CJ280 CWE: Criminal Justice** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

## CULINARY ARTS (CRT)

**CRT2000 Introduction Professional Cooking** 5 credits (2 lec, 6 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will focus on the fundamental principles of modern cooking. Students will learn about mise en place, what happens to food when it is heated, about how food is cooked with dry cooking methods, and about rules of seasoning and flavoring. The foundation of the professional kitchen is introduced through the basics of knife skills, stock, sauce and soup preparation. Theories which explain chemistry of cooking will be emphasized so students can successfully practice them in the kitchen. Emphasis will be placed on the vocabulary of cooking, procedures, ingredients, menu terms, food quality standards and equipment use.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2001 Basic Food Preparation** 6 credits (2 lec, 8 lec lab hrs/wk)

Prerequisite(s): Instructor consent

The student will focus on learning pre-preparation techniques important to professional kitchen operations - mise en place. Students will build on the principles learned in CRT2000 and move forward with moist cooking methods, the study of vegetables, starches and legumes. Also, students will be introduced to eggs, egg cookery and all breakfast fare. Coffee and tea will be discussed as well as the world of fruit salads, salad dressings and sandwiches are also introduced. Students will also be introduced to pre-preparation for set meal service and extended meal service.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2002 Intro Food and Beverage Industry** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

This course offers students an overview of the food service industry; its history, structure, organization, size, economic impact, trade journals and resources with a broad review of the various food service segments and the challenges thereof. Guest speakers representing various segments of the industry will provide an introduction to career opportunities and a view of real-world activities. Students will also be introduced and instructed in the "front of the house" environment including table service and proper service practices.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2003 Baking and Pastry for Culinary Arts** 6 credits (2 lec, 8 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will cover the fundamentals of baking and pastry, including terminology, ingredients technology, equipment, recipe conversion, measurements, storage and sanitation. Students will gain experience in using various mixing methods. Techniques in yeast and quick breads, pastry, pie, cookie and dessert making and presentation will be studied. The yeast breads are lean and rich yeast doughs. Also included are laminated doughs, meringues, cakes, icing, and creams and custards.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2004 Introduction Vineyards and Beverage** 2 credits (2 lec hrs/wk)

Prerequisite(s): Instructor consent

This course will present an introduction from a culinary perspective to wine and spirits produced by European and American vineyards. Students will study wine production, labeling and laws of the beverage industry. Emphasis is on developing a knowledge base suitable for assisting customers in choosing the "correct" wine for classical and contemporary cuisine. Students will also be exposed to beer making, liqueurs and spirits.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2005 Menu Planning and Design** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

This course will cover the basic principles of planning and design necessary to create a variety of menus for various food service operations. Menu layout, costing, and promotional approaches will be discussed in depth. Students will be required to design and create their own restaurant concept menu.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2006 Restaurant Layout and Design** 2 credits (2 lec hrs/wk)

Prerequisite(s): Instructor consent

This course will offer students an opportunity to design their own restaurant from the ground floor up based on their previous menu design project in CRT 2005. Emphasis will be on kitchen layout, dining room design, menu planning, staff allocations, exterior design, and obtaining business permits, insurance and financing. Students develop a concept proposal for presentation.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2007 Inventory Control and Purchasing** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

This course will present basic principles of costing and purchasing food, beverages, equipment, contract services, and supplies. Students will learn the necessary skills for product identification, supplier selection, ordering, receiving, storing and issuing processes as they apply to purchasing and inventory controls in the food service industry.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2012 A La Carte I** 6 credits (2 lec, 8 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course is the first part of a two-part course. A La Carte I focuses on the composition, structure, and basic quality factors of meats, game, poultry, finfish and shellfish. USDA requirements and guidelines will be introduced. IMPS and NAMPS classifications are discussed and some butchering techniques is practiced. Three- to four-course daily menus are designed around the aforementioned proteins, applying previously introduced moist and dry cooking methods. The students will gain competence in "a la minute" (prepare to order) methods for preparing these menus. Plate presentation approaches in the classical and contemporary styles will be included. Simulation of the restaurant environment in terms of timing of courses is practiced. A La Carte I focuses on poultry, beef, game, and veal.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2013 A La Carte II** 6 credits (2 lec, 8 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course is the second part of a two-part course. A La Carte II focuses on the composition, structure, and basic quality factors of meats, game, poultry, finfish and shellfish. USDA requirements and guidelines are introduced. IMPS and NAMPS classifications are discussed and some butchering is practiced. Three- to four-course daily menus are built around the aforementioned proteins, applying previously introduced moist and dry cooking methods. The students will gain competence in "a la minute" (prepare to order) methods for preparing these menus. Plate presentation approaches in the classical and contemporary styles will be included. Simulation of restaurant environment, in terms of timing of courses, is created. A La Carte II focuses on pork, lamb, finfish and shellfish.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2015 Sanitation and Safety for Managers** 3 credits (3 lec hrs/wk)

Prerequisite(s): Instructor consent

This course develops an understanding of the basic principles of sanitation and safety and enables students to apply them in the foodservice operations. It reinforces personal hygiene habits and food handling practices that protects the health of the consumer. This course is based on the Educational Foundation of the National Restaurant Association's ServSafe training and certification coursework and includes the ServSafe certification examination and standard first aid training, which meets the standard requirements of OSHA, yet exceeds with CPR (Cardiopulmonary Resuscitation). Safety in the workplace is also covered.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2016 Culinary Nutrition** 3 credits (3 lec hrs/wk)

Prerequisite(s): Instructor consent

This course focuses on nutrition as it applies to food preparation, menu analysis, trends, and recipe alternatives for the culinary arts. Students will look at their own diets and learn how food affects the human body, both positively and negatively. Students will prepare nutritional menus within the context of kitchen and restaurant operation.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2017 Restaurant Management Supervision** 3 credits (3 lec hrs/wk)

Prerequisite(s): Instructor consent

This course will focus on the necessary skills for effective restaurant management and supervision by preparing students to transition from the employee role to supervisory role. Students will evaluate styles of leadership and develop skills in human relations and personnel management.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2018 Culinary Arts Career Planning** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

This course will focus on the job market as it pertains to the culinary and baking and pastry world. Instruction will include current industry standards necessary for success in today's culinary arts job market. Students will review career tracts and opportunities in the culinary arts industry. Interview skills and portfolio development will be included.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2024 Frozen Desserts** 3 credits (6 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will cover the origin and history of frozen desserts, as well as the various churning methods for making ice cream, gelato and sorbets. Still frozen methods will also be discussed. Students will learn to prepare a variety of ice creams, gelatos, sorbets, frozen souffles, garnite and parfais.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2026 Dessert Menu Development** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

The dessert crowns the dinner. To create a fine dessert, one has to combine the skills of a confectioner, a decorator, a painter, and architect, an ice cream maker, a sculptor and a florist. Students will learn to develop dessert menus for the food services industry using a variety of techniques to add visual appeal to plated desserts. This course will be an eleven-week project where students will work towards a goal of developing a complete dessert menu.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2027 Introduction to Sugar** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will take the student through the history of sugar, manufacturing of sugar and making and usage of casting sugar, pouring sugar, spun sugar and piped sugar. Students will also learn how to make and use marzipan for decorations, fillings and confections. Students will gain a functioning knowledge of how to make, form and present pastillage.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2028 Basic Chocolate** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will take the student through the history of chocolate, from the growing of cacao to the manufacturing of chocolate. Students will also learn how to temper chocolate and prepare for decorations, fillings and confections. Students will gain a functioning knowledge of how to make, form and present chocolate modeling paste.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2030 Bakery Design** 3 credits (6 lec lab hrs/wk)

Prerequisite(s): Instructor consent

Theory and methodology behind designing and building a bakery, from location and equipment to menu options and staffing are covered. Students spend lab time designing and creating a bakery, and will bring their concept to life for one hour for the course final.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2031 Bakery and Pastry Fundamentals** 6 credits (1 lec, 10 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course covers baking and pastry fundamentals, including the history, terminology, ingredients, technology, equipment, storage and sanitation in the bakeshop. Students gain experience in using various mixing, holding and baking methods as well as international techniques to create an assortment of lean yeast doughs, quick breads, donuts, crisps, cobblers, cookies, pies and tarts.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2032 Baking and Pastry Fundamentals II** 7 credits (1 lec, 12 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course covers more advanced bakery techniques. Students will learn the production methods for American and European artisan breads as well as breads using natural yeast, and decorative breads using some basic sculpting techniques. European style pastries and tarts as well as a variety of international cookies will be covered. This course includes human digestion and how to create nutritional and allergy conscious options in the bakery. Recipes that are sugar free, reduced sugar, gluten free, lactose free and reduced fat baking will be covered in this course.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2033 Classic and Contemporary Cakes** 4 credits (8 lec lab hrs/wk)

Prerequisite(s): Instructor consent

From classic genoise rolades to contemporary fondant covered topsy-turvy cakes, this course covers all aspects of cake baking and building. Students learn the basics of cake making and will develop a complete understanding of cake structure and development and how to alter formulas. A variety decorative icings, coatings and fillings are covered and several styles of cakes will be produced. Piping skills are developed and enhanced. Cakes included are the American birthday cake, French wedding cake, Jaconde covered mousse cake, torten, gateau and charlottes, and specialty/celebration cakes.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2034 Advanced Sugar and Chocolate** 2 credits (4 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course takes the student to a higher level of sugar and chocolate skills such as blown sugar, sugar presentation pieces, chocolate display pieces, molded chocolates, bon bons, truffles, nougatine, crystalline and non-crystalline, and gelee based candies. Students design and execute showpieces to display cakes, candies and other confections for their capstone project. Topics include, velvetizing with chocolate, making silicon chocolate and sugar molds, building sugar and chocolate showpieces to include blown sugar, molded chocolate and other advanced sugar products.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2037 Plated Desserts** 6 credits (3 lec, 6 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This class will focus on plated restaurant-style desserts to include hot desserts such as cobblers, buckles, custards, soufflés and bread pudding. Cold and frozen desserts will include sorbets, gelatos, espuma, semifreddos, and bombes. Individual cakes, tortes and tartlets will also be presented. Intermezzos course and pallet refreshers will include granita and the cheese course will introduce the student to appropriate after dinner cheeses with accompaniments to include crackers, candied nuts and gastriques. Plating design and development with a focus on fine dining along with mingardaise concepts will also be included in this course. Dessert wines and spirits will also be incorporated into this class. This course may be taken 1 time for credit.

Course classification: CTE

**CRT2038 Applied Visual Principles** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

Foundation in visual perception and composition as applied to culinary arts and baking and pastry arts. Study of visual principles to understand how to present and create artistically pleasing dishes/foods. The seven principles presented are contrast, emphasis, balance, unity, pattern, movement, and rhythm.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2039 Prof Pres for the Culinary Wrkfr** 3 credits (3 lec hrs/wk)

Prerequisite(s): Instructor consent

Focuses on effective professional workplace presentations that connect with audiences, direct and hold attention, and promote understanding utilizing multiple visual and oral skills of rhetoric.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2040 Culinary Arts for Baking and Pastry** 6 credits (2 lec, 8 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course is designed specifically for students specializing in baking and pastry arts. Students are introduced to the philosophy of the hospitality industry through its history, growth and development up to present trends. Students are instructed in knife skills, hand tool and equipment operation, emphasizing safety. Basic stock, soup and sauce making are included. Cooking techniques and methodology are demonstrated and practiced through the use of herbs and spices, meats, seafood and poultry. Also covered are fruits, vegetables, starches, salads and basic dressings, sandwiches and breakfast products.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2042 Wedding Cakes** 3 credits (3 lec, 4 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will focus on the successful execution of modern day wedding cakes. Students will learn a brief history, but focus mainly on today's styles and trends. Set-up and marketing strategies will be covered in this course in addition to the construction of wedding cakes.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2045 Retail Baking** 7 credits (4 lec, 6 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will focus on the development of a "dream" retail bakery concept to include research and development of products, production of an assortment of baked goods to include savory as well as sweet items, breakfast pastries to include Viennoiserie, tea sandwiches and other savory and sweet items. Students will be responsible for running a model bakery. Students will be introduced to beverage service including tea, coffee, chocolate, and other hot and cold beverages. Wine, beer and spirits will also be introduced. Students will develop the skills to prepare hot beverages as well as an assortment of sweet and savory accompaniments. Students will also learn basic service skills to include bakery counter service, buffets and banquets.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2050 Regional and International Cuisine** 6 credits (2 lec, 8 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will focus on various International and American regional cuisines. Students will develop a working understanding of local products, traditional ethnic recipes and kitchen tools indigenous to various regional cuisines. The course will include the cuisines from national and international regions including New England, Louisiana, New Mexico, Florida, France, Italy and Scandinavia. Also included are the cuisines of China, Japan, Vietnam, Thailand, Greece, Spain and Portugal, Germany, Morocco, India, Mexico, The American Southwest, New Orleans, Cajun and Creole, and the Midwest Heartland.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2060 Garde Manger** 8 credits (3 lec, 10 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course will cover the preparation and artistic presentation of cold cuisine. While using garde manger small tools, students will develop skills in the fundamentals of preparing hot and cold appetizers and hors d'oeuvres, canapes, lunch and dinner salads, dressings, terrines, galantines, pates and charcuterie, vegetable and fruit carving, garnishes, hot and cold sandwiches, and food decoration. Basics of cold food pantry organization and sanitizing techniques will be studied. Students will be introduced to the artistic production and presentation of buffet arrangements.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2069 Professional Cooking Foundations** 3 credits (1 lec, 4 lec lab hrs/wk)

A hands on course presenting professional skills, techniques and methods of cooking that are utilized in the professional kitchen, beginning with sanitation and safety. Knife skills will be demonstrated and practiced throughout the course. The student will explore making stocks, soups and sauces. Each student will study vegetable, starch and protein cookery, using moist and dry heat cooking methodology. The student will, most importantly, explore taste sensations and flavor profiles. They will learn how to make their food taste delicious. Students will also be responsible for cleaning the kitchen in a professional manner.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT2070 Culinary of The Oregon Coast** 3 credits (3 lec hrs/wk)

This Course will focus on the functional principles of the foods and the lifestyle of the Oregon Coast. Exploring the bounty of the coastline, working with fresh Seafood to wild mushrooms and more. Re-create tribal style meals and fun beach crab dinners

This course may be taken 1 time for credit.

Course classification: CTE

**CRT280B1 CWE: Baking and Pastry Arts** 6 credits (18 lab hrs/wk)

Prerequisite(s): Instructor consent

This course offers students workplace experience in a variety of supervised settings that are applicable to the development of a student as a professional in the food service industry. Students will have the opportunity to work in different areas under the direction of chefs and food/beverage managers. Externships will be progressive training experiences structured to fit the background and career goals of each individual student.

This course may be taken 2 times for credit.

Course classification: CTE

**CRT280B2 CWE: Baking and Pastry Arts** 12 credits (36 lab hrs/wk)

Prerequisite(s): Instructor consent

This course offers students workplace experience in a variety of supervised settings that are applicable to the development of a student as a professional in the food service industry. Students will have the opportunity to work in different areas under the direction of chefs and food/beverage managers. Externships will be progressive training experiences structured to fit the background and career goals of each individual student.

This course may be taken 1 time for credit.

Course classification: CTE

**CRT280C1 CWE: Culinary Arts** 6 credits (18 lab hrs/wk)

Prerequisite(s): Instructor consent

This course offers students workplace experience in a variety of supervised settings that are applicable to the development of a student as a professional in the food service industry. Students will have the opportunity to work in different areas under the direction of chefs and food/beverage managers. Externships will be progressive training experiences structured to fit the background and career goals of each individual student.

This course may be taken 2 times for credit.

Course classification: CTE

**CRT280C2 CWE: Culinary Arts** 12 credits (36 lab hrs/wk)

Prerequisite(s): Instructor consent

This course offers students workplace experience in a variety of supervised settings that are applicable to the development of a student as a professional in the food service industry. Students will have the opportunity to work in different areas under the direction of chefs and food/beverage managers. Externships will be progressive training experiences structured to fit the background and career goals of each individual student.

This course may be taken 1 time for credit.

Course classification: CTE

## DENTAL (DEN)

**DEN101 Dental Assisting I** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH20 )

Dental Assisting I introduces the basic concepts of preventative dentistry and the dental assistant's role including dental terminology, infection control, basic microbiology, pharmacology, nutrition, oral and facial anatomy, tooth numbering, names of tooth surfaces, dental charting and oral assessment, the use of dental instruments and the various procedures used by dentists, dental asepsis techniques, patient education, legal and ethical issues, the collection of clinical data, and patient psychology as it relates to anxiety and pain management. Students are introduced to the members of a dental team, current professional trends and the various procedures within a dental office, including receptionist duties, bookkeeping, and chairside dental assisting. Lab provides hands-on clinical instruction of the lecture material presented and the material covered in this course.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN102 Infection Control** 2 credits (2 lec hrs/wk)

Prerequisite(s): ( MTH20 )

Corequisite(s): ( DEN103 )

This class prepares the student for DANB's (Dental Assisting National Board) ICE (Infection Control Exam). The class is designed to prepare students in: Patient and dental healthcare worker education, standard/universal precautions and prevention of disease transmission, prevention of cross contamination, maintaining aseptic conditions, performing sterilization procedures, environmental asepsis, and occupational safety.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN103 Introduction to Dental Assisting Seminar** 1 credit (1 lec hrs/wk)

Prerequisite(s): ( MTH20 )

Corequisite(s): ( DEN102 )

This course provides an extensive overview of office responsibilities, and work ethics. It prepares students for the challenge of their multiple roles in the dental office including: Guest, intern, student-worker, administrative assistant, chairside assistant and housekeeping worker. Students will review and discuss the expectations and protocols for their upcoming practicum classes including, but not limited to, the stages of an internship, the weekly required paperwork, work ethics, industry safety standards and strategies for meeting their learning objectives.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN104 Dental & Medical Emergency Mngmt** 2 credits (2 lec hrs/wk)

Prerequisite(s): ( DEN101 and DEN102 )

This class covers routine preparedness for dental team members; the dental assistant's role in emergency care; managing a dental office emergency kit; foreign body airway obstruction; the causes, signs, and treatment of medical emergencies; and specific dental emergencies. This course is designed to satisfy the American Dental Association's requirement that certified dental assistants have in-depth education in managing dental and medical emergencies.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN105 Dental Materials** 2 credits (2 lec hrs/wk)

Prerequisite(s): ( DEN101 and DEN102 )

Corequisite(s): ( DEN104 and DEN107 and DEN110 )

This class covers impression materials, model and die materials, fabrication of dental trays, preventive dental materials, esthetic and restorative dental materials, amalgam, dental cements, waxes, and temporary restorative materials. The class is designed to satisfy the American Dental Association's requirement that certified dental assistants have in-depth education in dental materials.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN107 Practicum in Dental Assisting I** 4 credits (12 lab hrs/wk)

Prerequisite(s): ( DEN101 and DEN102 and DEN103 )

Corequisite(s): ( DEN104 and DEN105 and DEN110 )

This course provides students with hands-on clinical experience. Students work an average of 13-15 hours per week in a host site as part of the dental team. Student placement duties will be assigned according to the student's skill level and the work needs of the host site.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN109 Dental Assisting II** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( DEN101 and DEN102 and DEN103 )

This course builds on the material learned in Dental Assisting I, specifically reinforcing oral and facial anatomy, tooth numbering, names of tooth surfaces, dental charting and oral assessment. The course will provide an in-depth view of specific, practical dental assisting skills in dental specialties. Topics covered in class will include the major dental specialties: oral surgery, endodontics, periodontics, prosthodontics, and orthodontics. Anatomical content covered will include the muscles, nerves, glands, and bones of the head and neck; the structures and tissues that make-up the oral cavity; and the development, tissues, morphology, and functions of the teeth. The class is designed to satisfy the American Dental Association's requirement that certified dental assistants have in-depth education in the anatomy of the head, skull, and oral cavity; and tooth morphology. Lab provides hands-on clinical instruction of the lecture material presented.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN110 Dental Radiology** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): Instructor consent

This class prepares the student for the Dental Assisting National Board (DANB) Radiation Health & Safety (RHS) exam - one of two exams required for the Certificate in Radiologic Proficiency from the State of Oregon, which is required to legally expose radiographs. To become fully certified, students must also pass the Oregon Clinical Radiologic Proficiency Exam administered by DANB. This class is designed to prepare students in the following sections: Radiation safety for the patient, radiation safety for the operator, exposing and evaluating radiographs, processing films, mounting and labeling radiographs, and techniques used in performing a full mouth radiographic exam. Lab provides hands-on clinical instruction of the lecture material presented. Students demonstrate the capabilities and understanding through clinical evaluation in a lab setting.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN111 Practicum in Dental Assisting II** 4 credits (12 lab hrs/wk)

Prerequisite(s): ( DEN107 )

Corequisite(s): ( DEN109 )

Practicum in Dental Assisting II provides student hands-on clinical experience. Students work an average of 13-15 hours per week in a host site as part of the dental team. Student placement duties will be assigned according to the student's skill level and the work needs of the host site.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN112 Chairside Assisting** 2 credits (2 lec hrs/wk)

Prerequisite(s): ( DEN111 )

This class prepares the student for the National Entry Level Dental Assisting (NELDA) exam administered by the Dental Assisting National Board. The class is designed to prepare students in the following sections: Collection and recording of clinical data; chairside dental procedures; oral anatomy; chairside dental materials (preparation, manipulation, application); lab materials and procedures; patient education and oral health management; infection control procedures; occupational safety; legal issues; prevention and management of emergencies; office management procedures, anatomy and physiology related to dentistry.

This course may be taken 1 time for credit.

Course classification: CTE

**DEN113 Expanded Functions Dental Assistant** 2 credits (4 lec lab hrs/wk)

Prerequisite(s): ( DEN111 )

This class prepares the student for the Oregon Board of Dentistry written exam in expanded functions for the chairside dental assistant (EFDA). Expanded functions are determined by the Oregon Board of Dentistry and may change without prior notice. The exam is administered by the Dental Assisting National Board. Students will still need a NELDA certificate before becoming EFDA certified. (General Dental Assisting EFDA Certification: Pathway III). The class is designed to prepare students in the following sections: Placing matrix bands; polishing amalgam fillings; cement removal; taking impressions; coronal polishing; fabricating temporary crowns and tooth whitening. Lab provides hands-on clinical instruction of the lecture material presented and material covered in the course. Students demonstrate their capabilities and understanding through clinical evaluation in a lab setting.

This course may be taken 1 time for credit.

Course classification: CTE

**DDEN114 Dental Admin & Legal and Ethical** 4 credits (2 lec, 3 lab, 2 lec lab hrs/wk)

Dental Administration & Legal and Ethical Issues in Dentistry exposes the student to variety of Administrative Duties, and legal and ethical dilemmas, helping students become more prudent, confident, and competent dental professionals. Classroom content includes: the legal system, the legal rights that define relationships between individuals, quality assurance, office protocols and patient records, and legal issues that affect employment. Students will develop administrative communication skills, written correspondence skills, and patient relations. The students will develop team communication skills, and keep accurate patient clinical records. Students will become familiar with scheduling and recall systems, and how insurance claims are processed. Students will understand the legal and proper ways to establish financial arrangements within accounts receivable and payable, and collections procedures. This course is designed to satisfy the American Dental Association's requirements.

This course may be taken 1 time for credit.

Course classification: CTE

**DDEN180 Internship: Dental Assisting** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**DDEN280 CWE: Dental Assisting** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

## DIGITAL DESIGN (DD)

**DD160 Digital Design Orientation** 3 credits (3 lec hrs/wk)

This course introduces students to the field of digital design, including: core concepts & terminology, specializations, workplace environments, and careers. Students will explore societal and ethical issues surrounding digital design, including copyright law, and strategies for job exploration and professional portfolio development. The course will prepare students for reflective learning and assist them in aligning their personal and career goals with the appropriate course of study.

This course may be taken 1 time for credit.

Course classification: CTE

**DD235PH Digital Design App: Photoshop** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( CIS125PH )

This course offers students the opportunity to apply contemporary industry software and design principles to the planning, design, and development of digital design projects. Students will independently research and employ advanced solutions to meet design project challenges and refine their software skills in preparation for associated industry certification exams.

This course may be taken 1 time for credit.

Course classification: CTE

**DD250 Projects in Digital Media** 3 credits (2 lec, 3 lab hrs/wk)

Prerequisite(s): ( CIS125DW and DD235PH )

This course explores contemporary digital design topics in an advanced studio environment. Through the creation of large-scale projects, students will investigate the design process, including: Analysis, research, planning, designing, building, testing, and publishing work. Students will have the opportunity to develop portfolio-quality projects in their chosen discipline and gain further insight into industry standards and techniques.

This course may be taken 1 time for credit.

Course classification: LDC

**DD280 CWE: Digital Design** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow student to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**DD297 Digital Design Capstone** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( CIS195 and DD250 )

In this course students will assemble a design portfolio reflecting their focus area and career objectives. Students will gain experience evaluating design work, selecting appropriate content for a professional portfolio, and preparing it for presentation. Throughout this project-based course, students will engage in a range of capstone activities, including: job research, mapping educational pathways, and the analysis of design tools & technologies.

This course may be taken 1 time for credit.

Course classification: CTE

## DRAFTING (DRFT)

**DRFT100 Computer Assisted Drafting Survey** 3 credits (3 lec hrs/wk)

Introduction to computer assisted drafting (CAD) software and its typical uses in creating 2-D drawings. Instruction will include system requirements, menu structure, drawing setup, drawing aids, basic drawing, editing, display and dimensioning. Also using blocks, graphic patterns and printing commands. AutoCAD software is utilized to produce 2-D schematic and mechanical drawings.

This course may be taken 1 time for credit.

Course classification: CTE

**DRFT105 Blueprint Reading** 3 credits (3 lec hrs/wk)

Presents instruction and skill development in blueprint reading and interpretation. Emphasis is placed on fundamentals of blueprint reading including understanding basic lines, views, dimensions, tolerances, symbols, machine call-outs, and notations. Emphasis is on blueprints as used in the welding trades with considerable time learning how to properly interpret American Welding Society (AWS) welding symbols.

This course may be taken 1 time for credit.

Course classification: CTE

**DRFT110 Computer Assisted Drafting I** 3 credits (3 lec hrs/wk)

Introduction to computer aided drafting (CAD) using AutoCADD software and hardware components comprising a typical CAD workstation.

Starting the computer and software, workstation adjustment, drawing beginning and set-up, basic drawing commands and organization, editing and display, dimensioning, printing and plotting, and using the template and display commands to create conceptual design and construction documents.

This course may be taken 1 time for credit.

Course classification: CTE

**DRFT111 Computer Assisted Drafting II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( DRFT110 )

Continued study of computer aided drafting (CAD) using AutoCADD software and hardware components comprising a typical CAD workstation. Using advanced linework, assignment to layers, and advanced dimensioning. Becoming fluent with options, shortcuts, CUI, the Design Center and Express Tools. Developing Advanced Design concepts, and using File Management Tools to store and share documents. Importing and exporting files and drawings, and the utilization of External References (XREFs) in expanding the abilities for complex documents. Using the tools, templates and commands to create, edit and share computer aided drafting documents that are the standard of the design and construction document industry.

This course may be taken 1 time for credit.

Course classification: CTE

**DRFT112 Computer Assisted Drafting III** 3 credits (3 lec hrs/wk)

This course demonstrates the use of the computer to create 3D Solid Models using the SolidWorks Computer Aided Drafting (CAD) system. Solid modeling software will be used to draw, dimension, define, and interface separate solid pieces that will be joined into a working machine model. The solid models will be used to generate 2D and 3D fabrication documents with exploded assemblies and presentation files that would be used in the forging and machining of machine parts. The computers at the CAD workstations with pre-loaded software will be utilized for this class.

This course may be taken 1 time for credit.

Course classification: CTE

**DRFT180 Internship: Drafting** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge

This course may be taken 12 times for credit.

Course classification: LDC

**DRFT280 CWE: Drafting** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

# EARLY CHILDHOOD EDUCATION (ECE)

**ECE102 Theory and Practice II Pre-K** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( ECE209 and ECE209B )

Corequisite(s): ( ECE102B )

The third in a sequence of courses with a practicum co-requisite designed to assist students gaining experience working with young children in a laboratory or qualified preschool setting. The various roles of early childhood educators, assisting with daily activities in a preschool program, observation/assessment, and guidance techniques are included in the course curriculum. The intellectual and emotional developmental domains are emphasized. Lesson plans are developed and implemented with small groups.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE102B Practicum III Pre-K** 2 credits

Prerequisite(s): ( ECE209 and ECE209B )

Corequisite(s): ( ECE102 )

Third in a sequence of Practicum courses. Taken concurrently with ECE 102 this practicum is designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. The various roles of the early childhood educator, assisting with various daily activities in a preschool program, observation/assessment, and guidance techniques are included in the course curriculum. The intellectual and emotional developmental domains are emphasized. Lessons plans are developed and implemented with small groups.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE150 Introduction and Observation in ECE** 4 credits (4 lec hrs/wk)

A beginning course focusing on the theoretical foundations, history and basic concepts of early childhood education. The value and usage of objective observations as a teaching tool are emphasized. This course focuses on an introduction to the education of infant-toddler, preschoolers, and children in Kindergarten through third grade. This course requires an Oregon State background check.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE151 Guidance and Classroom Management** 3 credits (3 lec hrs/wk)

This course introduces students to the principles of positive guidance, emphasizes the role of the teacher, and the use of direct and indirect techniques for individual and group guidance and management. Topics include observing children, managing behavior, building prosocial behaviors, and helping young children develop in the social and emotional domains.

This course may be taken 1 time for credit.

Course classification: LDC

**ECE152 Creative Activities in ECE** 3 credits (3 lec hrs/wk)

A practical curriculum course focusing on understanding and implementing a developmental approach to creative activities. Emphasis is on integrating curriculum across the teaching disciplines. Specifically, this course teaches students how to develop creative art, music, drama, and movement curriculum for infants, toddlers, and preschool children.

This course may be taken 1 time for credit.

Course classification: LDC

**ECE154 Children's Language and Lit Dev** 3 credits (3 lec hrs/wk)  
Students will learn how young children develop literacy and language skills. Students will explore how to develop strategies for teaching language acquisition and literacy skill development at each developmental stage through the four interrelated areas of speaking, listening, writing, and reading. Quality children's literature, ways to implement its use, and ways to evaluate its appropriateness for young children are discussed.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ECE161 Theory and Practice I Inf/Tod** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( ECE263 )  
Corequisite(s): ( ECE161B )  
The second in a sequence of courses with a practicum co-requisite designed to assist students in gaining experience working with very young children in a laboratory or qualified infant/toddler setting. The various roles of the early childhood educator, assisting with various daily activities in an infant/toddler program, observation/assessment, and guidance techniques are included in the course curriculum. The physical and social domains are emphasized.  
This course may be taken 1 time for credit.  
Course classification: CTE

**ECE161B Practicum II Inf/Tod** 2 credits (6 lab hrs/wk)  
Prerequisite(s): Instructor consent  
Corequisite(s): ( ECE161 )  
Second in a sequence of Practicum courses. Taken concurrently with ECE 161 this practicum is designed to assist students in gaining experience working with infants and/or toddlers in a laboratory or qualified preschool setting. The various roles of the early childhood educator, assisting with various daily activities in a program, observation/assessment, and guidance techniques are included in the course curriculum. The physical and social domains are emphasized.  
This course may be taken 1 time for credit.  
Course classification: CTE

**ECE162 Theory and Practice II Inf/Tod** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( ECE161 and ECE161B )  
Corequisite(s): ( ECE162B )  
The third in a sequence of courses with a practicum co-requisite designed to assist students gaining experience working with very young children in a laboratory or qualified infant/toddler setting. The various roles of early childhood educators, assisting with daily activities in an infant/toddler program, observation/assessment, and guidance techniques are included in the course curriculum. The intellectual and emotional developmental domains are emphasized. Lessons plans are developed and implemented with small groups.  
This course may be taken 1 time for credit.  
Course classification: CTE

**ECE162B Practicum III Inf/Tod** 2 credits (6 lab hrs/wk)  
Prerequisite(s): ( ECE161 and ECE161B )  
Corequisite(s): ( ECE162 )  
Second in a sequence of Practicum courses. Taken concurrently with ECE 209 this practicum is designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. The various roles of the early childhood educator, assisting with various daily activities in a preschool program, observation/assessment, and guidance techniques are included in the course curriculum. The physical and social domains are emphasized.  
This course may be taken 1 time for credit.  
Course classification: CTE

**ECE163 Environments and Guidance in ECE** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( ECE150 )  
Corequisite(s): ( ECE163B )  
The first in a sequence of courses with a practicum co-requisite designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. Students gain experience identifying developmentally appropriate learning environments, completing observations and assessments, identifying and practicing guidance strategies, planning, and evaluating environments appropriate for the young child.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ECE163B Practicum I ECE** 2 credits (6 lab hrs/wk)  
Prerequisite(s): ( ECE150 )  
Corequisite(s): ( ECE163 )  
First in a sequence of Practicum courses. Taken concurrently with ECE 163 this practicum is designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. Students gain experience identifying developmentally appropriate learning environments, completing observations and assessments, identifying and practicing guidance strategies, planning and evaluating environments appropriate for the young child.  
This course may be taken 1 time for credit.  
Course classification: CTE

**ECE170 Health and Safety Early Childhood** 3 credits (3 lec hrs/wk)  
This course covers health/safety practices recommended for the early childhood field and includes information on common diseases, health, and nutrition. Completion of First Aid & CPR for Infants and Children, and Reporting Child Abuse and Neglect Certification are required to pass this course.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ECE180 Internship: Early Childhood Ed** 1-9 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to explore early childhood education in workplace environments and career options. This course may be taken 9 times for credit.  
Course classification: LDC

**ECE180HV Internship: ECE Home Visitor** 1-3 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to explore early childhood education home visiting workplace environments and career options.  
This course may be taken 9 times for credit.  
Course classification: LDC

**ECE209 Theory and Practice I Pre-K** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( ECE163 and ECE163B )

Corequisite(s): ( ECE209B )

The second in a sequence of courses with a practicum co-requisite designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. The various roles of the early childhood educator, assisting with various daily activities in a preschool program, observation/assessment, and guidance techniques are included in the course curriculum. The physical and social developmental domains are emphasized.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE209B Practicum II Pre-K** 2 credits (6 lab hrs/wk)

Prerequisite(s): ( ECE163 and ECE163B )

Corequisite(s): ( ECE209 )

Second in a sequence of Practicum courses. Taken concurrently with ECE 209 this practicum is designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. The various roles of the early childhood educator, assisting with various daily activities in a preschool program, observation/assessment, and guidance techniques are included in the course curriculum. The physical and social domains are emphasized.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE240 Lesson and Curriculum Planning** 3 credits (3 lec hrs/wk)

Students will be introduced to various approaches to planning early childhood curriculum to meet the whole child's development. The course will review existing curriculum models, and students will develop theme based curriculum, units, lesson plans, and assessments in math, science, and social studies for young children.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE261 Student Teaching Pre-K** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( ECE102 )

Corequisite(s): ( ECE261B )

The fourth and final in a sequence of courses with a practicum co-requisite designed to assist students gaining experience working with young children in a laboratory or qualified preschool setting. Continued development of knowledge and skills in curriculum planning and implementation, observation/assessment if children in all four domains, and working with children and families are included. Self-assessment and evaluation are a primary focus.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE261B Practicum IV Pre-K** 3 credits (9 lab hrs/wk)

Corequisite(s): ( ECE261 )

Final in a sequence of Practicum courses. Taken concurrently with ECE 261 this practicum is designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. Continued development of knowledge and skills in curriculum planning and implementation, observation/assessment if children in all four domains, and working with children and families are included. Self-assessment and evaluation are a primary focus.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE262 Student Teaching Infants/Toddlers** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( ECE162 )

Corequisite(s): ( ECE262B )

The fourth and final in a sequence of courses with a practicum co-requisite designed to assist students gaining experience working with young children in a laboratory or qualified infant/toddler setting. Continued development of knowledge and skills in curriculum planning and implementation, observation/assessment of children in all four domains, and working with children and families are included. Self-assessment and evaluation are a primary focus.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE262B Practicum IV Infants/Toddlers** 3 credits (9 lab hrs/wk)

Prerequisite(s): ( ECE150 and ECE151 )

The fourth and final practicum designed to assist students gaining experience working with young children in a laboratory or qualified Infant/Toddler setting. Continued development of knowledge and skills in curriculum planning and implementation, observation/assessment if children in all four domains, and working with children and families are included. Self-assessment and evaluation are a primary focus included, along with a strong focus on higher level guidance techniques, working with families, and leading teaching teams. This course requires an Oregon State background check.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE263 Env and Guidance in ECE Inf/Todd** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( ECE150 )

Corequisite(s): ( ECE263B )

The first in a sequence of courses with a practicum co-requisite designed to assist students in gaining experience working with young children in a laboratory or qualified infant/toddler setting. Students gain experience identifying developmentally appropriate learning environments, completing observations and assessments, identifying and practicing guidance strategies. planning, and evaluating environments appropriate for the very young child.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE263B Practicum I Infant/Toddler** 2 credits (6 lab hrs/wk)

Corequisite(s): ( ECE263 )

First in a sequence of Practicum courses. Taken concurrently with ECE 263 this practicum is designed to assist students in gaining experience working with young children in a laboratory or qualified preschool setting. Students gain experience identifying developmentally appropriate learning environments, completing observations and assessments, identifying and practicing guidance strategies, planning and evaluating environments appropriate for the young child.

This course may be taken 1 time for credit.

Course classification: CTE

**ECE280 CWE: Early Childhood Ed** 1-9 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore early childhood education in workplace environments and career options. This course may be taken 9 times for credit.

Course classification: LDC

**ECE280HV CWE: ECE Home Visitor** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow student to explore early childhood education home visiting workplace environments and career options.  
This course may be taken 12 times for credit.  
Course classification: LDC

## ECONOMICS (ECON)

**ECON201 Microeconomics** 4 credits (4 lec hrs/wk)  
Prerequisite(s): (MTH60)  
Analyzes the market system with attention given to the role of households, firms and government in determining wages/prices and the allocation of productive resources.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ECON202 Macroeconomics** 4 credits (4 lec hrs/wk)  
Prerequisite(s): (MTH60)  
Analyzes the national economy as a whole with attention given to determining national income, business cycles, economic growth, fiscal and monetary policy and international trade.  
This course may be taken 1 time for credit.  
Course classification: LDC

## EDUCATION (ED)

**ED101K Practicum: Grade K-3** 1 credit (3 lab hrs/wk)  
Prerequisite(s): Instructor consent  
A beginning practicum in Education, which provides students the opportunity to experience and explore their developing skills and knowledge pertaining to children in primary school (grades K-3), by spending time in a classroom where they can observe and interact with students during each volunteer experience. In addition, Practicum students will attend seminars during the term with education faculty.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED101P Practicum: Ed Pre-K** 1 credit (3 lab hrs/wk)  
Prerequisite(s): Instructor consent  
A beginning practicum in Education, which provides students the opportunity to experience and explore their developing skills and knowledge pertaining to children in preschool, by spending time in a classroom where they can observe and interact with students during each volunteer experience. In addition, Practicum students will attend seminars during the term with education faculty. Students pursuing an emphasis in early intervention and early childhood special education may request placement in an setting focused on early intervention services.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED101U Practicum: Grade 3-6** 1 credit (3 lab hrs/wk)  
Prerequisite(s): Instructor consent  
A beginning practicum in Education, which provides students the opportunity to experience and explore their developing skills and knowledge pertaining to children in upper elementary school (grades 3 - 6), by spending time in a classroom where they can observe and interact with students during each volunteer experience. In addition, Practicum students will attend seminars during the term with education faculty.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED121 Leadership Development** 3 credits (3 lec hrs/wk)  
The course is designed to provide a basic understanding of leadership and group dynamics theory and to assist the student in developing a personal philosophy of leadership, an awareness of the moral and ethical responsibilities of leadership, and an awareness of one's own style of leadership. The course will integrate leadership models and theories with current leadership practices within a multicultural context.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED122 Introduction Residence Life** 1 credit (1 lec hrs/wk)  
Course offered to students as an introduction to residence life, reviewing foundational residence life research, examining theoretical frameworks in community, group, and student development, developing practical skills, and orienting students to student housing. Given the foundational nature of the course, it will focus primarily on raising student awareness and basic skill development. The topics of the course will provide a collective understanding of the philosophical underpinnings of our work (why we do what we do) and the basis for future training.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED134 Children Who are Dual Lang Learners** 2 credits (2 lec hrs/wk)  
This course focuses on the unique characteristics of teaching young children who are Dual Language Learners (DLL). Theory and best practice are studied. Emphasis is on developmentally appropriate curriculum and strategies to help dual language learners thrive in a classroom setting.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED135 Teaching Math to Young Children** 3 credits (3 lec hrs/wk)  
Young children live in a world full of mathematics! This curriculum course focuses on the pre-math concepts and early math concepts important for young children (pre-kindergarten through second grade) to grasp so they can be successful in math throughout their lives. Positive approaches to the subject of mathematics will be emphasized.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED136 Tutor Certification** 1 credit (1 lec hrs/wk)  
Prerequisite(s): Instructor consent  
The purpose of this course is to provide an opportunity for students to learn and adopt methods that promote their success as tutors. Curriculum is guided by College Reading & Learning Association (CRLA) standards. Students completing this course will be CRLA Level I internationally certified tutors.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ED137 Tutor Certification II** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

The purpose of this course is to provide an opportunity for students to learn and adopt methods that promote their success as tutors. Curriculum is guided by College Reading & Learning Association (CRLA) standards. Students completing this course will be CRLA Level II internationally certified tutors.

This course may be taken 1 time for credit.

Course classification: LDC

**ED138 Tutor Certification III** 1 credit (1 lec hrs/wk)

Prerequisite(s): Instructor consent

The purpose of this course is to provide an opportunity for students to learn and adopt methods that promote their success as tutors. Curriculum is guided by College Reading & Learning Association (CRLA) standards. Students completing this course will be CRLA Level III internationally certified tutors.

This course may be taken 1 time for credit.

Course classification: LDC

**ED154 Children's Literature** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): (WR121)

In this introductory literature course, students will gain broad exposure to quality children's literature and poetry; students will develop understanding of high quality literature selection; participate and develop engaging activities based on literature (e.g. literature circles, extension activities, reader's response log); practice reading literature/poetry aloud. This is a workshop course and will be taught through discussion of readings, teacher demonstrations, group discussions/activities, and individual work time. Participation in class activities is required.

This course may be taken 1 time for credit.

Course classification: LDC

**ED169 Overview of Student Special Needs** 3 credits (3 lec hrs/wk)

An introductory course covering categories of special needs and medical conditions that educators must be able to recognize and understand in order to plan, serve, and teach students effectively. Focuses on inclusion strategies and activities that enable educators to successfully provide an optimal educational environment for all students, including those with diverse abilities.

This course may be taken 1 time for credit.

Course classification: LDC

**ED180 Internship: Education & Tutoring** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**ED201 Music Education for Elementary Ed** 3 credits (2 lec, 2 lec lab hrs/wk)

This course covers historical perspectives, elements of music, and effective practices in music education for the elementary classroom teacher. Explores the role and value of music in child development and learning. Multicultural perspectives are used to explore music making, music history, music appreciation, and music performance for elementary school children. Students will explore integrating music with the core curriculum.

This course may be taken 1 time for credit.

Course classification: LDC

**ED202 Art Education for Elementary Ed** 3 credits (2 lec, 2 lec lab hrs/wk)

This course covers historical perspectives, critical theories, and effective practices in art education for the elementary classroom teacher. It explores the role and value of art and creativity in child development and learning. Multicultural perspectives are used to explore artmaking, art history, aesthetics, art appreciation, and art performance for children ages 5-12. Students will explore integrating art with the core curriculum. Using art as an assessment tool will be discussed.

This course may be taken 1 time for credit.

Course classification: LDC

**ED216 Introduction To Education** 3 credits (3 lec hrs/wk)

This course introduces students to the historical, philosophical, and contemporary foundations of the American educational system. It fosters an understanding of the teaching and learning processes, as well as the legal, financial and ethical issues involved in today's schools. This course analyzes current trends and issues in education, and provides students with a framework to make decisions about entering into the teaching field. Through participation in this course, each student will evaluate their commitment to becoming a professional practitioner, prepared to be a reflective teacher who will be able to make informed decisions to improve and enhance the environment for children and youth.

This course may be taken 1 time for credit.

Course classification: LDC

**ED258 Multicultural Education** 3 credits (3 lec hrs/wk)

This course introduces anti-bias educational theory and multicultural approaches to teaching, with a focus on how to creatively develop relationships and learning environments that value diversity and help children respect each other as individuals. In this course, students will examine topics relevant to diversity among children, classrooms, and families. Students will be introduced to strategies and skills to creatively use activism to enhance work with parents, students, and community. Emphasis is on becoming culturally responsive when working with diverse families.

This course may be taken 1 time for credit.

Course classification: LDC

**ED258A Multicultural Education A** 1 credit (1 lec hrs/wk)

This course introduces anti-bias educational theory and multicultural approaches to teaching, with a focus on how to creatively develop relationships and learning environments that value diversity and help children respect each other as individuals. In this course, students will examine topics relevant to diversity among children, classrooms, and families. Students will be introduced to strategies and skills to creatively use activism to enhance work with parents, students, and community. Emphasis is on becoming culturally responsive when working with diverse families.

This course may be taken 1 time for credit.

Course classification: LDC

**ED258B Multicultural Education B** 1 credit (1 lec hrs/wk)

This course introduces anti-bias educational theory and multicultural approaches to teaching, with a focus on how to creatively develop relationships and learning environments that value diversity and help children respect each other as individuals. In this course, students will examine topics relevant to diversity among children, classrooms, and families. Students will be introduced to strategies and skills to creatively use activism to enhance work with parents, students, and community. Emphasis is on becoming culturally responsive when working with diverse families.

This course may be taken 1 time for credit.

Course classification: LDC

**ED258C Multicultural Education C** 1 credit (1 lec hrs/wk)

This course introduces anti-bias educational theory and multicultural approaches to teaching, with a focus on how to creatively develop relationships and learning environments that value diversity and help children respect each other as individuals. In this course, students will examine topics relevant to diversity among children, classrooms, and families. Students will be introduced to strategies and skills to creatively use activism to enhance work with parents, students, and community. Emphasis is on becoming culturally responsive when working with diverse families.

This course may be taken 1 time for credit.

Course classification: LDC

**ED280 CWE: Education & Tutoring** 1-12 credits

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**ED280I Internship, Inter med. Grades 3-8** 1-12 credits (36 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and careers in the field of intermediate grades education. Placements applying to elementary education licenses require experience in a contained-classroom. Contained-classrooms have one teacher assigned for the majority of student instruction; placement in classrooms in grades 6-8 are permitted if they are contained-classrooms. A background check may be required.

This course may be taken 1 time for credit.

Course classification: LDC

**ED280K Internship, Primary Grades K - 2** 1-12 credits (36 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and careers in the field of Kindergarten and Elementary school. A background check may be required.

This course may be taken 1 time for credit.

Course classification: LDC

**ED280P Internship Preschool Placement** 1-12 credits (36 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and careers in the field of pre-school. A background check may be required.

This course may be taken 1 time for credit.

Course classification: LDC

# EMERGENCY MANAGEMENT (EM)

**EM101 Incident Command & Emergency Mngmt** 4 credits

This course is designed to provide students with the basic knowledge of the Incident Command System (ICS)/National Interagency Incident Management System (NIIMS) and emergency management. ICS includes operational requirements, interactive components and procedures for organizing and operating an on-scene management system.

This course may be taken 1 time for credit.

Course classification: CTE

**EM204 Type III All Hazard Logistics Secti** 3 credits (3 lec hrs/wk)

This course provides local- and state-level emergency responders with a robust understanding of the duties, responsibilities, and capabilities of an effective Logistics Section Chief on an All-Hazards Incident Management Team (AHIMT). These responsibilities fall into two categories: responding to the incident and effectively fulfilling the position responsibilities of a Logistics Section Chief on an AHIMT.

This course may be taken 1 time for credit.

Course classification: CTE

**EM213 Basic Public Information Officers** 1 credit (1 lec hrs/wk)

This course will consider the value of communication before, during and after an incident. It will help PIOs identify critical audiences, both internal and external. Explain the importance of public information during an incident. Recognize the needs of the whole community. Demonstrate the role of the PIO in both day-to-day and emergency environments.

Compare actions PIOs can take to work with the news media during non-emergency and emergency situations. Develop a public awareness campaign and an incident communications strategy. Draft a variety of products, use social media and demonstrate how to interact with the media. Demonstrate application of on-scene media management laws and guidelines. Complete a public information training goals inventory.

This course may be taken 1 time for credit.

Course classification: CTE

# EMERGENCY MEDICAL TECHNICIAN (EMT)

**EMT151 Emergency Medical Technician Part A** 5 credits (4 lec, 3 lab hrs/wk)

Provides instruction at the level of Emergency Medical Technician. Includes all cognitive (knowledge) and psychomotor (practical) skills necessary to develop student skills in the recognition of signs and symptoms of illness and injury and proper emergency care procedures as outlined by the scope of practice established by the Oregon Medical Board. This course will also build personal skills in hands on capabilities, and a positive attitude towards the patients they may care for. This is the first of a two-part course as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT\*151/152.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT152 Emergency Medical Technician Part B** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( EMT151 )

Provides instruction at the level of Emergency Medical Technician. Includes all cognitive (knowledge) and psychomotor (practical) skills necessary to develop student skills in the recognition of signs and symptoms of illness and injury and proper emergency care procedures as outlined by the scope of practice established by the Oregon Medical Board. This course will also build personal skills in hands on capabilities and a positive attitude towards the patients they may care for. Students will also be exposed to patient care in the real world setting through clinical hours in the Emergency Department and ALS ambulance. This is the second of a two-part course as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT\*151/152.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT160 Advanced EMT Part A** 5 credits (4 lec, 3 lab hrs/wk)

Provides instruction at the level of Advanced Emergency Medical Technician. Includes all cognitive (knowledge) and psychomotor (practical) skills necessary to develop student skills in the recognition of signs and symptoms of illness and injury and proper emergency care procedures as outlined by the scope of practice established by the Oregon Medical Board. This course will also build personal skills in hands on capabilities, and a positive attitude towards the patients they may care for. This is the second of a three-part course as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT181, EMT182, EMT280 G. Course requirements: Current Oregon EMT License and in good standing with the Health Division. Current healthcare provider CPR card that meets or exceeds the 2015 American Heart Association ECC guidelines or equivalent standards approved by the Oregon Health Authority.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT161 Advanced EMT Part B** 4 credits

Prerequisite(s): ( EMT160 )

Provides instruction at the level of Advanced Emergency Medical Technician. Includes all cognitive (knowledge) and psychomotor (practical) skills necessary to develop student skills in the recognition of signs and symptoms of illness and injury and proper emergency care procedures as outlined by the scope of practice established by the Oregon Medical Board. This course will also build personal skills in hands on capabilities, and a positive attitude towards the patients they may care for. This is the second of a three-part course as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT181, EMT182, EMT280 AEMT. Course requirements: Current Oregon EMT License and in good standing with the Health Division. Current healthcare provider CPR card that meets or exceeds the 2015 American Heart Association ECC guidelines or equivalent standards approved by the Oregon Health Authority

This course may be taken 1 time for credit.

Course classification: CTE

**EMT162 EMT Intermediate** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( EMT160 and EMT161 )

This course prepares individuals for licensure in Oregon as an Emergency Medical Technician - Intermediate. Upon successful completion of this course, students will be eligible to take the Oregon EMT-Intermediate licensing examinations. Course requirements: Completed EMT161 with a grade C or better and have a current Oregon AEMT license in good standing with the Health Division. Current Healthcare Provider CPR card that meets or exceeds the 2015 American Heart Association ECC guidelines or equivalent standards approved by the Oregon Health Authority to register for this course.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT169 Emergency Medical Technology Rescue** 3 credits (2 lec, 3 lab hrs/wk)

This training should provide a brief introduction into EMS/fire service rescue practices. Course topics will include but not limited to Auto Extrication, Rope Rescue, Water and Ice Rescue, Fire Ground Search and Rescue, Confined Space Rescue Situations. This course is designed to give students the skills necessary in order to begin rescue situations that are listed above. This is not an in-depth technical rescue course due to the limited time and limited degree of training resources available. In order to become certified in these fields there are other courses that must be attended.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT170 Emergency Response & Communication Documentation** 2 credits (4 lec hrs/wk)

Corequisite(s): ( EMT171 )

Covers principles of therapeutic communication, verbal, written, and electronic communications in the provision of EMS, documentation of elements of patient assessment, care and transport, communication systems, radio types, reports, codes, and correct techniques. This is a 5.5 week course.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT171 Emergency Response Transport** 2 credits (2 lec, 6 lab hrs/wk)

Corequisite(s): ( EMT170 )

This course covers the role and responsibilities of the Emergency Medical Technician (EMT) from Basic through Paramedic in regards to transportation of the patient. Other aspects include EMS systems, legal considerations in EMS, major incident response and safety precautions. This is a 5.5 week course.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT175 Intro Emergency Medical Services** 3 credits (3 lec hrs/wk)

This preparatory course integrates comprehensive knowledge of Emergency Medical Services (EMS) systems, safety/well being of the paramedic, and medical/legal and ethical issues, which is intended to improve the health of EMS personnel, patients, and the community.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT280F EMT Paramedic Internship** 7 credits (21 lab hrs/wk)

Prerequisite(s): ( EMT298 ), or instructor consent

The goal of this course is to develop a planned program of observation and practical experience with an organization providing emergency medical services at the Paramedic/Advanced Life Support (ALS) level. Students will perform the functions of an entry-level paramedic under the guidance of a preceptor on an ALS ambulance. Students will perform assessments and invasive procedures in a real world environment. Students will experience firsthand the skills and knowledge required to act in the capacity of a Paramedic. This course also continues the clinical internships. This is part four of a four-part series as set forth by the National EMS Education Standards.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT280G Advanced Emergency Medical Technician Internship** 1 credit (3 lab hrs/wk)

Prerequisite(s): ( EMT296 ), or instructor consent

The goal of EMT 280G is to introduce the student to assessment and treatments of live patients in a clinical and field setting. The student will perform skills acquired in classroom and laboratory settings under the guidance of a preceptor to achieve required competencies. This is the second of a three-part course as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT291 Paramedic Field Practicum** 7 credits (21 lab hrs/wk)

Prerequisite(s): ( EMT298 )

The goal of this course is to develop a planned program of observation and practical experience with an organization providing emergency medical services at the Paramedic/Advanced Life Support (ALS) level. Students will perform the functions of an entry-level Paramedic under the guidance of a preceptor on an ALS ambulance. Students will perform assessments and invasive procedures in a "real world" environment. Students will experience firsthand the skills and knowledge required to act in the capacity of a Paramedic. This course also continues the clinical internships as well. This is part four of a four-part series as set forth by the National EMS Education Standards.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT296 EMT Paramedic Part I** 12 credits (10 lec, 6 lab hrs/wk)

The goal of the first of a three term series in Paramedic education is to begin fundamentals on patient assessment, airway management and ventilation, and general pharmacology (to include medication administration and dosing). Then focus on pathophysiology of the respiratory and cardiovascular systems to include identification and treatments of related emergencies. This is the first of a four-part course as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT296, EMT297, EMT298, and EMT291.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT297 EMT Paramedic Part II** 12 credits (6 lec, 18 lab hrs/wk)

Prerequisite(s): ( EMT296 )

The goal of EMT297 is to focus on anaphylactic, toxicological, environmental, geriatric, pediatric, obstetric, gynecologic, neonatal, and endocrine emergencies; infectious diseases and trauma care. Applies didactic knowledge to campus-based laboratory skills practice and clinical patient care in the hospital setting. The student will also be introduced to assessments and treatments of live patients in a clinical setting. The student will perform skills acquired in classroom and laboratory settings under the guidance of a preceptor to achieve required competencies. This is the second of a four-part series as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT296, EMT297, EMT298, and EMT291.

This course may be taken 1 time for credit.

Course classification: CTE

**EMT298 EMT Paramedic Part III** 9 credits (5 lec, 12 lab hrs/wk)

Prerequisite(s): ( EMT297 )

The goals of EMT298 will include a continuation of focus as seen in EMT297. This term will include comprehensive skills and cognitive testing to assess the student's retention of information that has been presented to them so far in the program. Students will continue assessments and treatments of live patients in a clinical setting as well. This is part three of a four-part series as set forth by the National EMS Education Standards. Failure of this course will require retaking the full sequence of EMT296, EMT297, EMT298, and EMT280F.

This course may be taken 1 time for credit.

Course classification: CTE

## ENGINEERING (ENGR)

**ENGR111 Intro to Engineering** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MTH111 )

Topics include: survey of the engineering profession, educational and professional development, standards of practice; engineering information, calculations and analysis. Students will complete an engineering design project will be incorporated.

This course may be taken 1 time for credit.

Course classification: LDC

**ENGR112 Engineering Computation** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH111 )

Introduction to engineering problem solving by means of programmed numerical methods. Exposure to fundamentals of computational systems, logical analysis, algorithm development, and program input/output design. A higher-level programming language will be presented and utilized.

This course may be taken 1 time for credit.

Course classification: LDC

**ENGR201 Electrical Fundamentals I** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH251 )

Topics include: circuit variables and elements, simple resistive circuits, techniques of circuit analysis, applications of operational amplifiers, inductors, capacitors, and first-order circuits.

This course may be taken 1 time for credit.

Course classification: LDC

**ENGR202 Electrical Fundamentals II** 4 credits (3 lec, 3 lab hrs/wk)  
Prerequisite(s): ( ENGR201 )  
Topics include: circuit variables and elements, simple resistive circuits, techniques of circuit analysis, applications of operational amplifiers, inductors, capacitors, and first-order circuits.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENGR203 Electrical Fundamentals III** 4 credits (3 lec, 3 lab hrs/wk)  
Prerequisite(s): ( ENGR202 )  
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.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENGR211 Statics** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( MTH252 )  
Analysis of forces induced in structures and machines by various types of loading in static equilibrium.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENGR212 Dynamics** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( ENGR211 and MTH252 )  
Kinematics, Newton's laws of motion, and work-energy and impulse-momentum relationships applied to engineering systems.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENGR213 Strength of Materials** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( ENGR211 )  
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.  
This course may be taken 1 time for credit.  
Course classification: LDC

## ENGLISH (ENG)

**ENG104 Introduction to Literature Fiction** 3 credits (3 lec hrs/wk)  
Reading, analysis and appreciation of significant works of fiction, especially short stories, with emphasis on the fiction writer's craft. Presents methods of in-depth critical reading that serve as a basis for further study and enjoyment of literature.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG105 Introduction to Literature Drama** 3 credits (3 lec hrs/wk)  
Reading, analysis, and appreciation of significant works of drama and the elements of dramatic literature (setting, theme, characterization and language) serve as a basis for further study and enjoyment of drama.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG106 Introduction to Literature Poetry** 3 credits (3 lec hrs/wk)  
Reading, analysis, and appreciation of significant poems, how they are written and how they speak to human concerns. Presents elements of poetry, language, form, metrics, style and voice that serve as a basis for further study and enjoyment of poetry.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG107 World Literature** 3 credits (3 lec hrs/wk)  
This course introduces the students to key literary works and authors of world literature from Ancient and Classical foundations to the Middle Ages. Students should consider taking History of Western Civilization concurrently.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG108 World Literature** 3 credits (3 lec hrs/wk)  
This course introduces the students to key literary works and authors of world literature from late Middle Ages and Renaissance to the Enlightenment. Students should consider taking History of Western Civilization concurrently.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG109 World Literature** 3 credits (3 lec hrs/wk)  
This course introduces the students to key literary works and authors of world literature from the Enlightenment to modern and contemporary writings. Students should consider taking History of Western Civilization concurrently.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG145 Shakespeare in Performance** 1 credit (11 lec hrs/wk)  
trip to the Oregon Shakespeare Festival to see a play in performance. The course will consist of a discussion of the text, a viewing of the play, and a discussion of the performance, including themes and interpretations.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG180 Internship: English** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to explore workplace environments and career options.  
This course may be taken 12 times for credit.  
Course classification: LDC

**ENG201 Shakespeare** 3 credits (3 lec hrs/wk)  
This course is an introduction to Shakespeare's early dramatic literature with an emphasis on the timelessness of his ideas and themes, the formal demands of drama, and the development of the artist. The plays for this term are drawn from early histories and comedies.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG204 Survey of English Literature** 3 credits (3 lec hrs/wk)  
This course discusses the literary documents and authors of the British Isles from the Anglo-Saxon beginnings through the sixteenth century. It will also treat the surviving Celtic materials and their influence on British literature. The study will focus on, but not necessarily be limited to, characteristic works and major figures of the period.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG205 Survey of English Literature** 3 credits (3 lec hrs/wk)  
This course discusses the literary documents and authors of the British Isles from the sixteenth through the early nineteenth centuries. The study will focus on characteristic works and major figures on the period.  
This course may be taken 1 time for credit.  
Course classification: LDC

**ENG206 Survey of English Literature** 3 credits (3 lec hrs/wk)

This course discusses the literary documents and authors of the British Isles of the nineteenth and twentieth centuries and the historic context.

This course may be taken 1 time for credit.

Course classification: LDC

**ENG253 Survey of American Literature** 3 credits (3 lec hrs/wk)

Introduction to the development of American literature from colonial beginnings through the early romantic period. Special attention is given to helping students develop a sense of what is "American" in literature and thought.

This course may be taken 1 time for credit.

Course classification: LDC

**ENG254 Survey of American Literature** 3 credits (3 lec hrs/wk)

Introduction to the development of American Literature in the middle and latter parts of the nineteenth century (late romanticism, realism, and naturalism). Special attention is given to helping students develop a sense of what is "American" in literature and thought.

This course may be taken 1 time for credit.

Course classification: LDC

**ENG255 Survey of American Literature** 3 credits (3 lec hrs/wk)

Introduction to the development of American Literature of the twentieth century. Special attention is given to helping students develop a sense of what is "American" in literature and thought.

This course may be taken 1 time for credit.

Course classification: LDC

**ENG262 Worlds and Writings J.R. R. Tolkien** 3 credits (3 lec hrs/wk)

Examines and evaluates the works of Tolkien, Tolkien's role in the creation of the genre of fantasy literature, and the ways in which Tolkien's works reflect 20th century concerns about power and the environment.

This course may be taken 1 time for credit.

Course classification: LDC

**ENG280 CWE: English** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options. This is a variable credit course, ranging from 1-12 credits and a variable hour lab ranging from 33-396 hours.

This course may be taken 12 times for credit.

Course classification: LDC

## ENVIRONMENTAL TECHNOLOGY (ENV)

**ENV110 Introduction Environmental Science** 3 credits (3 lec hrs/wk)

This course integrates the physical, life and social sciences under an overarching theme of sustainability to examine environmental issues and solutions. It incorporates a diverse set of topics including ecology, biodiversity, urban and regional planning, air and water pollution, energy supply and consumption, water resources, food production, solid waste, toxic substances, and human population. Critical thinking is promoted through student analysis and interpretation of environmental data and trends, and through student application of knowledge to new situations.

This course may be taken 1 time for credit.

Course classification: LDC

**ENV180 Internship: Environmental Tech** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options

This course may be taken 12 times for credit.

Course classification: LDC

**ENV235 Introduction to Soil Science** 4 credits (3 lec, 3 lab hrs/wk)

In this course, students learn about the chemical, physical, and biological nature of soils; the factors controlling soil development; what a soil name can tell about the environment; and, how land management decisions affect soil quality and its sustainability. Topics will include: The importance of soils, what soil is, how soil forms, how soils are described, physical properties of soils, soil water, soil chemistry, soil biology, and soil sustainability.

This course may be taken 1 time for credit.

Course classification: LDC

## FIRE SCIENCE TECHNOLOGY (FS)

**FS100 Principles of Emergency Services** 4 credits (4 lec hrs/wk)

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.

This course may be taken 1 time for credit.

Course classification: CTE

**FS105 Firefighter Fundamentals I** 2 credits (4 lec lab hrs/wk)

The purpose of this course is to teach the student how to be a professional in the fire service. Topics include fire service culture, regulations, expected behaviors, dress and appearance, among others. Students will be introduced to a professional network and given an opportunity to serve a community.

This course may be taken 1 time for credit.

Course classification: CTE

**FS110 Firefighter Fundamentals II** 2 credits (4 lec lab hrs/wk)

The purpose of this course is to teach the student how to be a professional in the fire service. Topics include tools and equipment, certification, resume development, interview skills, among others. Students will be introduced to a professional network and given an opportunity to serve a community.

This course may be taken 1 time for credit.

Course classification: CTE

**FS115 Firefighter Fundamentals III** 2 credits (4 lec lab hrs/wk)

The purpose of this course is to teach the student how to be a professional in the fire service. Topics include fire apparatus, maintenance, ongoing training, professional development, among others. Students will be introduced to a professional network and given an opportunity to serve a community.

This course may be taken 1 time for credit.

Course classification: CTE

**FS120 Building Const Related to Fire Svc** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( FS100 )

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

This course may be taken 1 time for credit.

Course classification: CTE

**FS121 Fire Behavior and Combustion** 3 credits (3 lec hrs/wk)

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled.

This course may be taken 1 time for credit.

Course classification: CTE

**FS123 Structural Firefighter I** 4 credits (8 lec lab hrs/wk)

This course provides students with the knowledge, skills, and abilities required for Firefighter I (structural firefighting).

This course may be taken 1 time for credit.

Course classification: CTE

**FS125 Principles of Fire and Emergency S** 4 credits (4 lec hrs/wk)

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

This course may be taken 1 time for credit.

Course classification: CTE

**FS127 Structural Firefighter II** 2 credits (4 lec lab hrs/wk)

This course provides students with the knowledge and skills required for the Firefighter II level (structural firefighting).

This course may be taken 1 time for credit.

Course classification: CTE

**FS130 Fire Apparatus Driver/Operator** 1 credit (2 lec lab hrs/wk)

This course provides students with the knowledge and skills required to safely drive/operate a fire apparatus.

This course may be taken 1 time for credit.

Course classification: CTE

**FS131 Wildland Firefighter Type 2** 3 credits (1 lec, 4 lec lab hrs/wk)

This course provides students with the knowledge and skills required to gain an entry level position in the fire service (wildland).

This course may be taken 1 time for credit.

Course classification: CTE

**FS133 S-215 Fire Operations in the Wildla** 2 credits (2 lec hrs/wk)

The purpose of this course is to educate students to operate safely and effectively in a wildland/urban interface incident by using situation awareness, performing structure triage, using pre-planning tools, having a basic understanding of fire behavior, and using strategy and tactics unique to the wildland/urban interface environment (wildland).

This course may be taken 1 time for credit.

Course classification: CTE

**FS135 Fire Apparatus Aerial Operator** 2 credits (1 lec, 2 lec lab hrs/wk)

This course provides students with the knowledge and skills required to safely drive/operate a fire apparatus equipped with an aerial device.

This course may be taken 1 time for credit.

Course classification: CTE

**FS137 S-131 Wildland Firefighter Type 1** 1 credit (1 lec hrs/wk)

This course provides students with the knowledge and skills required to meet the training needs of the Firefighter Type 1 (wildland).

This course may be taken 1 time for credit.

Course classification: CTE

**FS139 S-290 Intermediate Wildland Fire Be** 3 credits (3 lec hrs/wk)

This course provides students with wildland fire behavior knowledge applicable for safe and effective wildland fire management activities (wildfires, fire use, and prescribed fire).

This course may be taken 1 time for credit.

Course classification: CTE

**FS141 S-230 Crew Boss (Single Resource)** 3 credits (3 lec hrs/wk)

This course provides students with knowledge and skills in the performance of duties associated with the single resource boss position from initial dispatch through demobilization to the home unit (wildland)

This course may be taken 1 time for credit.

Course classification: CTE

**FS143 S-212 Wildland Fire Chain Saws** 2 credits (1 lec, 2 lec lab hrs/wk)

This course provides students with an introduction to the function, maintenance, and use of internal combustion engine-powered chain saws and their tactical wildland fire application.

This course may be taken 1 time for credit.

Course classification: CTE

**FS180 Internship: Fire Science** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**FS200 Strategy and Tactics** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( FS100 )

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents.

This course may be taken 1 time for credit.

Course classification: CTE

**FS202N Field Training and Evaluation Progr** 2 credits (2 lec hrs/wk)

The Field Training & Evaluation Program (FTEP) course is designed to provide formal training and practical information for personnel who will become Field Training Officers in their police department. The course, through reference to the "San Jose Model", will consider specific teaching methods applicable to adult learners, performance evaluations using standardized rating procedures, remedial training techniques, and legal issues in recruit training, as well as ethics, leadership, communication, evaluation, retention and dismissal. The instructors for the program are seasoned law enforcement practitioners with advanced academic experiences.

This course may be taken 1 time for credit.

Course classification: CTE

**FS205 Fire Prevention** 3 credits (3 lec hrs/wk)

This course provides 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; fire and life safety education; and fire investigation.

This course may be taken 1 time for credit.

Course classification: CTE

**FS210 Hazardous Materials for First Respo** 2 credits (2 lec hrs/wk)  
This course provides students with the knowledge and skills required to respond to and operate at hazardous materials incidents.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS215 Legal Aspects of Emergency Services** 2 credits (2 lec hrs/wk)  
This course will address the federal, state, and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS220 Fire Protection Systems** 3 credits (3 lec hrs/wk)  
This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS222 Fire Instructor I** 3 credits (3 lec hrs/wk)  
This course provides students with the knowledge and skills required to instruct in the fire service.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS223 Fire Instructor II** 3 credits (3 lec lab hrs/wk)  
Prerequisite(s): ( FS222 )  
This course provides students with the knowledge and skills required to manage a training program, develop curriculum, and deliver instruction in the fire service.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS225 Prin of Fire & Emerg Service Admin** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( FS100 )  
This course introduces the student to the organization and 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.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS230 Fire Apparatus Pumper/Operator** 2 credits (4 lec lab hrs/wk)  
This course provides students with the knowledge and skills required to safely drive/operate a fire apparatus equipped with a fire pump.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS231 Fire Protection Hydraulics and Wate** 3 credits (3 lec hrs/wk)  
Prerequisite(s): ( MTH60 )  
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.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS232 Occupational Safety and Health ES** 3 credits (3 lec hrs/wk)  
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 service organizations.  
This course may be taken 1 time for credit.  
Course classification: CTE

**FS280 CWE: Fire Science** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.  
This course may be taken 12 times for credit.  
Course classification: LDC

## FOOD AND NUTRITION (FN)

**FN155 Nutrition in Early Childhood Programs** 1 credit (1 lec hrs/wk)  
This course covers nutrition aspects related to the early childhood years (birth to eight years) and includes information about serving healthy foods for child care. Information on teaching nutrition activity in developmentally appropriate ways are also covered in the course.  
This course may be taken 1 time for credit.  
Course classification: LDC

**FN180 Internship: Nutrition** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge.  
This course may be taken 12 times for credit.  
Course classification: LDC

**FN225 Nutrition** 4 credits (4 lec hrs/wk)  
This course focuses on the study of basic nutrition principles and newer scientific investigations of optimal diet for health. A review of present day nutrition problems is included. The course is valuable for home economic, nursing, physical education, food service, dental hygiene and childhood education majors.  
This course may be taken 1 time for credit.  
Course classification: LDC

**FN280 CWE: Food and Nutrition** 1-12 credits (3 lab hrs/wk/cr)  
Prerequisite(s): Instructor consent  
This course focuses on the study of basic nutrition principles and newer scientific investigations of optimal diet for health. A review of present day nutrition problems is included. The course is valuable for home economic, nursing, physical education, food service, dental hygiene and childhood education majors.  
This course may be taken 12 times for credit.  
Course classification: LDC

# FOREST RESOURCES TECHNOLOGY (F)

## **F111 Introduction to Forestry** 3 credits (3 lec hrs/wk)

This course will cover a broad overview of basic forestry principle; a review of the history of forestry balanced with a discussion of current forestry management programs, laws, and practices implemented in the United States today.

This course may be taken 1 time for credit.

Course classification: LDC

## **F180 Internship: Forestry** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

## **F222A Elementary Forest Surveying** 4 credits (3 lec, 3 lab hrs/wk)

An introduction to the theory and practice of forest surveying methods and measurements as applied to the specifics of forestry problems and their solutions. The course provides fundamental instruction for surveying and field measurements.

This course may be taken 1 time for credit.

Course classification: LDC

## **F241 Dendrology** 5 credits (4 lec, 3 lab hrs/wk)

Learn to identify the principal forest trees of North America, and the principal trees and shrubs of the Pacific Northwest, including the ranges over which they grow, important ecological characteristics, and principal uses. Also learn about forested regions of the world, and the structure and function of forest plants.

This course may be taken 1 time for credit.

Course classification: LDC

## **F250 Forest Biology** 4 credits (3 lec, 3 lab hrs/wk)

This course is designed to introduce students to the basic concepts of forest and natural resource biology concepts. It will focus on forest plants and animals, communities, and ecosystems, along with their functioning and their relationship to resource management. Forest Biology is a basic course that provides a broad foundation in biology that is relevant to many natural resource issues. The course will examine biology at multiple levels of organization, from molecules to the globe.

This course may be taken 1 time for credit.

Course classification: LDC

## **F251 Recreation Resource Management** 4 credits (3 lec, 3 lab hrs/wk)

Exposes students to the theories and practices involved in managing our natural resources for public use. Resource management, visitor management, and service management components will be studied and analyzed. An emphasis will be put on how visitors impact natural resources, and the tools available to resource managers to control and mitigate those impacts using planning and management techniques. The lecture portion of the class will involve lecture and group discussions. The lab will include field trips to public recreation sites and presentations from recreation resource managers and planners.

This course may be taken 1 time for credit.

Course classification: LDC

## **F280 CWE: Forestry** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

# GENERAL SCIENCE (GS)

## **GS104 Physical Science** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH60 )

This course provides an overview of the essential ideas in physics with an emphasis on the laws of motion, work, energy, heat and temperature.

This course may be taken 1 time for credit.

Course classification: LDC

## **GS105 Physical Science** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH60 )

This course is an introduction to chemistry for non-science majors.

The course material covers atomic structure and theory, compounds, chemical bonds, states of matter, solution chemistry, chemical reactions and selected topics in organic and biochemistry.

This course may be taken 1 time for credit.

Course classification: LDC

## **GS106 Introduction to Earth Science** 4 credits (3 lec, 3 lab hrs/wk)

Introduces various branches of earth science. Includes basic terminology, fundamental processes and respective interrelationships. Discusses rock and mineral formation, plate tectonic theory, volcanism, earthquakes, surficial processes, and geologic time. Includes laboratory component.

Credit cannot be earned for this course and G221.

This course may be taken 1 time for credit.

Course classification: LDC

## **GS107 Astronomy** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH60 )

A descriptive treatment of the solar system, stars, stellar evolution, galaxies and cosmology. The results of current space missions are emphasized. Recent discoveries in stellar astronomy will be discussed.

This course may be taken 1 time for credit.

Course classification: LDC

## **GS108 Oceanography** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH60 ) or ( WR90R )

Studies the ocean and its phenomena. Discusses the chemical, biological, geological, and physical nature of the oceans, the ocean floor and shorelines. The course also includes sedimentation, volcanism, plate tectonics, and other geological aspects of the oceans.

This course may be taken 1 time for credit.

Course classification: LDC

## **GS180 Internship: General Science** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

**GS280 CWE: General Science** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

## GEOGRAPHY (GEOG)

**GEOG105 Cultural Geography** 3 credits (3 lec hrs/wk)

This course examines the nexus of human and environmental interaction. We will consider issues such as the origins of domestication of animals and plants for food, economic development and underdevelopment, environmental racism, and the geographic origins of cultural differences.

This course may be taken 1 time for credit.

Course classification: LDC

**GEOG180 Internship: Geography** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

**GEOG209 Physical Geography Weather/Climate** 4 credits (4 lec hrs/wk)

Examines the processes of the atmosphere, the distribution and character of climate types, climate change, and humankind as a modifier of climate.

This course may be taken 1 time for credit.

Course classification: LDC

**GEOG265 Intro to Geographical Info Systems** 4 credits (3 lec, 3 lab hrs/wk)

An introduction to the appropriate use and potential applications of geographic information systems (GIS) and related technologies (GPS and remote sensing) in forest management, operations planning, and problem solving. Students are presented with lectures and exercises that cover a wide range of GIS and GIS-related topics and issues including spatial database creation, structure, analysis, and modeling. Class meetings include a lectures and hands-on GIS exercises in a computer lab. Students are required to complete weekly lab assignments and a final project.

This course may be taken 1 time for credit.

Course classification: LDC

**GEOG270 Adv Topics in Geog Info Systems** 3 credits (2 lec, 3 lab hrs/wk)

Prerequisite(s): (GEOG265)

An advanced course in geographic information science. This class builds upon techniques learned in GEOG265 Introduction to Geographic Information Systems (GIS) by exposing students to more advanced methods in developing and utilizing GIS data.

This course may be taken 1 time for credit.

Course classification: LDC

**GEOG275 Fundamentals of Cartography** 3 credits (2 lec, 3 lab hrs/wk)

Prerequisite(s): (GEOG265)

A general introduction to cartography as an art and a science. The course teaches fundamental principles of map design and construction. Students will become familiar with the cartographic process, especially as they apply basic mapping concepts such as scale, typography, map projections, generalization, symbols, color schemes, and data visualization. Students will use cartographic tools available in Esri software.

This course may be taken 1 time for credit.

Course classification: LDC

**GEOG277 GIS Capstone** 1 credit

Prerequisite(s): (GEOG275)

An independent GIS project carried out in concert with industry professionals.

This course may be taken 1 time for credit.

Course classification: LDC

**GEOG280 CWE: Geography** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

## GEOLOGY (G)

**G145AG Regional Geology Agness Field Trip** 1 credit (1 lec hrs/wk)

A lecture in the field to highlight the significant geologic features of the coast range up and over the Agness Divide and along the Rogue River.

The course consists of a field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features unique to the region.

Also offered as G025AG for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G145CA Regional Geology Cape Arago Field Trip** 1 credit (1 lec hrs/wk)

A lecture in the field to highlight the significant geologic features along the southern Oregon Coast with stops focused between Cape Arago and Bandon.

The course consists of a field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features unique to the region. Also offered as G025CA for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G145CB Regional Geology Cape Blanco Field Trip** 1 credit (1 lec hrs/wk)

A lecture in the field to highlight the significant geologic features along the southern Oregon Coast with stops focused between Cape Blanco and Brookings. The course consists of a field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features unique to the region. Also offered as G025CB for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G145CK Regional Geology Cape Kiwanda Field Trip** 1 credit (1 lec hrs/wk)

A lecture in the field to highlight the significant geologic features along the Oregon Coast with stops focused between Florence and Cape Kiwanda/Pacific City. The course consists of a field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features such as the submerged forest at Neskowin unique to the region. Also offered as G025CK for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G145CL Regional Geology Crater Lake Field Trip** 1 credit (1 lec hrs/wk)

A lecture in the field to highlight the significant geologic features of the coast range and Cascades with a focus on stops in and around Crater Lake National Park. The course consists of a field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features unique to the region. Also offered as G025CL for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G145DB Regional Geology Depoe Bay Field Trip** 1 credit (1 lec hrs/wk)

A lecture in the field to highlight the significant geologic features along the Oregon Coast with stops focused between Florence and Depoe Bay. The course consists of a field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features unique to the region. Also offered as G025DB for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G145DU Regional Geology Dunes Field Trip** 1 credit (1 lec hrs/wk)

A lecture in the field to highlight the significant geologic features along the Oregon Coast with stops focused between Coos Bay and Yachats. The course consists of a field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features unique to the region. Also offered as G025DU for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G145LB Regional Geology Lava Beds Field Trip** 2 credits (1 lec, 2 lec lab hrs/wk)

A lecture in the field to highlight the significant geologic, cultural and historic features focusing on the area in and around Lava Beds National Monument in northern California. The course consists of a 3 day camping field trip arranged to illustrate the geologic setting, stratigraphy and structure, topography, age and origin, significant events through geologic time, and special features unique to the region associated with Modoc prehistory and oral traditions, the Modoc War, CCC camp, WWII history, Japanese Internment Camp in Newell, water rights issues, etc. This course is also offered as G025LB for no credit or grade.

This course may be taken 1 time for credit.

Course classification: LDC

**G180 Internship: Geology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options

This course may be taken 12 times for credit.

Course classification: LDC

**G201 Physical Geology I** 4 credits (3 lec, 3 lab hrs/wk)

Corequisite(s): ( G025AG ) or ( G025CL ) or ( G025DB ) or ( G145AG ) or ( G145CL ) or ( G145DB )

A study of the nature of the earth, earth materials and geologic structures, fundamental geologic principles, and physical processes acting within and upon the earth. Laboratory exercises and field trips required.

This course may be taken 1 time for credit.

Course classification: LDC

**G202 Physical Geology II** 4 credits (3 lec, 3 lab hrs/wk)

Corequisite(s): ( G025CB ) or ( G025DU ) or ( G145CB ) or ( G145DU )

Studies fundamental geologic principles and the natural processes acting within and upon the earth. Examines internal and superficial processes, geologic time and the inter-relationships of people and their natural environment. Laboratory exercises and field trips are required.

This course may be taken 1 time for credit.

Course classification: LDC

**G203 Historical Geology** 4 credits (3 lec, 3 lab hrs/wk)

Corequisite(s): ( G025CA ) or ( G025CK ) or ( G025LB ) or ( G145CA ) or ( G145CK ) or ( G145LB )

Covers the physical and historical nature of the earth through time.

Includes principles of historical geology, geologic time, the sequence of tectonic changes stratigraphic relations paleogeographic environments and major events through time and the progression of life through time. Laboratory exercises and field trips are required.

This course may be taken 1 time for credit.

Course classification: LDC

**G221 General Geology** 3 credits (3 lec hrs/wk)

Introduces the physical aspects of geology. Includes rocks and mineral formation and identification, volcanoes, earthquakes, plate tectonics and glaciation. Also includes other gradational processes, other aspects of volcanism, geologic time, a brief survey of prehistoric life and sequence of major events through time. Credit cannot be earned for this course and GS106.

This course may be taken 1 time for credit.

Course classification: LDC

**G246 Geological Hazards And Natural Catastrophes** 3 credits (3 lec hrs/wk)

The causes and effects of earthquakes, tsunamis, landslides, ground subsidence and collapse, floods, storms, coastal erosion, volcanic eruptions and more will be addressed. The potential for prediction and mitigation will be examined, as will potential for natural hazards in Oregon and the Pacific Northwest.

This course may be taken 1 time for credit.

Course classification: LDC

**G280 CWE: Geology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

# HEALTH (HE)

**HE180 Internship: Health Ed** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**HE250 Personal Health** 3 credits (3 lec hrs/wk)

This personal health course deals with current health trends and issues in the United States. The course will expose students to a broad range of issues and information relating to several dimensions of personal health & wellness: physical, social, emotional, intellectual, spiritual, environmental, and occupational. Topics of exploration include, but are not limited to: nutrition, physical fitness, recognition of stress and weight management techniques, aging, and disease prevention.

This course may be taken 1 time for credit.

Course classification: LDC

**HE252 First Aid & CPR Professional Rescue** 3 credits (3 lec hrs/wk)

This course follows the American Red Cross, and OSHA requirements to prepare the student with knowledge, skill, and techniques necessary to recognize and provide care in first aid, respiratory, and cardiac emergencies using the latest CPR and emergency cardiac care guidelines. Students learn how to perform rescue breathing; one-rescuer and two-rescuer CPR; how to use airway adjuncts (bag-valve-mask, oxygen administration); and how to operate an Automated External Defibrillator (AED). American Red Cross Professional Rescuer and First Aid certification is given upon completion of course requirements.

This course may be taken 1 time for credit.

Course classification: LDC

**HE280 CWE: Rural Health Aide** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**HE280E Field Experience: EMT** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course consists of a planned program of observation and practical experience with an organization providing emergency medical services. The course is designed to provide students with experience and an opportunity to apply emergency medical concepts and theory in a field situation.

This course may be taken 12 times for credit.

Course classification: LDC

# HEALTH INFORMATION MANAGEMENT (HIM)

**HIM110 Health Information Technology** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH20 ) or ( WR90R )

Introduces the concept of health information management and health informatics including the components of content, use the structure of health care data along with information keeping practices in both paper and electrical systems.

This course may be taken 1 time for credit.

Course classification: CTE

**HIM180 Internship: Health Information Mgmt** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**HIM182 Health Care Delivery Systems** 3 credits (3 lec hrs/wk)

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.

This course may be taken 1 time for credit.

Course classification: CTE

**HIM183 Health Information Systems** 3 credits (3 lec hrs/wk)

Health Information Systems introduces the history and current status of information systems in health care: Information architectures, administrative and clinical applications, evidence-based medicine, information retrieval, decision support systems, security and confidentiality, bioinformatics, information system cycles, the electronic health record, key health information systems and standards, and medical devices. Teaches strategies and tools to ensure the development and/or selection of health information systems. Discusses the role of health care information and communication technologies in health care delivery including their role in improving the quality, safety and efficiency of health care delivery.

This course may be taken 1 time for credit.

Course classification: CTE

**HIM185 Healthcare Financing and Compliance** 3 credits (3 lec hrs/wk)

Provides an understanding of the essential components of financing and compliance in health care facilities.

This course may be taken 1 time for credit.

Course classification: CTE

**HIM280 CWE: Health Information Mgmt** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

# HISTORY (HST)

## **HST101 History of Western Civilization** 3 credits (3 lec hrs/wk)

This course traces the history of the Western world from its ancient beginnings in Mesopotamia and Egypt up to the rebirth of Europe during the Renaissance.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST102 History of Western Civilization** 3 credits (3 lec hrs/wk)

The course traces the history of Western civilization from the Reformation/Age of Religious Wars to the beginning of the Industrial Age (1550 to 1815).

This course may be taken 1 time for credit.

Course classification: LDC

## **HST103 History of Western Civilization** 3 credits (3 lec hrs/wk)

The course traces the history of Western civilization from the aftermath of the French Revolution to the present – well almost (1815 to 1991).

This course may be taken 1 time for credit.

Course classification: LDC

## **HST104 History of the Middle East** 3 credits (3 lec hrs/wk)

A survey of Middle Eastern history with emphasis on modern, post-World War II era. Course will include geographic, religious, political and cultural issues of the region.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST145 Field Study: History** 1-3 credits (3 lab hrs/wk/cr)

A field study of significant historical features of a selected region. Students will apply techniques of inquiry and analysis from various academic disciplines in order to understand and resolve key issues at selected field study sites. Introductory lecture will survey key issues and introduce techniques required for a site-based field study followed by on-site visit. The three credit course does not have the separate lecture component that is a preview and summary experience; that is to be included in the ten-day trip.

This course may be taken 3 times for credit.

Course classification: LDC

## **HST180 Internship: History** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

## **HST195 History of the Vietnam War** 3 credits (3 lec hrs/wk)

This is an introductory survey of the Vietnam War which raged from the end of World War II to 1975. Topics include early Vietnamese history, Vietnam and French imperialism, Vietnam in World War II, the French - Vietnamese War, growing U.S. involvement in the 1950s, the creation of North and South Vietnam, the introduction of U.S. combat troops in the 1960s, the victory of Communist forces in 1975, and the impact of the war upon domestic U.S. politics and the role of the Cold War.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST201 History of the United States** 3 credits (3 lec hrs/wk)

The United States from colonial times to the mid-nineteenth century just prior to the Civil War. Introduces students to major themes of American social, economic, cultural, and political history.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST202 History of the United States** 3 credits (3 lec hrs/wk)

A history of the United States focusing on the major social, economical, political, and cultural developments beginning with the build-up to the Civil War and ending just before American involvement in World War I.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST203 History of the United States** 3 credits (3 lec hrs/wk)

A history of the United States focusing on the major social, economical, political, and cultural developments beginning with American involvement in World War I and concluding with the end of the Cold War.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST215 History of World War II** 3 credits (3 lec hrs/wk)

This course traces the causes, progression, and results of World War II, including political, social, and military development.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST240 Hist of Oregon and the South Coast** 3 credits (3 lec hrs/wk)

This course surveys the history and geography of Oregon within the Pacific Northwest region. Students will use supplemental readings and documents from Oregon's south coast to enhance their understanding of local history while studying the regional history.

This course may be taken 1 time for credit.

Course classification: LDC

## **HST280 CWE: History** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course offers career exploration and workplace experience within a widely defined number of supervised settings which provide professional experience in the field of history.

This course may be taken 12 times for credit.

Course classification: LDC

# HONORS PROGRAM (HON)

## **HON101 Introduction to Honors** 1 credit (1 lec hrs/wk)

Introduction to Honors provides students with an overview of the Honors Program, explores the values and habits that contribute to academic excellence, and helps students begin an E-portfolio.

This course may be taken 1 time for credit.

Course classification: LDC

## **HON102 Honors in Arts and Letters** 1 credit (1 lec hrs/wk)

Honors in Arts and Letters challenges students to think critically about important issues in arts and letters and explore the role of the arts in society.

This course may be taken 1 time for credit.

Course classification: LDC

**HON103 Honors in Math and Science** 1 credit (1 lec hrs/wk)  
Honors in Math and Science challenges students to think critically about important issues in math and science and explore the role of these disciplines in society.

This course may be taken 1 time for credit.

Course classification: LDC

**HON104 Honors in Social Sciences** 1 credit (1 lec hrs/wk)  
Honors in Social Sciences challenges students to think critically about the important questions addressed by social sciences and explore the role of the social sciences in society.

This course may be taken 1 time for credit.

Course classification: LDC

**HON110 Leadership in Honors** 1 credit (1 lec hrs/wk)  
This course is designed to provide a basic understanding of leadership and leadership theory. This class will assist students with developing a personal philosophy of leadership and an awareness of one's own style of leadership.

This course may be taken 1 time for credit.

Course classification: LDC

**HON115 Honors Capstone** 1 credit (1 lec hrs/wk)  
Prerequisite(s): (HON101 )  
Honors Capstone guides students in the completion of a meaningful project and a well-designed e-portfolio.

This course may be taken 1 time for credit.

Course classification: LDC

## HUMAN DEVELOPMENT (HD)

**HD100 College Success and Survival** 3 credits (3 lec hrs/wk)  
Facilitates adjustment to the college environment. Focuses on self-assessment, personal development, educational goal setting and critical thinking. Encourages interdisciplinary exploration, exposure to multiple modes of educational delivery, and structured academic journaling.

This course may be taken 1 time for credit.

Course classification: LDC

**HD100A College Success and Survival A** 1 credit (1 lec hrs/wk)  
First of a sequence of three one-credit courses dividing up the content of former HD\*100. Facilitates adjustment to the college environment.

Focuses on self-assessment, personal development, educational goal setting and critical thinking. First module focuses on personal responsibility, goal setting, motivation, time management, self-management and SWOCC specific information.

This course may be taken 1 time for credit.

Course classification: LDC

**HD101 Community Service Learning Exp** 3 credits (2 lec, 3 lab hrs/wk)  
A theoretical and practical course examining the principles and features of service-learning. Students will develop a personal understanding of civic engagement, ethics and leadership through direct and/or indirect service to a community-based organization and through critical reflection. Students will be required to complete 33 hours of service and participate in weekly seminars/discussions.

This course may be taken 1 time for credit.

Course classification: LDC

**HD101L Service Learning Lab** 1-9 credits (3 lab hrs/wk/cr)  
This course permits an instructor to offer an optional concurrent service learning component to supplement a course already taught. This component extends, reinforces, or applies the learning from the original course to meet a community need. May be repeated for a total of nine credit hours. A separate syllabus/course outline or schedule will be required for each class offered.

This course may be taken 9 times for credit.

Course classification: LDC

**HD102 College Nuts and Bolts** 1 credit (1 lec hrs/wk)  
Designed for first year students, provides a brief introduction to the essentials of college adjustment. Topics include: Accessing college resources, managing time, understanding college procedures, academic planning and maintaining academic standing.

This course may be taken 1 time for credit.

Course classification: LDC

**HD105 Finding Funding Through Scholarship** 1 credit (1 lec hrs/wk)  
Designed to increase students' success in obtaining scholarships. Topics covered are: Common scholarship criteria, application tips, essay writing, scholarship searches, and how scholarship committees make their decisions.

This course may be taken 1 time for credit.

Course classification: LDC

**HD110 Career and College Awareness** 2 credits (2 lec hrs/wk)  
This course focuses on preparing non-traditional students to enter college, training programs and/or employment. It helps students achieve their education and career goals by offering a variety of opportunities for students to identify and reflect on their strengths and interests. Aspects of this course are integrating prior knowledge with new information, improving vocabulary, reading skills, charts and tables and locating information.

This course may be taken 2 times for credit.

Course classification: LDC

**HD111 Math Success** 2 credits (1 lec, 2 lec lab hrs/wk)  
This course facilitates students to become successful math learners and critical thinkers. Students will be exposed to a variety of math study skills, problem solving skills, and systems of logic which will be put into immediate practice through group and individual exercises. Students will assess their own most favored learning styles and develop increased comfort in alternative learning situations. Students will also self-identify possible math and/or test anxiety which may be artificially reducing their math grades. Students are encouraged to be concurrently enrolled in a math course required for their majors so that the skills learned here can be put into immediate practice.

This course may be taken 1 time for credit.

Course classification: LDC

**HD112 Study Skills** 3 credits (3 lec hrs/wk)  
Designed to increase the students' success in college by assisting them in obtaining skills necessary to reach their educational objectives. Students are introduced to time management strategies, note taking, library usage, problem solving, exam strategies, muscle reading, and learning style.

This course may be taken 1 time for credit.

Course classification: LDC

**HD113 Stop Test Anxiety Now** 1 credit (1 lec hrs/wk)

Covers techniques for coping with debilitating test-taking anxiety, and improving overall test performance. Students will utilize biofeedback to assess individual levels of anxiety and map precise solutions to individual anxiety constructions.

This course may be taken 1 time for credit.

Course classification: LDC

**HD140 Career/Education Exploration** 1 credit (1 lec hrs/wk)

Provides tools needed to make an informed career and educational decision. Includes interest testing; self-assessment of skills, values, and attitudes. Learn how to locate occupational information and relate it to making informed educational choices.

This course may be taken 1 time for credit.

Course classification: LDC

**HD152 Stress Management** 2 credits (2 lec hrs/wk)

Introduces the types, cause, and effects of stress (physiological, psychological, emotional, cognitive, and intrapersonal/interpersonal) from a personal and academic perspective. Facilitates application of tools (including biofeedback) and techniques to identify, manage and re-frame stress to improve academic and life success.

This course may be taken 1 time for credit.

Course classification: LDC

**HD208 Career/Life Plan** 3 credits (3 lec hrs/wk)

Students learn a process for career selection, emphasizing development as an ongoing process. Attention is given to self-assessment (skills, interests, values, attitudes, motivational patterns), decision making models, job and career research techniques (including electronic resources), and development of a personal action plan.

This course may be taken 1 time for credit.

Course classification: LDC

## HUMAN DEVELOPMENT AND FAMILY STUDIES (HDFS)

**HDFS140 Contemporary American Families** 3 credits (3 lec hrs/wk)

Prerequisite(s): (WR121)

An introductory course in marriage and family studies that focuses on the diversity of the contemporary American family today as well as giving an overview of relationships and changes in the family environment and structure over time. Theoretical perspectives on family are examined and topics that influence families are included such as violence, gender, divorce, remarriage, economics, and culture.

This course may be taken 1 time for credit.

Course classification: LDC

**HDFS222 Understanding Families: Supporting Diversity Disability and Risk** 3 credits (3 lec hrs/wk)

A practical and theoretical course examining the traditional and evolving roles and functions of families in the 21st century. Topics include cultural, ethnic, and linguistic diversity, supporting families at risk, creating professional alliances with families, communicating and collaborating with families. Emphasis is placed on understanding how the family effects the development of children aged 0 – 8.

This course may be taken 1 time for credit.

Course classification: LDC

**HDFS225 Prenatal Infant and Toddler Development** 3 credits (3 lec hrs/wk)

This course covers principles of theory and development beginning with conception through three years of age. Emphasis is placed on physical, intellectual, emotional, and social development of the young child, including a strong focus on early brain development. The course readings and discussions will focus on typical development with an introduction to atypical development. Caregiving, teaching, and practice based strategies with young children are introduced.

This course may be taken 1 time for credit.

Course classification: LDC

**HDFS227 Parents as Partners in Education** 3 credits (3 lec hrs/wk)

Collaborative family partnerships are a key to success in early childhood programs. Course topics highlight formal and informal communication with parents and the community, and how to be culturally-responsive within these relationships. Students will learn practical strategies for partnering with families and the community to support, enhance, and maximize the quality of care and education for young children. Focus will be on acquiring the critical skills teachers need to establish effective, productive relationships with families and in the community where they teach.

This course may be taken 1 time for credit.

Course classification: CTE

**HDFS229 Child Development PreK - Adolescent** 3 credits (3 lec hrs/wk)

This course covers the principles of theory and development for children aged six through emerging adulthood. Emphasis is placed on physical, intellectual, emotional, and social development, including a strong focus on brain development. The course readings and discussions will focus on typical development with an introduction to atypical development. Caregiving, teaching, and practice based strategies with children and adolescents are introduced.

This course may be taken 1 time for credit.

Course classification: LDC

**HDFS247 Child Development 0-8** 3 credits (3 lec hrs/wk)

This course covers the principles of theory and development for children aged conception through eight years of age. Emphasis is placed on physical, intellectual, emotional, and social development of children, including a strong focus on brain development. The course readings and discussions will focus on typical development with an introduction to atypical development. Caregiving, teaching, and practice based strategies with young children are introduced.

This course may be taken 1 time for credit.

Course classification: LDC

**HDFS285 Prof Issues in Early Childhood Ed** 3 credits (3 lec hrs/wk)

This childhood education capstone course focuses on the diverse professional roles of early childhood educators in our present society by synthesizing knowledge and experience in the areas of ethics, conflict resolution, leadership, advocacy, and current topics in early childhood education. It includes substantial work assembling the professional portfolio required for graduation for Childhood Education and Family Studies Degrees.

This course may be taken 1 time for credit.

Course classification: LDC

**HDFS297 Parenting Ed and Early Childhood Home Visitor Capstone** 2 credits (4 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course is the capstone requirement for students applying for completion of the Parenting Education and Early Childhood Home Visitor Certificate. Students attend a series of community-based parenting education classes in their local community and interview a home visitor in a program that serves young children and their families. A final written paper reflecting on their interview and experience in the parenting education classes in relation to the certificate coursework completed, along with a professional development plan for themselves as parenting education facilitators and/or home visitors, will complete the Capstone requirement.

This course may be taken 1 time for credit.

Course classification: CTE

## HUMAN SERVICES (HS)

**HS100 Introduction to Human Services** 3 credits (3 lec hrs/wk)

Introduces the human services/social work profession with an emphasis on exploring the relationship between social welfare history, social policy, and the values skills and knowledge required for success in the field.

This course may be taken 1 time for credit.

Course classification: LDC

**HS154 Community Resources** 3 credits (3 lec hrs/wk)

Students will learn about the agencies and programs that form the foundation for human service/social work practice. Basic skills for needs assessment, resource referral, and effective service delivery will be introduced.

This course may be taken 1 time for credit.

Course classification: LDC

**HS155 Interviewing Theory and Techniques** 4 credits (4 lec hrs/wk)

Provides the theoretical and practical basis for effective interviewing. Emphasis on developing listening and communication skills beneficial for students of all disciplines.

This course may be taken 1 time for credit.

Course classification: LDC

## HUMANITIES (HUM)

**HUM180 Internship: Humanities** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**HUM204 World Mythology & Religion** 3 credits (3 lec hrs/wk)

The origins and character of world mythologies. This survey course explores the archetypal stories by which human consciousness shapes a sense of order and belonging in the natural and supernatural worlds. Emphasis will be given to the Shaman as storyteller, as living bridge between two worlds, as healer and shaper of community and culture.

This course may be taken 1 time for credit.

Course classification: LDC

**HUM205 World Mythology & Religion** 3 credits (3 lec hrs/wk)

A consideration of the great myths of India and the Far East. This survey course will explore the foundation myths and the sacred texts which give rise to and inform the great religions of the region, particularly Hinduism and the vehicles of Buddhism. Consideration will also be given to the indigenous myths of the Orient and the ways of life they support (i.e., Shinto, Daoism, Confucianism).

This course may be taken 1 time for credit.

Course classification: LDC

**HUM206 World Mythology & Religion** 3 credits (3 lec hrs/wk)

Treats the great myths and religions of Egypt and the fertile crescent. This survey course also treats Celtic and Nordic beliefs indigenous to Europe, and the mystery religions of Greece. The influence of the ancient myths of early pastoral and agrarian cultures on the Hebrew, Islamic and Christian religions, will be considered, as well as the departure those religions make from the mythic character of the world from which they emerged.

This course may be taken 1 time for credit.

Course classification: LDC

**HUM280 CWE: Humanities** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

## LIBRARY SCIENCE (LIB)

**LIB127 Navigating the 24/7 Library** 1 credit (1 lec, 3 lab hrs/wk)

This course helps students navigate the current information landscape, where resources are often available 24 hours a day and seven days a week. Students learn how to access digital and print resources used for academic research and how to search appropriate resources effectively and efficiently by using basic and advanced search techniques. Students conduct electronic searches to find both online and print materials by using the library's catalog, periodical databases, reference databases, and the Internet. Students evaluate the usefulness of information in terms of an academic research question, access information both in print and online, and write and annotated bibliography. Topics for discussion include the ethics of using information, the analysis of a research question, and the development of a research plan.

This course may be taken 1 time for credit.

Course classification: LDC

**LIB180 Internship Library** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

# MACHINE TOOL (MT)

## **MT101 Machine Tool Processes I** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD101 )

Introduce machine tool technology including an overview of manual lathes and milling machines, drill presses and grinders and basic measurements. The function, basic operation and set-up will be studied. This course may be taken 1 time for credit.

Course classification: CTE

## **MT102 Machine Tool Processes II** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( MT101 )

This second course in this sequence continues the study of machine tool operations and set-up, with emphasis on the vertical milling machines, tool sharpening by hand, and advanced lathe set-ups such as threading and tapering. Machine theory and precision measurement is studied and applied. Students gain sound understanding of why machine tools are the basis of manufacturing.

This course may be taken 1 time for credit.

Course classification: CTE

## **MT103 Machine Tool Processes III** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( MT102 )

In this third course of the basic sequence, the student will study the operation and set-up of the tool and cutter, grinder, the surface grinder and the horizontal bandsaw. Provides students with an opportunity to apply the skills developed in the two previous MT courses. Students will have the necessary understanding of why machine tools are the basis of manufacturing. More advanced machine set-ups will be studied and applied. The students will gain basic skills in the area of computer usage in the machine shop.

This course may be taken 1 time for credit.

Course classification: CTE

# MANUFACTURING TECHNOLOGY (MFG)

## **MFG180 Internship: Manufacturing** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

## **MFG280 CWE: Manufacturing** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

The student is required to be employed in a manufacturing-related position for an organization or company utilizing manufacturing principles, methods, techniques, and/or skills.

This course may be taken 12 times for credit.

Course classification: LDC

## **MFG4102 Mechanical Systems** 3 credits (2 lec, 2 lec lab hrs/wk)

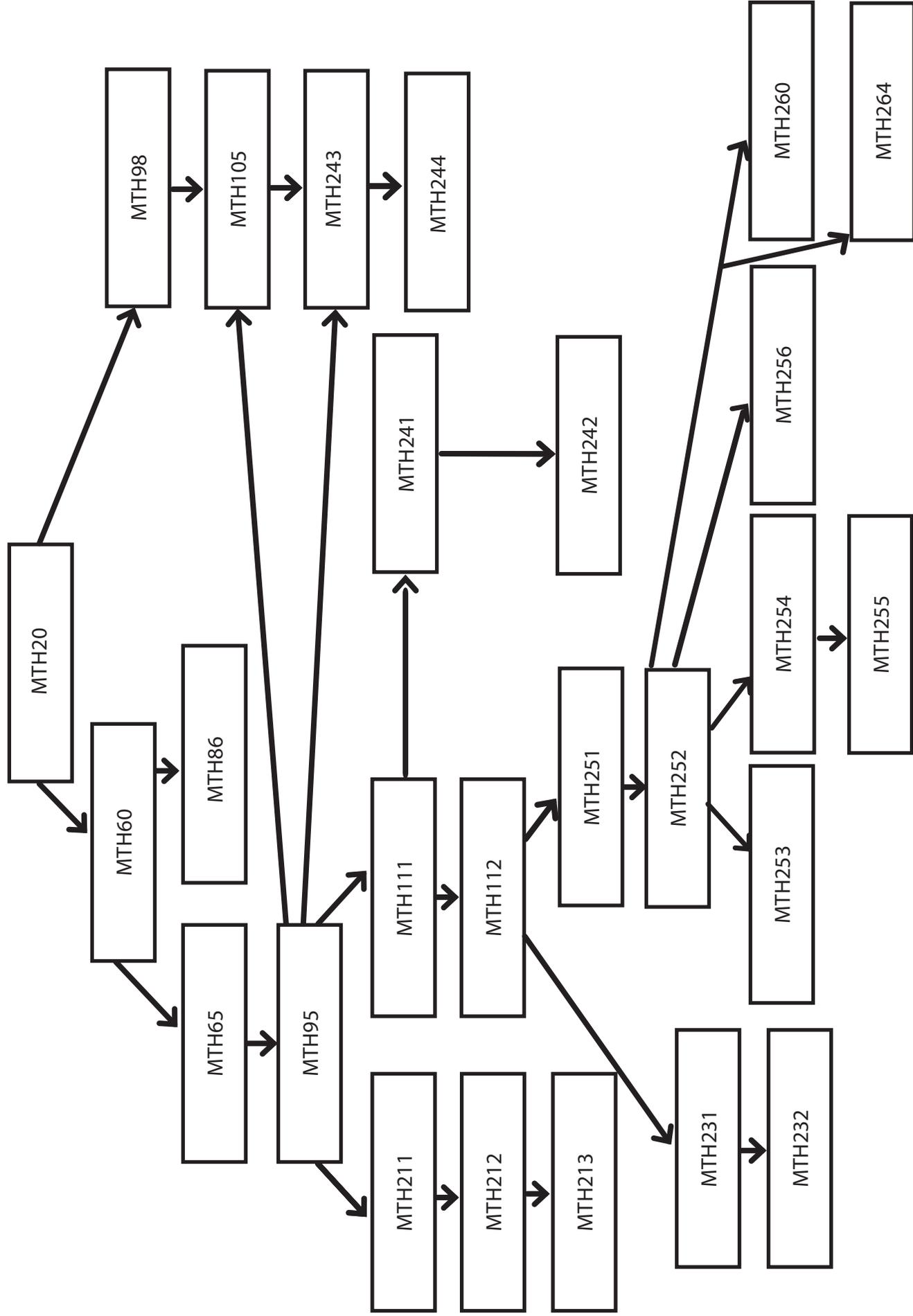
This course focuses on learning the fundamentals of mechanical power. Students learn common mechanical components from nuts and bolts to gears, gear boxes, shafts and bearings. Students perform common mechanical tasks, and learn to fine-tune drive systems involving belts, chains, etc. This course demonstrates the importance of lubrication in maintaining gears and other movable parts, and emphasizes operations to reduce friction and wasted motion, which are major contributors to energy inefficiency.

This course may be taken 1 time for credit.

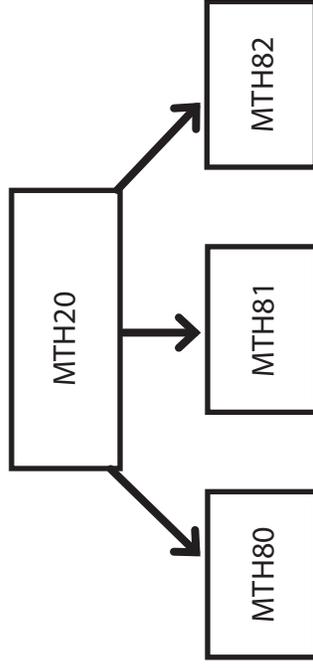
Course classification: CTE

# SEQUENCE OF MATHEMATICS

2020-2021



SEQUENCE OF MATHEMATICS  
COURSES (CTE)



# MATHEMATICS (MTH)

For information about Southwestern's math placement process or math pathways please talk to an advisor in the Student Success Center at 541-888-7405.

It is highly important that students consult with their advisor to make sure they are following the appropriate mathematics path needed for their chosen degree.

## **MTH105 Math in Society** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH95 ) or ( MTH98 )

Math in Society is a rigorous mathematics course designed for students in liberal arts and humanities majors. The course provides a solid foundation in quantitative reasoning, symbolic reasoning, and problem-solving techniques. Topics include financial literacy, probability, statistics, problem solving, and logic.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH111 College Algebra** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH95 )

A study of the concepts and principles considered in precalculus. Topics include: solution of equations and inequalities; analysis of functions and their graphs; polynomial and rational functions and their graphs; exponential and logarithmic functions and their graphs.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH112 Trigonometry** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH111 )

A study of the concepts and principles in precalculus. Topics include: Trigonometric functions and their graphs; trigonometric identities, equations, and formulas; oblique-triangle trigonometry; complex numbers and DeMoivre's theorem; sequences and series.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH180 Internship: Mathematics** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

## **MTH20 Basic Mathematics** 4 credits (4 lec hrs/wk)

A course designed to (1) introduce students to various applications of basic mathematics and (2) prepare students for elementary algebra by strengthening their foundations in the real number system. Topics include: Whole numbers and their operations; signed numbers and their operations; fraction and decimal notation; ration and proportion; percent notation; geometry; and, an introduction to variables and linear equations.

This course may be taken 1 time for credit.

Course classification: DEV

## **MTH211 Fundamentals of Elementary Mathematics I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH95 )

A foundation in mathematics for elementary teachers. Topics include: Introduction to problem solving, number systems, number theory, logic, sets, relations, and functions.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH212 Fundamentals of Elementary Mathematics II** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH211 )

A foundation in mathematics for elementary teachers. Topics include: Rational numbers, exponents, decimals and applications. Probability and statistics will be introduced.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH213 Fundamentals of Elementary Mathematics III** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH212 )

A foundation in mathematics for elementary teachers. Topics include: Euclidean geometry, constructive geometry, measurement, motion and tessellation.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH231 Elements of Discrete Mathematics I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH112 )

Topics include: Propositional calculus (the logic of compound statements), predicate calculus (the logic of quantified statements), elementary number theory and proof methods, sequences and mathematical induction, set theory. The first course of a two-term sequence strongly recommended for computer engineering, computer science and mathematics majors.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH232 Elements of Discrete Mathematics II** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH231 )

Topics include: Functions, recursion, graphs of functions, coordinate diagrams, order notation, efficiency of algorithms, relations, partially and totally ordered sets, (topological) graph and tree theory. The second course of a two-term sequence strongly recommended for computer engineering, computer science and mathematics majors.

This course may be taken 1 time for credit.

Course classification: LDC

## **MTH241 Calculus for Bus and Soc Science I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH111 )

Review of functions and their graphs. Overview of limits and continuity. Introduction to differential calculus of polynomial and rational functions. Cover rules and techniques of differentiation. Introduction to First and Second Derivative Tests, curve sketching, and optimization. Applications in economics, business, social and managerial sciences.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH242 Calculus for Bus and Soc Science II** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH241 )

Introduction to exponential and logarithmic functions and their derivatives. Uses of exponential and natural logarithmic functions. Introduction to integral calculus of polynomial, rational, exponential, and logarithmic functions. Cover Riemann sums, Fundamental Theorem of Calculus, and techniques of integration. Applications in the social and manager sciences.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH243 Intro to Probability and Statistics** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH105 ) or ( MTH95 )

Introduces the basic practice of statistics. Topics include descriptive statistics, graphical summaries of data; concepts of data collection and sampling design; probability: discrete and continuous probability distributions, central limit theorem; inferential statistics: estimating population parameters including means and proportions using confidence intervals, tests of significance on a single population mean or proportion.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH244 Probability & Statistics II** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH243 )

Offers a second course open to all majors covering testing of two-sample problems, linear regression and correlation, chi-squared tests, one-way and two-way analysis of variance, and non-parametric methods.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH251 Calculus I Differential Calculus** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( MTH112 )

Topics include: pre-calculus concepts and principles; limits and their properties, continuous functions; indeterminate forms and l'Hôpital's rule; derivatives and their properties; the chain rule, implicit differentiation; relative extrema, the first and second derivative tests; applications involving rectilinear motion of a particle and optimization of functions. This course covers the standard differential calculus topics required for engineering, mathematics, and science majors.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH252 Calculus II Integral Calculus** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( MTH251 )

Topics include: antiderivatives, Riemann sums, integrals and their properties; the first and second fundamental theorems of calculus; calculation of length, area, volume, work, and resultant force via integration; integrals of exponential, logarithmic, hyperbolic, trigonometric and inverse trigonometric functions; integration by substitutions, tables, and by parts. This course covers the standard integral calculus topics required for engineering, mathematics, and science majors.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH253 Calculus III Infinite Sequences And Series** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( MTH252 )

Topics include: improper integrals; differential equations; infinite sequences and series; convergence tests for infinite series; Taylor series for functions; translated and rotated conic sections; polar and parametric equations; calculus in polar and parametric. This course covers the standard sequences and series topics required for engineering, mathematics, and science majors.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH254 Vector Calculus I** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( MTH252 )

Topics include three-dimensional space and coordinate systems, analytic geometry, vector algebra, space curves, surfaces, vector-valued functions, vector calculus, parametrizations, curvature, functions of several variables, and derivatives of functions of several variables.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH255 Vector Calculus II** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( MTH254 )

Topics include tangent planes and gradient; optimization of functions of several variables; iterated integration, multiple integrals; divergence and curl of vector fields, line and surface integrals; Green's, Gauss', and Stokes' theorems.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH256 Differential Equations** 4 credits (3 lec, 2 lec lab hrs/wk)

Prerequisite(s): ( MTH252 )

Topics include first-order linear and nonlinear ODEs; second-order linear ODEs; series solutions to second-order linear ODEs; Laplace transforms; systems of linear ODEs.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH260 Matrix Methods and Linear Algebra** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH252 )

Topics include: Matrix concepts and algebra; determinants and inverses of matrices; solution methods for systems of linear equations; linear independence linear transformations and vector spaces; bases and coordinates; eigenvalues and eigenvectors; diagonalization of matrices.

This course covers the standard linear algebra topics required for engineering, mathematics, and science majors.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH264 Introduction to Matrix Algebra and Power Series** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH252 )

Topics include: Introduction to matrix algebra; systematic solution to systems of linear equations; linear transformations; eigenvalue problems. This course covers the standard matrix algebra topics required for engineering, mathematics, and science majors. Convergence and divergence of numerical series, including geometric series. Series of functions. Power series and their analytic properties. Taylor series expansions and Taylor polynomials.

This course may be taken 1 time for credit.

Course classification: LDC

**MTH280 CWE: Math** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

**MTH60 Algebra I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH20 )

A study of the concepts and principles considered in algebra. Topics include: Signed numbers; algebraic expressions; linear equations and inequalities; polynomial expressions, operations, and factorizations; quadratic equations.

This course may be taken 1 time for credit.

Course classification: DEV

**MTH65 Algebra II** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH60 )

A study of the concepts and principles considered in algebra. Topics include: Graphing linear equations and functions; factoring; solving polynomial equations; rational expressions, equations, and functions; and systems of linear equations and matrices.

This course may be taken 1 time for credit.

Course classification: DEV

**MTH80 Technical Mathematics I** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH20 ) or ( MTH55 )

This course includes basic algebraic concepts and their application in technical scenarios involving measurement precision and accuracy, materials consumption, labor and production estimates, product design, dimensioning and tolerances, economical layout, takeoffs and estimates, and metal bending and stretchouts. Offered by the mathematics department in cooperation with the career technical education faculty.

This course may be taken 1 time for credit.

Course classification: DEV

**MTH81 Applied Mathematics for Culinary Arts** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH20 ) or ( MTH55 ), or instructor consent

Includes basic algebraic concepts with culinary applications, basic statistics and graphing, graphing in a rectangular coordinate system, and weights, measures and metric conversion. Offered by the mathematics department in cooperation with the culinary education faculty. Enrollment in the culinary program required as a co-requisite for this course.

This course may be taken 1 time for credit.

Course classification: DEV

**MTH82 Business Mathematics** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH20 )

This course includes basic algebraic concepts and their application in business scenarios involving discounts, pricing and inventory control, payrolls and banking, simple and compound interest, billing, accounting, taxes, and depreciation. Offered by the mathematics department in cooperation with the business faculty.

This course may be taken 1 time for credit.

Course classification: DEV

**MTH86 Computer Technology Mathematics** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH60 )

This course introduces students to the foundational mathematics of the computer industry. Mathematic topics including scientific notation, decimal, binary and hexadecimal arithmetic, sets and logic, and Boolean Algebra and their applications in the computer industry will be covered. Offered by the mathematics department in cooperation with CS/CIS faculty.

This course may be taken 1 time for credit.

Course classification: DEV

**MTH95 Intermediate Algebra** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH65 )

A study of the concepts and principles considered in intermediate algebra. Topics include: Radical expressions and equations, complex numbers, quadratic equations, quadratic functions and their graphs, conic sections; absolute value equations and inequalities; absolute value functions and their graphs.

This course may be taken 1 time for credit.

Course classification: DEV

**MTH98 Math Literacy** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( MTH20 )

Math Literacy is a course designed for liberal arts and humanities majors. This course develops quantitative reasoning, modeling, and problem solving skills needed in MTH105 and in other college courses in programs not requiring calculus. For students not needing calculus, MTH98 is an alternative to MTH 60/65/95 as a pathway to MTH105. Topics include rational numbers and their representations, linear relationships, proportional reasoning, statistics, and probability.

This course may be taken 1 time for credit.

Course classification: DEV

## MUSIC (MUS)

**MUS101 Music Fundamentals** 3 credits (3 lec hrs/wk)

A course to instruct in the fundamentals of music. A preparatory course for private instruction, ensemble participation and for a better understanding of music and music history. Music fundamentals, scales, key signatures, meter, notation, chords, non-harmonics, introduction to piano, and sight singing. Recommended for music minors, beginning musicians and preparatory for some music majors. (Contact music advisor for proper placement.)

This course may be taken 1 time for credit.

Course classification: LDC

**MUS111 Music Theory I** 3 credits (3 lec hrs/wk)

A course to instruct in the fundamentals of music, figured bass analysis, four-part composition, chords with sevenths, secondary dominants, modulation and basic musical forms. This is a preparatory course for private instruction, for ensemble participation, and for a better understanding of music and music history. Required for music majors and minors, recommended for beginning and intermediate musicians.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS112 Music Theory II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MUS111 )

A course to instruct in the fundamentals of music, figured bass analysis, four-part composition, chords with sevenths, secondary dominants, modulation and basic musical forms. This is a preparatory course for private instruction, for ensemble participation, and for a better understanding of music and music history. Required for music majors and minors, recommended for beginning and intermediate musicians. This course may be taken 1 time for credit.

Course classification: LDC

**MUS113 Music Theory III** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MUS112 )

A course to instruct in the fundamentals of music, figured bass analysis, four-part composition, chords with sevenths, secondary dominants, modulation and basic musical forms. This is a preparatory course for private instruction, for ensemble participation, and for a better understanding of music and music history. Required for music majors and minors, recommended for beginning and intermediate musicians. This course may be taken 1 time for credit.

Course classification: LDC

**MUS114 Aural Skills I** 1 credit (2 lec lab hrs/wk)

Corequisite(s): ( MUS111 )

Learn to hear music and identify tones and chords (dictation), transfer music notation and communicate notation by voice (sight singing). Learn to hear what we see (sight singing) and be able to see what we hear (dictation).

This course may be taken 1 time for credit.

Course classification: LDC

**MUS115 Aural Skills I** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS114 )

Corequisite(s): ( MUS112 )

Learn to hear music and identify tones and chords (dictation), transfer music notation and communicate notation by voice (sight singing). Learn to hear what we see (sight singing) and be able to see what we hear (dictation).

This course may be taken 1 time for credit.

Course classification: LDC

**MUS116 Aural Skills I** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS115 )

Corequisite(s): ( MUS113 )

Learn to hear music and identify tones and chords (dictation), transfer music notation and communicate notation by voice (sight singing). Learn to hear what we see (sight singing) and be able to see what we hear (dictation).

This course may be taken 1 time for credit.

Course classification: LDC

**MUS118 Music and Computers** 3 credits (3 lec hrs/wk)

This course is designed to give students a fundamental understanding of how computers are used in the music field. Students will be introduced to MIDI (Musical Instrument Digital Interface) which is an industry standard protocol utilized by all digital music instruments. In addition, students will be introduced to various software packages that make use of this MIDI technology. Students will also be given hands-on experience working with a computer and digital musical instruments and sound modules culminating in their ability to set up their own MIDI studio, or work in a MIDI studio that is already in place (i.e. a recording studio or educational classroom).

This course may be taken 1 time for credit.

Course classification: LDC

**MUS131 Piano Class** 1 credit (2 lec lab hrs/wk)

Piano basics and music fundamentals. Learn to read notes, basic music symbols, perform simple chords, major scales, and repertoire. Simple transposition and harmonization will also be taught.

This course may be taken 3 times for credit.

Course classification: LDC

**MUS132 Piano Class** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS131 )

Based upon continuing the work in MUS131, all major keys - introduction to minor keys. Performance of chord progressions in major & minor keys, transposition, simple modulations using deceptive cadences, sight reading, and repertoire.

This course may be taken 3 times for credit.

Course classification: LDC

**MUS133 Piano Class** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS132 )

Based upon continuing the work in MUS132, all major keys - introduction to minor keys. Performance of chord progressions in major & minor keys, transposition, simple modulations using deceptive cadences, sight reading, and repertoire.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS134 Voice Class** 1 credit (1 lec hrs/wk)

A study of vocal basics. An introduction to music fundamentals, tone production, abdominal breathing, vowel-consonant clarity and relaxation techniques.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS137 Guitar Class** 1 credit (1 lec hrs/wk)

Guitar basics and music fundamentals. Learn to read notes, basic music symbols, perform simple to advanced chords, strumming-picking techniques and "barring." Introduction to classical guitar methods.

This course may be taken 3 times for credit.

Course classification: LDC

**MUS161 Jazz Improvisation Blues And Beginnings** 1 credit (2 lec lab hrs/wk)

Corequisite(s): ( MUP105 )

Blues and beginning improvisation. Listening, theory demonstration, explanation and using improv in performance.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS170 Introduction to Recording Technique** 3 credits (2 lec, 2 lec lab hrs/wk)

This course is designed to teach students how to record music using state of the art digital recording equipment. The use of industry standard digital recording software, in conjunction with a computer and mixing equipment, will be utilized in a limited "hands on" environment. Topics of instruction will include, microphone placement, basic acoustic principles, multiple tracking techniques including bouncing and splitting, mixing multiple tracks into two tracks (stereo), working with analog and digital signals, final- and post-production of recordings, making CD's, syncing to video recordings, etc.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS180 Internship: Music** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**MUS201 Intro to Music and its Literature** 3 credits (3 lec hrs/wk)

The study of musical styles and the historical context of music from Antiquity through the Renaissance. Emphasis is on the examination and subsequent appreciation of the music literature and the composers who wrote that music in these time periods. Listening skills for music will also be developed, concentrating on the development of a deeper understanding of music and its role in the cultural context of various historical time periods.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS202 Intro to Music and its Literature** 3 credits (3 lec hrs/wk)

The study of musical styles and the historical context of music from the Early Baroque Period through the late Classical Period. Emphasis is on the examination and subsequent appreciation of the music literature and the composers who wrote the music in these time periods. Listening skills for music will also be developed, concentrating on the development of a deeper understanding of music and its role in the cultural context of the various historical time periods.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS203 Intro to Music and its Literature** 3 credits (3 lec hrs/wk)

The study of musical styles and the historical context of music from the Romantic Period (1827 to 1900) through the twentieth century and into the twenty-first century. Emphasis is on the examination and subsequent appreciation of the music literature and the composers who wrote that music in these time periods. Listening skills for music will also be developed, concentrating on the development of a deeper understanding of music and its role in the cultural context of the various historical time periods.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS205 Intro to Jazz History** 3 credits (3 lec hrs/wk)

An introduction to the one true American music genre. Exploring the beginning of jazz, early blues, Dixieland, the big band era, bebop, fusion, free form jazz, contemporary jazz, and straight ahead jazz. Students will also be introduced to rhythm and blues, gospel and early rock and roll.

This course has been approved to meet the Cultural Literacy requirement.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS206 Intro to History of Rock and Roll** 3 credits (3 lec hrs/wk)

A survey of rock music from its origins to the present as revealed through the study of the most innovative and influential artists of this American musical form. Emphasis is placed on building listening and comprehension skills through listening to rock and roll, in-class discussion of the music, class assignments, research, and reading of the text.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS207 The Beatles and Their Music** 3 credits (3 lec hrs/wk)

The Beatles rose to prominence in the 1960's and this course will look at how they got started, following them through the British Invasion culminating in their final roof-top concert at Abbey Road studios and their final album "Let It Be" which was released in 1970. While looking at the drug counter-culture as only part of the myth that surrounds the Beatles, this course will also look at how their music came together both on the road and in the recording studio. It will also examine how and why their music is still popular today, 50 years after their first #1 hit!

This course may be taken 1 time for credit.

Course classification: LDC

**MUS211 Advanced Music Theory I** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MUS113 )

Corequisite(s): ( MUS224 )

A study of music that includes the extended diatonic and chromatic harmonies indicative of the Late Baroque, Classical and early Romantic Periods. Included in this study is the writing of four-part SATB part writing, analysis of form, melody and harmony including the use of secondary dominants, modulation, neapolitan harmonies and mode mixture. Larger forms such as Rondo and Sonata Allegro will also be introduced.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS212 Advanced Music Theory II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MUS211 )

Corequisite(s): ( MUS225 )

A study of polyphony, counterpoint, chromatic chords and twentieth century composition.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS213 Advanced Music Theory III** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MUS212 )

Corequisite(s): ( MUS226 )

A study of polyphony, counterpoint, extended and chromatically altered chords and twentieth century composition.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS221 Arranging I** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS113 )

Basic arranging techniques, instrumentation and notation practices for live rhythm section, lead vocal, score preparation, parts preparation, notation and nomenclature in contemporary styles.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS222 Arranging II** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS221 )

A continuation of rhythm section arranging with the addition of one or two horns; saxophone and trumpet. Discussion of transposition and range on contemporary music styles.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS223 Arranging III** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS222 )

The third level of this series focuses on various contemporary applications of small horn section writing and rhythm section. Voicings and styles is discussed.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS224 Sight Singing Ear Training II** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS116 )

Corequisite(s): ( MUS211 ) or ( MUS212 ) or ( MUS213 )

This class is designed to teach the student to hear, identify, write and sing melodies, chords and rhythm from sight and by listening to melodic and harmonic material played for the student. Music majors take three terms.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS225 Sight Singing Ear Training II** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS224 )

Corequisite(s): ( MUS212 )

This class is designed to teach the student to hear, identify, write and sing melodies, chords and rhythm from sight and by listening to melodic and harmonic material played for the student. Music majors take three terms.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS226 Sight Singing Ear Training II** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): ( MUS225 )

Corequisite(s): ( MUS213 )

This class is designed to teach the student to hear, identify, write and sing melodies, chords and rhythm from sight and by listening to melodic and harmonic material played for the student. Music majors take three terms.

This course may be taken 1 time for credit.

Course classification: LDC

**MUS280 CWE: Music** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course offers career exploration and workplace experience within a widely defined number of supervised settings which provide professional experience in the field of music.

This course may be taken 12 times for credit.

Course classification: LDC

## MUSIC PERFORMANCE (MUP)

**MUP105 Jazz Band** 1 credit (2 lec lab hrs/wk)

The sounds of the "Big Band" era. This group performs regularly both locally and throughout the State. Audition first class.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP114 Stage Band** 1 credit (2 lec lab hrs/wk)

A performance ensemble which rehearses and performs the appropriate musical literature chosen by the instructor. Instruction will be given to individuals as well as the ensemble as how to improve the overall musical effect. Pop ballads to jazz both traditional and non-traditional. Intermediate and advanced musicians are admitted. Student may need to audition.

This course may be taken 1 time for credit.

Course classification: LDC

**MUP121 Symphonic Choir** 1 credit (2 lec lab hrs/wk)

A large choral ensemble performing the works of major composers, encompassing all musical periods and styles. Students may be asked to audition.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP125 Vocal Jazz Southwesterners** 2 credits (4 lec lab hrs/wk)

Pop ballads, early rock and roll, traditional jazz, and blues will be the material rehearsed and performed by this ensemble. Emphasis will be placed upon the dynamics of live performance.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP131 Chamber Choir** 2 credits (4 lec lab hrs/wk)

Small choral ensemble performing the major works and the octavo literature of prominent composers of every musical period. Student may be asked to audition.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP142 Orchestra** 1 credit (2 lec lab hrs/wk)

Strings, woodwinds, brass, and percussion performing the works of composers from every musical period. Intermediate and advanced musicians admitted. Students may be asked to audition.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP171 Private Instruction: Piano** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP174 Private Instruction: Voice** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP175 Private Instruction: Violin** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP178 Private Instruction: Bass Guitar** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP179 Private Instruction: Guitar** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 1 time for credit.

Course classification: LDC

**MUP181 Private Instruction: Flute** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP182 Private Instruction: Oboe** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP183 Private Instruction: Clarinet** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP184 Private Instruction: Saxophone** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP186 Private Instruction: Trumpet** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP187 Private Instruction: French Horn** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP188 Private Instruction: Trombone** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP191 Private Instruction: Percussion** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP202B Community Band** 1 credit (2 lec lab hrs/wk)

A performance ensemble which rehearses and performs marches, traditional band literature, classical literature arranged for concert band. Intermediate and advanced musicians are admitted. Students may be asked to audition.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP271 Private Instruction: Piano** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP274 Private Instruction: Voice** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP275 Private Instruction: Violin** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP278 Private Instruction: Bass Guitar** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP279 Private Instruction: Guitar** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP281 Private Instruction: Flute** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP283 Private Instruction: Clarinet** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP284 Private Instruction: Saxophone** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP286 Private Instruction: Trumpet** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP287 Private Instruction: French Horn** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP288 Private Instruction: Trombone** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

**MUP291 Individual Lessons: Percussion** 1 credit (1 lec hrs/wk)

Individual lessons are arranged with the instructor, based upon available time and space. Instructor consent is required for all private lessons. All credits for private lessons is transferable. Music majors are expected to have a primary instrument of performance and be enrolled for individual instruction. Lessons are given for all levels of musicianship.

This course may be taken 6 times for credit.

Course classification: LDC

## NATURAL RESOURCES (NR)

**NR180 Internship: Natural Resources** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**NR201 Managing Natural Res for the Future** 3 credits (3 lec hrs/wk)

This course offers an overview of the complexities involved in managing natural resources in the Pacific Northwest and elsewhere, exposure to major natural resources issues, and development of critical thinking skills useful in seeking solutions.

This course may be taken 1 time for credit.

Course classification: LDC

**NR260 Watershed Processes** 4 credits (3 lec, 3 lab hrs/wk)

This course is about learning both the concepts and physical processes of water movement as well as the techniques to solve hydrologic problems and analyze hydrologic data. This class has a quantitative component. Covering quantify rates of water exchange between the atmosphere, the ground, and the ocean. The class is structured around the hydrologic cycle, which can be pictured as a set of linked processes that cycle water between the ocean, atmosphere, and land surface. We will examine the individual components of the hydrologic cycle, as well as interactions between these components.

This course may be taken 1 time for credit.

Course classification: LDC

**NR280 CWE: Natural Resources** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

# NURSING (NRS)

**NRS110 Foundations of Nursing Health Promotion** 9 credits (5 lec, 3 lab, 6 lec lab hrs/wk)

Prerequisite(s): Instructor consent

This course introduces the learner to the framework of the OCNE curriculum. The emphasis on health promotion across the life span includes learning about self-health as well as patient health practices. To support self and patient health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview patients 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. Populations studied in the course include children, adults, older adults and the family experiencing a normal pregnancy. Includes classroom and clinical learning experiences. The clinical portion of the course includes practice with therapeutic communication skills and selected core nursing skills identified in the OCNE Core Nursing Skills document.

This course may be taken 1 time for credit.

Course classification: CTE

**NRS111 Found of Nrsng in Chronic Illness I** 6 credits (2 lec, 3 lab, 6 lec lab hrs/wk)

Prerequisite(s): ( NRS110 ), or instructor consent

Corequisite(s): ( NRS230 ) or ( NRS232 )

This course introduces assessment and common interventions (including technical procedures) for patients with chronic illnesses common across the life span in multiple ethnic groups. The patient's and family's lived experience of the condition is explored. Clinical practice guidelines and research evidence are used to guide clinical judgments in care of individuals with chronic conditions. Multidisciplinary team roles and responsibilities are explored in the context of delivering safe, high quality health care to individuals with chronic conditions (includes practical and legal aspects of delegation). Cultural, ethical, legal and health care delivery issues are explored through case scenarios and clinical practice. Case exemplars include children with asthma, adolescents with a mood disorder, adults with type 2 diabetes, and older adults with dementia. The course includes classroom and clinical learning experiences.

This course may be taken 1 time for credit.

Course classification: CTE

**NRS112 Foundations of Nursing in Acute I** 6 credits (2 lec, 3 lab, 6 lec lab hrs/wk)

Prerequisite(s): ( NRS110 and NRS111 and NRS230 and NRS232 ), or instructor consent

Corequisite(s): ( NRS231 and NRS233 )

This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients across the lifespan 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, patient-centered care. Includes classroom and clinical learning experiences.

This course may be taken 1 time for credit.

Course classification: CTE

**NRS115 LPN Transition to OCNE** 6 credits (3 lec, 3 lab, 4 lec lab hrs/wk)

Prerequisite(s): ( NRS230 and NRS232 ), or instructor consent

Corequisite(s): ( NRS231 and NRS233 )

This course introduces the learner to the framework of the SOCC and Oregon Consortium for Nursing Education (OCNE) curriculum including the OCNE competencies, benchmarks and the clinical judgment model. The student is introduced to the role and practice of the registered nurse. Concepts and applicability of the ANA Code of Ethics will be emphasized. Students will be introduced to evidenced-based care including levels of evidence. Concepts of health promotion, chronic care and acute care as applied to nursing practice will be explored. Case studies will be used to provide students opportunities to demonstrate critical thinking in the provision of patient care. The course includes classroom, simulation and lab learning experiences including evaluation of certain learning skills.

This course may be taken 1 time for credit.

Course classification: LDC

**NRS121 Nursing Concepts and Clinical Practice** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): Instructor consent

Introduces concepts of the Southwestern Oregon Community College and OCNE nursing curriculum and reviews previously learned information and skills for students who have previous nursing education.

This course may be taken 1 time for credit.

Course classification: CTE

**NRS221 Found of Nrsng in Chronic Illness II and End of Life** 9 credits (5 lec, 3 lab, 6 lec lab hrs/wk)

Prerequisite(s): ( NRS222 ), or instructor consent

This course builds on NRS 111, Foundations of Nursing in Chronic Illness I. Chronic Illness II expands the student's knowledge related to family care giving, symptom management and end of life concepts. These concepts are 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 the assessment and management of concurrent illnesses and conditions are developed within the context of patient and family preferences and needs. Skills related to enhancing communication and collaboration as a member of an interprofessional team and across health care settings are further explored. Exemplars include patients with chronic mental illness and addictions as well as other chronic conditions and disabilities affecting functional status and family relationships. The course includes classroom and clinical learning experiences

This course may be taken 1 time for credit.

Course classification: CTE

**NRS222 Found of Nrsng in Acute Care II and End of Life** 9 credits (5 lec, 3 lab, 6 lec lab hrs/wk)

Prerequisite(s): ( NRS112 and NRS231 and NRS233 ), or instructor consent

This course builds on Nursing in Acute Care I, focusing on more complex and/or unstable patient care conditions, some of which may result in death. These patient care conditions require strong noticing and rapid decision making skills. Evidence base is used to support appropriate focused assessments, and effective, efficient nursing interventions. Life span and developmental factors, cultural variables, and legal aspects of care frame the ethical decision-making employed in patient choices for treatment or palliative care for disorders with an acute trajectory. Case scenarios incorporate prioritizing care needs, delegation and supervision, and family and patient teaching for either discharge planning or end-of-life care. Exemplars include acute conditions affecting multiple body systems. Includes classroom and clinical learning experiences.

This course may be taken 1 time for credit.

Course classification: CTE

**NRS224 Scope of Practice/Integrated Practicum** 9 credits (2 lec, 21 lab hrs/wk)

Prerequisite(s): ( NRS221 ), or instructor consent

This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. Faculty/Clinical Teaching Associate/Student Triad Model provides a context that allows the student to experience the nursing role in a selected setting, balancing demands of professional nursing and lifelong learner. Analysis and reflection throughout the clinical 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.

This course may be taken 1 time for credit.

Course classification: CTE

**NRS230 Clinical Pharmacology I** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BI231 and BI232 and BI233 and BI234 )

Corequisite(s): ( BI234 )

This course introduces the theoretical background that enables students to provide safe and effective care related to drugs and natural products to persons throughout the lifespan. It includes the foundational concepts of principles of pharmacology, nonopioid analgesics, and antibiotics, as well as additional classes of drugs. Students will learn to make selected clinical decisions in the context of nursing regarding using current, reliable sources of information, understanding of pharmacokinetics and pharmacodynamics, developmental physiologic considerations, 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. This course may be taken 1 time for credit.

Course classification: CTE

**NRS231 Clinical Pharmacology II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BI231 and BI232 and BI233 and BI234 and NRS230 )

This sequel to Clinical Pharmacology I continues to provide the theoretical background that enables students to provide safe and effective nursing care related to drugs and natural products to persons throughout the lifespan. Students will learn to make selected clinical decisions in the context of nursing 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. This course may be taken 1 time for credit.

Course classification: CTE

**NRS232 Pathophysiological Processes I** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BI231 and BI232 and BI233 and BI234 )

Corequisite(s): ( BI234 )

This course introduces pathophysiological processes that contribute to many different disease states across the lifespan and human responses to those processes. It includes the foundational concepts of cellular adaptation, injury, and death; inflammation and tissue healing; fluid and electrolyte imbalances; and physiologic response to stressors and pain, as well as additional pathophysiological processes. Students will learn to make selective clinical decisions in the context of nursing regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused nursing assessments based on knowledge of pathophysiological processes, teaching persons from diverse populations regarding pathophysiological processes, and communicating with other health professionals regarding pathophysiological processes.

This course may be taken 1 time for credit.

Course classification: CTE

**NRS233 Pathophysiological Processes II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( BI231 and BI232 and BI233 and BI234 and NRS232 )

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 in the context of nursing regarding using current, reliable sources of pathophysiology information, selecting and interpreting focused nursing 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 additional pathophysiological processes not contained in Pathophysiological Processes I.

This course may be taken 1 time for credit.

Course classification: CTE

# NURSING - CNA (NUR)

**NUR120 Nursing Assistant Level 1** 9 credits (5 lec, 12 lab hrs/wk)

Prerequisite(s): Instructor consent

This course prepares students to work as nursing assistants in long-term care facilities, home care, hospitals and adult foster homes. It consists of a minimum of 187 hours of instruction and work experience in a licensed nursing facility. The course prepares students for eligibility to take the State certification examination to become a Certified Nursing Assistant 1 (CNA 1).

This course may be taken 1 time for credit.

Course classification: CTE

**NUR220 Certified Nursing Assistant Level 2** 5 credits (3 lec, 6 lab hrs/wk)

Prerequisite(s): Instructor consent

The course is for the currently Certified Nursing Assistant 1 who assists licensed nursing personnel in the provision of nursing care. This course will expand the breadth and depth of the Certified Nursing Assistant 1's knowledge, skills and abilities. It will prepare the CNA 1 for certification for CNA-2 Acute Care as specified by the Oregon State Board of Nursing. This course may be taken 1 time for credit.

Course classification: CTE

# PHARMACY TECH (PHAR)

**PHAR180 Internship: Pharmacy** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**PHAR280 CWE: Pharmacy** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore a variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**PHAR5470 Introduction to Pharmacy: Practice And Law** 4 credits (4 lec hrs/wk)

This course introduces students to the career of Pharmacy Technician. It explores history, potential workplace options and personnel related to pharmaceutical services, including pharmacy ethics. A general overview of the knowledge base required for the occupation and an introduction to standard pharmacy references, federal & state law, is provided.

This course may be taken 1 time for credit.

Course classification: CTE

**PHAR5472 Pharmacology I** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( AH111 )

This basic course introduces the student to generic and trade names of common therapeutic drugs. Drug categories and drug use in prevention of or interference with disease processes are discussed. Important contraindications, side effects, cautions, and interactions regarding drug use are included. The course also covers common nonprescription drugs. This course may be taken 1 time for credit.

Course classification: CTE

**PHAR5473 Pharmacology II** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( PHAR5472 and PHAR5474 and PHAR5475 )

This basic course continues the student's introduction to generic and trade names of common therapeutic drugs. Drug categories and drug use in prevention of or interference with disease processes are discussed. Important contraindications, side effects, cautions, and interactions regarding drug use are included. The course also covers common nonprescription drugs.

This course may be taken 1 time for credit.

Course classification: CTE

**PHAR5474 Pharmacy Calculations** 2 credits (2 lec hrs/wk)

Prerequisite(s): ( MTH60 )

This course reviews basic mathematics and includes the application of math concepts in the performance of certain pharmacy technician duties (and other health-care provider duties). It covers systems of weight, measure and temperature and the conversion from one system into another. The basics of retail accounting are introduced. Students develop the capabilities needed to calculate dosages, drug amount or volume, percent concentrations, milli-equivalents and intravenous infusion rates.

This course may be taken 1 time for credit.

Course classification: CTE

**PHAR5475 Pharmacy Technician Procedures I** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( PHAR5470 )

This course is designed to provide students with the knowledge and skills needed in the performance of technical pharmacy tasks. These include: pharmacy operation, prescription processing, compounding and packaging, communication skills and emerging new pharmacy fields.

This course may be taken 1 time for credit.

Course classification: CTE

**PHAR5476 Pharmacy Technician Procedures II** 4 credits (3 lec, 3 lab hrs/wk)

Prerequisite(s): ( PHAR5470 and PHAR5472 and PHAR5474 and PHAR5475 )

This course is designed to provide students with the knowledge and skills needed in the performance of advanced pharmacy tasks. These include hospital dispensing systems, long-term care pharmacy, nuclear and home infusion pharmacy, hospice and managed care pharmacy, federal pharmacy, aseptic technique, IV prep admixtures on oncology preparations.

This course may be taken 1 time for credit.

Course classification: CTE

**PHAR5477 Pharmacy Records Management** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( PHAR5470 and PHAR5472 and PHAR5474 and PHAR5475 )

This course is designed to provide knowledge and skill preparing, maintaining and storing a multiple of pharmacy records. The first two weeks of the course consists of HIPAA training for pharmacy technicians. This course may be taken 1 time for credit.

Course classification: CTE

# PHILOSOPHY (PHL)

**PHL101 Introduction to Philosophy: Philosophical Problems** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR121 )

Introduces students to the philosophical quest for wisdom for the purpose of personal transformation: To understand themselves, reality, and their place within it by exploring fundamental questions and problems of metaphysics (the study of the nature of reality) and epistemology (the study of knowledge and truth) from a cross-cultural perspective.

This course may be taken 1 time for credit.

Course classification: LDC

**PHL102 Ethics** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR121 )

Investigates the nature of moral philosophy by examining ethical theories from a variety of cultural traditions as well as issues in applied ethics such as just war and pacifism, euthanasia, environmental ethics and cloning. Enables students to develop and reflect critically on their own ethical stance.

This course may be taken 1 time for credit.

Course classification: LDC

**PHL103 Intro to Logic and Critical Thnkg** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR121 )

Focuses on improving critical reasoning skills in academic studies and daily life by examining the basic concepts of logic and critical thinking; the use of language; propaganda and doublespeak; and informal fallacies in academic arguments, editorials, letters to the editor, and advertising. Attention given to writing arguments and position papers.

This course may be taken 1 time for credit.

Course classification: LDC

**PHL180 Internship: Philosophy** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**PHL280 CWE: Philosophy** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course offers career exploration and workplace experience within a widely defined number of supervised settings which provide professional experience in the field of philosophy.

This course may be taken 12 times for credit.

Course classification: LDC

# PHYSICAL EDUCATION (PE)

**PE131 Intro to Health & Physical Ed** 3 credits (3 lec hrs/wk)

This course provides an orientation and foundational understanding of the academic disciplines and professions that lie beneath the umbrella of physical education, fitness, and sport. Students learn the underpinnings of historical and contemporary development in the disciplines and broaden their understanding of opportunities available within related professions.

This course may be taken 1 time for credit.

Course classification: LDC

**PE180 Internship: Physical Education** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**PE185AA Gymnastics Advanced** 1 credit (3 lab hrs/wk)

This course is a continuation of intermediate gymnastics with an emphasis on more advanced gymnastic skills, teaching, and spotting techniques.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AB Baseball Advanced** 1 credit (3 lab hrs/wk)

This course is designed to increase students' knowledge of the game; skills offensive and defensive strategies. Offensive strategies will revolve around executing various plays to move runners into scoring position and then score runs. Defensive strategies will emphasize limiting base runners limiting their advancement and eliminating them through various defensive plays.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AC Gymnastics Beginning** 1 credit (3 lab hrs/wk)

Beginning Gymnastics will offer the student instruction on basic gymnastics skills with an emphasis on tumbling, balance beams, rings, bars and vault. Students will also develop the basic strength needed to be successful on the various gymnastics apparatus.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AD Gymnastics Intermediate** 1 credit (3 lab hrs/wk)

Students in Intermediate Gymnastics will continue learning skills that are more advanced than those learned in Beginning Gymnastics.

Students will use fundamentals developed in Beginning Gymnastics to safely learn more challenging skills. Students will also learn basic spotting techniques so that they can work on their own with fellow students. Students will put skills together in combinations on the various apparatus.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AE Indoor Rock Climbing Advanced** 1 credit (3 lab hrs/wk)

Prerequisite(s): Instructor consent

This class will present the level content, method and safety of indoor rock climbing necessary for the advanced student. Students will learn to use and implement an advanced level of climbing equipment and knots. Emphasis will be placed on the continued acquisition of skills and techniques necessary for indoor rock climbing including advanced climbing techniques and the development of climbing routes.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AF Indoor Rock Climbing Beginning** 1 credit (3 lab hrs/wk)

This class will present the beginning level content, method and safety of indoor rock climbing. Emphasis will be placed on the acquisition of beginning level skills, techniques and equipment necessary for indoor rock climbing.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AG Indoor Rock Climbing Intermediate** 1 credit (3 lab hrs/wk)

This class will present the level content, method and safety of indoor rock climbing necessary for the intermediate student. Students will learn to use and implement an intermediate level of climbing equipment and knots. Emphasis will be placed on the continued acquisition of skills and techniques necessary for indoor rock climbing including.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AH Techniques and Skills Outdoor Climbing** 1 credit (3 lab hrs/wk)

Through this course, students will become capable assets to the southern Oregon climbing community. Capable in terms of the practical knowledge they will gain in the areas of anchoring construction and basic rescue techniques. With these technical skills, students will exit the class with definite proficiency in climbing safely and securely both indoors and out as well as in their ability to assist other climbers should the need arise. Students will become assets to the outdoor community in general and to the climbing community specifically in the sense that through this course, students will be endowed with an understanding of the responsibilities we assume when we are active in the outdoors.

To accomplish this, all class excursions, though primarily intended to provide students opportunity to practice skills on the rocks, will be partnered with experiences of service (trail maintenance, rubbish removal, anchor replacement, meeting with local access representatives, etc.).

This course may be taken 3 times for credit.

Course classification: LDC

**PE185AT Track Advanced** 1 credit (3 lab hrs/wk)

This course will focus on expanding the students knowledge base relating to the latest technical information on track and field. Students will work with instructors in analyzing the biomechanical aspects of training for track. Students will make analytical comparisons of their performance compared to those of world class athletes.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BB Baseball Beginning** 1 credit (3 lab hrs/wk)

This course offers an introduction to the game of baseball. Also the necessary skills drills fundamentals and strategies for baseball players will be addressed.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BC Bowling Advanced** 1 credit (3 lab hrs/wk)

This course is designed to help students learn the advanced fine-tuned skills of bowling and how to make adjustments with different types of equipment and conditions.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BF Basketball Advanced** 1 credit (3 lab hrs/wk)

Advanced Basketball is the course sequential to Intermediate Basketball and is designed to provide the student with opportunities to develop and use the basic individual and group fundamental skills, techniques, tactics, concepts, rules and philosophies acquired in the previous course.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BG Basketball Beginning** 1 credit (3 lab hrs/wk)

A physical education class that is designed to teach mechanical principles and beginning skills of basketball.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BH Basketball Intermediate** 1 credit (3 lab hrs/wk)

Intermediate Basketball is the course sequential to Beginning basketball and is designed to provide the student with additional instruction to develop and use the basic individual and group fundamental skills, techniques, tactics, concepts, rules and philosophies acquired in the previous course.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BI Bowling Intermediate** 1 credit (3 lab hrs/wk)

This course is designed to help students learn intermediate bowling skills and to achieve the ability to adjust to different lane conditions. Students will learn intermediate spare shooting, different hook techniques, and the effects of technology on equipment performance (surfaces, cores, finger hole locations).

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BJ Bowling Beginning** 1 credit (3 lab hrs/wk)

This course is designed to help students develop and enhance their bowling skills. Students will learn about bowling, its history, equipment and skills needed to bowl.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BK Kayak Beginning** 1 credit (3 lab hrs/wk)

Students will gain experience with the basic strokes, maneuvers, and rescue techniques of kayaking on flat, ocean and moving river water.

River structure and ocean action will be reviewed as well as kayaking and water safety measures.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BL Cross Country Beginning** 1 credit (3 lab hrs/wk)

Student will learn methods of training, strategy, and techniques for cross country running. Competitive experience will be offered as part of the class.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BM Cross Country Intermediate** 1 credit (3 lab hrs/wk)

Student will learn advanced methods of training, strategies, and techniques for cross country running. Competitive experience will be offered as part of the course.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BN Softball Advanced** 1 credit (3 lab hrs/wk)

This course is designed to introduce students to an advanced level of development in the fundamentals of fastpitch softball. Students will develop their knowledge and understanding of softball skills and techniques, game history and characteristics, and skill development. The course is designed to help students develop beyond the basic and intermediate skills and techniques of fastpitch softball.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BO Softball Beginning** 1 credit (3 lab hrs/wk)

This course is designed to introduce students to basic skill development in the fundamentals of softball. Students will develop their knowledge and understanding of softball skills and techniques, game history and characteristics, and skill development. The course is designed to help students develop the basic skills and techniques to participate in games at an acceptable level of competence.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BP Softball Intermediate** 1 credit (3 lab hrs/wk)

This course is designed to introduce students to an intermediate level of development in the fundamentals of fastpitch softball. Students will develop their knowledge and understanding of softball skills and techniques, game history and characteristics, and skill development. The course is designed to help students develop beyond the basic skills and techniques of fastpitch softball in order to participate in games at an acceptable level of competence.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BQ Weight Training Beginning** 1 credit (3 lab hrs/wk)

Students will be introduced to basic methods and techniques of heavy resistance exercises. Weightlifting will be used to increase muscular strength endurance, and flexibility.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BR Weight Training Intermediate** 1 credit (3 lab hrs/wk)

Students will be taught intermediate methods and techniques of heavy resistance exercises. Weightlifting will be used to increase muscular strength endurance, and flexibility. Preparation for athletic competition in weightlifting and other sports will be offered.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BS Advanced Weight Training** 1 credit (3 lab hrs/wk)

The study of advanced weight training techniques. The course is designed to give the student experience in advanced lifting techniques and provide them with a more rigorous workout than intermediate or beginning.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BT Track Beginning** 1 credit (3 lab hrs/wk)

Beginning Track is a class that will focus on the execution of basic track and field skills needed to perform running and field events. The use of handouts and film analysis of current track and field techniques as well as performing various drills will be used to improve the students knowledge techniques.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BV Turbo Kick** 1 credit (3 lab hrs/wk)

This course will enable the student to participate in moderate turbo kick group exercise through choreographed movement patterns combinations and techniques. The student will experience a cardiovascular challenge with a sport specific warm-up, bouts of intense intervals of kickboxing, specific strength and endurance training, and cool-down exercises.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185BY Bicycling** 1 credit (3 lab hrs/wk)

Bicycling is a course designed to give the novice bicycle rider basic knowledge about effectively using cycling to improve one's cardiovascular health. The course will also provide information on how to maximize the use of multi gear bicycles. Students will spend a majority of class time actually riding their bicycles. Several local routes will be utilized and at least one long day trip will be planned. Students will also learn the basic bicycle maintenance including gear adjustment, flat tire repair and brake adjustment.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185DF Dance Fitness** 1 credit (3 lab hrs/wk)

Dance Fitness fuses fitness, entertainment and culture into an addictive dance-fitness class. The course utilizes the principles of fitness interval training and resistance training to maximize caloric output, fat burning, and total body toning. It's a way of mixing body sculpting movements with easy-to-follow dance steps. Inspired by fun and upbeat dance music, using a variety of dance styles in the routines. Music selections include both fast and slow rhythms to help tone and sculpt the body.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185EA Esports Advanced** 1 credit (3 lab hrs/wk)

This course offers and introduces the advanced fundamentals of the sport including skills, strategies, fitness, health and social behavior necessary to participate at the collegiate level.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185EB Esports Beginning** 1 credit (3 lab hrs/wk)

This course offers and introduces the basic fundamentals of Esports including skills, strategies, equipment, health and social behavior.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185EI Esports Intermediate** 1 credit (3 lab hrs/wk)

This course develops and builds upon the basic fundamentals of the sport including skills, strategies, health and social behavior.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185GA Golf Advanced** 1 credit (3 lab hrs/wk)

Advanced Golf is part of the physical education curriculum. This course continues the process of skill development acquired knowledge and appreciation of the sport of golf started in Beginning Golf and enhanced by Intermediate Golf. The class is designed as an individual activity so that the students may develop an appreciation of the recreational aspects of golf. Advanced Golf will focus on skills needed to lower the participants handicap, teach them to read situations on the course, and perform basic golf skills with a higher degree of accuracy.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185GB Golf Beginning** 1 credit (3 lab hrs/wk)

Golf is a part of the physical education curriculum. This course introduces students to basic skill development in the fundamentals of golf. Students will develop their knowledge and understanding of golf skills, game characteristics, and skill development. The course is designed as an individual activity so the students may develop an appreciation of the recreational aspects of golf.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185GI Golf Intermediate** 1 credit (3 lab hrs/wk)

Golf is a part of the physical education curriculum. This course continues the process of skill development, acquired knowledge, and appreciation of the sport of golf started in Beginning Golf. The class is designed as an individual activity so that the students may develop an appreciation of the recreational aspects of golf.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185IB Baseball Intermediate** 1 credit (3 lab hrs/wk)

This course will add to the knowledge, skills, and drills emphasized in the beginning class. More emphasis will be placed on strategy; both offensive and defensive.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185IT Track Intermediate** 1 credit (3 lab hrs/wk)

Intermediate Track will focus on applying the latest technical information related to track and field to the students actual performance and daily practice. Students will be videotaped and analyzed to recognize technical weakness and strengths. The instructor and student will use current information to improve performance.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185P Plyometrics** 1 credit (3 lab hrs/wk)

Plyometrics is an intense workout designed to improve quickness power agility strength and jumping ability. The participant will perform a variety of strenuous exercises including jumping hopping rebounding and basic calisthenics. Students will work against resistance and obstacles to improve athletic performance.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185PC Physical Conditioning** 1 credit (3 lab hrs/wk)

A physical education class designed to motivate and educate students of all ages in the methods of and the necessity for physical education.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185PF Pound Fit** 1 credit (3 lab hrs/wk)

Pound is a full-body cardio session, combining light resistance with constant simulated drumming. The workout fuses cardio, pilates, isometric movements, plyometrics and isometric poses into a 50-minute series. Pound combines easy to follow cardio moves with strength training and drumming. This combo works the entire body, raises the heart rate to a fat-burning zone, and forces each move to be as precise as a basic beat.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185PS Public Safety Conditioning** 1 credit (3 lab hrs/wk)

This course is designed to prepare and enhance individuals in public safety for essential physical capacities required to satisfactorily perform job duties and pre-employment physical exams. This course will result in students having to meet specific and measureable standards with respect to job specific physical conditioning in public safety professions.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185S1 Swimming Beginning** 1 credit (3 lab hrs/wk)

The course is designed to provide the student with the opportunity to improve competitive swimming skills and become proficient at all competitive swimming strokes. In addition, students will begin to explore concepts of the physiology of swimming and training methodology. In addition, opportunities are provided for swim conditioning, so the student's fitness level should improve. Students will be asked to pass a swim test to participate in this course.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185S2 Swimming Intermediate** 1 credit (3 lab hrs/wk)

The course is designed to provide the student with the opportunity to gain an intermediate knowledge of the sport, its history, equipment and facilities, safety procedures, rules, terminology, and to improve the fundamental skills of all four competitive strokes in order to become proficient at an intermediate competitive swimming level. In addition, opportunities are provided for swim conditioning, so the student's fitness level should improve. Students must pass an advanced swim test to participate in this course.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185S3 Swimming Advanced** 1 credit (3 lab hrs/wk)

Prerequisite(s): ( PE185S2 )

The course is designed to provide the student with advanced knowledge of the sport, the physiology of how the body can react and adapt to training as well as gaining practical knowledge on how to develop a training plan and progressions to bring about improvements. Students will also develop the advanced skills of competitive swimming in order to become proficient at an advanced swimming level. In addition, opportunities are provided for swim conditioning, so the student's fitness level should improve. Students must pass an advanced swim test to participate in this course.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185SA Soccer: Advanced** 1 credit (3 lab hrs/wk)

This is an advanced course emphasizing the highest level of technique and tactics of the sport of soccer. This class will present the content method and safety of advanced soccer. Students will learn to use and implement a variety of advanced soccer skills and techniques. Emphasis will be placed on the acquisition of advanced skills and techniques necessary for advanced soccer.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185SB Soccer Beginning** 1 credit (3 lab hrs/wk)

This is an introductory course emphasizing the fundamentals of beginning soccer. This class will present the content method and safety of beginning soccer. Students will learn to use and implement a variety of beginning soccer skills and techniques. Emphasis will be placed on the acquisition of basic skills and techniques necessary for beginning soccer.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185SI Soccer Intermediate** 1 credit (3 lab hrs/wk)

This is an intermediate course emphasizing the fundamentals of intermediate soccer. This class will present the content method and safety of intermediate soccer. Students will learn to use and implement a variety of intermediate soccer skills and techniques. Emphasis will be placed on the acquisition of intermediate skills and techniques necessary for intermediate soccer.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185SO Scuba Open Water Dive** 1 credit (3 lab hrs/wk)

Discover the exciting world of underwater exploration by SCUBA diving.

This course will teach students how to become comfortable and confident in the water. Students will learn the basics including hand signals buoyancy control and self-aid skills. Students will also gain the knowledge to plan and execute a dive safely.

This course may be taken 9 times for credit.

Course classification: LDC

**PE185SP Self-Paced Fitness** 1 credit (3 lab hrs/wk)

Introduces a self paced physical exercise program encompassing cardiovascular conditioning, strength training, and flexibility exercises. Incorporates individual and independent physical exercises and requires tracking exercises in a log/journal. This is a Hybrid Course that may meet at the beginning and end of the term for pre/post evaluation. SWOCC email addresses are required and weekly submission of work to the instructor via myLakerLink.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185TA Tennis: Advanced** 1 credit (3 lab hrs/wk)

This course offers and introduces the basic fundamentals of the sport including skills, strategies, fitness, health and social behavior

This course may be taken 3 times for credit.

Course classification: LDC

**PE185TB Tennis Beginning** 1 credit (3 lab hrs/wk)

This course offers and introduces the basic fundamentals of the sport including skills, strategies, fitness, health and social behavior.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185TF Track & Field Throwing Techniques** 1 credit (3 lab hrs/wk)

Track and Field Throwing Techniques is designed to instruct the student in the throwing events for Track and Field. Students will concentrate on the discus shot put and hammer. Techniques of throwing as well as current conditioning will be studied.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185TI Tennis Intermediate** 1 credit (3 lab hrs/wk)

This course offers and introduces the basic fundamentals of the sport including skills, strategies, fitness, health and social behavior

This course may be taken 3 times for credit.

Course classification: LDC

**PE185VA Volleyball Advanced** 1 credit (3 lab hrs/wk)

Advanced Volleyball is for the student that has completed beginning and intermediate volleyball and would like to focus on the advanced skills and strategies related to volleyball. Students will work on techniques related to serving receiving blocking and strategic aspects of Volleyball. Advanced Volleyball will also include strength and conditioning exercises to enhance the players physical abilities.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185VB Volleyball Beginning** 1 credit (3 lab hrs/wk)

Volleyball is part of the physical education curriculum. This course is designed to introduce students to basic skill development in the fundamentals of volleyball. Students will develop their knowledge and understanding of volleyball skills game history and characteristics as well as skill development. The course is designed to help students develop a lifelong interest in playing the game of volleyball.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185VI Volleyball Intermediate** 1 credit (3 lab hrs/wk)

Volleyball is part of the physical education curriculum. This course continues the process of skill development acquired knowledge and appreciation of the sport of volleyball started in Beginning Volleyball. The class is designed as a group activity so that students may develop and perfect their skills and knowledge of the game to better appreciate the sport as a lifetime physical activity.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185WA Wrestling Advanced** 1 credit (3 lab hrs/wk)

This is an advanced course emphasizing the fundamentals of advanced wrestling. This class will present the content, method, and safety of advanced wrestling. Students will learn to use and implement a variety of advanced wrestling skills and techniques. Emphasis will be placed on the acquisition of advanced skills and techniques necessary for advanced wrestling.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185WB Wrestling Beginning** 1 credit (3 lab hrs/wk)

This is an introductory course emphasizing the fundamentals of beginning wrestling. This class will present the content, method, and safety of beginning wrestling. Students will learn to use and implement a variety of beginning wrestling skills and techniques. Emphasis will be placed on the acquisition of basic skills and techniques necessary for beginning wrestling.

This course may be taken 3 times for credit.

Course classification: LDC

**PE185WI Wrestling Intermediate** 1 credit (3 lab hrs/wk)

This is an intermediate course emphasizing the fundamentals of intermediate wrestling. This class will present the content method and safety of intermediate wrestling. Students will learn to use and implement a variety of intermediate wrestling skills and techniques. Emphasis will be placed on the acquisition of intermediate skills and techniques necessary for intermediate wrestling.

This course may be taken 3 times for credit.

Course classification: LDC

**PE210 Theory Of Coaching** 3 credits (3 lec hrs/wk)

A survey of issues encountered by coaches in all sports. Topics will include, but not be limited to communication with players, colleagues and administration, ethical issues and responsibilities, coaching philosophies, relations with media and community, time management, coach and athlete motivation, mental training skills, and equipment and facilities management.

This course may be taken 1 time for credit.

Course classification: LDC

**PE231 Wellness for Life** 3 credits (3 lec hrs/wk)

Physical assessment techniques to assess present strength, flexibility, and cardiovascular health will be administered in this course. Students will receive informational tools needed to facilitate positive change in their present state of fitness. Basic blood work will assess cholesterol, glucose, and other results. Health issues and concepts are also covered. This course may be taken 1 time for credit.

Course classification: LDC

**PE270 Sport and Exercise Psychology** 3 credits (3 lec hrs/wk)

The course is designed to provide students the knowledge to understand the basics of psychological skills to improve physical performance in others or themselves. The course would be well suited for athletes, coaches or exercise leaders.

This course may be taken 1 time for credit.

Course classification: LDC

**PE280 CWE: Physical Education** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Students will gain real life experience in the various roles and responsibilities related to the field of Physical Education. Students will participate in a variety of supervised settings that are applicable to the development of the student as a professional in Health and Physical Education field including; areas related to life time wellness, fitness and conditioning as well as the educational aspect such as teaching.

This course may be taken 12 times for credit.

Course classification: LDC

## PHYSICS (PH)

**PH180 Internship: Physics** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**PH201 General Physics I: Mechanics** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH112 )

Corequisite(s): ( MTH112 )

Algebra-based study of physics principles. This is the first course in a three course sequence. Concepts of mechanics including kinematics, forces, equilibrium, energy, momentum, conservation laws. Includes laboratory activities. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**PH202 General Physics II: Heat, Waves, Relativity** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( PH201 )

Study of the physical properties and interactions of systems. Second course of the sequence focuses on fluids, thermodynamics, waves, and relativity.

This course may be taken 1 time for credit.

Course classification: LDC

**PH203 Gen Physics III: Elect & Magnetism** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( PH202 )

Study of the physical properties and interactions of electricity and magnetism. Includes laboratory activities. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**PH211 General Physics with Calculus I** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH112 )

Corequisite(s): ( MTH252 )

Study of the physical properties and interactions of mechanics including kinematics, forces, energy and momentum. For science and engineering students. Includes laboratory activities. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**PH212 General Physics with Calculus II** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( PH211 )

Corequisite(s): ( MTH252 ) or ( MTH252H )

Study of the physical properties and interactions of fluids, sound, heat, light, and optics. For science and engineering students. Includes laboratory activities. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**PH213 General Physics with Calculus III** 5 credits (4 lec, 3 lab hrs/wk)

Prerequisite(s): ( MTH252 and PH212 )

Study of the physical properties and interactions of electricity, and magnetism. For science and engineering students. Includes laboratory activities. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**PH280 CWE: Physics** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical worksite exposure to applied science, which provides students an opportunity to explore potential career paths in science while gaining practical experience in applying classroom science theory.

This course may be taken 12 times for credit.

Course classification: LDC

## POLITICAL SCIENCE (PS)

**PS180 Internship: Political Science** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**PS201 American Government: Political Institutions** 3 credits (3 lec hrs/wk)

An introduction to American political institutions, processes and ideology, in relation to politics and public policy.

This course may be taken 1 time for credit.

Course classification: LDC

**PS202 American Government: Policy Issues** 3 credits (3 lec hrs/wk)

This course continues the study of civil liberties and practical application of powers of the federal government to society's problems. Current issues in American politics and the application of federal government powers to society's problems will be addressed.

This course may be taken 1 time for credit.

Course classification: LDC

**PS203 Local Politics and Government** 3 credits (3 lec hrs/wk)

This course introduces the student to United States state and local governments with comparative political behavior in states and communities. The course defines and discusses the political and institutional processes by which state and local governments make policy and law. The course also examines the role of state and local governments within the federal system of government.

This course may be taken 1 time for credit.

Course classification: LDC

**PS205 International Relations: US Foreign Policy in the 20th Century** 3 credits (3 lec hrs/wk)

The course focuses on the development of US Foreign Policy within the 20th Century with an emphasis on past precedents, new challenges, and how America's increasing economic interconnectedness with our neighbors has changed our policies. The course uses the world wars and the Cold War as major events which have shaped American Foreign Policy and continue to do so.

This course may be taken 1 time for credit.

Course classification: LDC

**PS280 CWE: Political Science** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course offers career exploration and workplace experience within a widely defined number of supervised settings which will provide professional experience in the field of political science, political organizing, and campaigning.

This course may be taken 12 times for credit.

Course classification: LDC

## PSYCHOLOGY (PSY)

**PSY100 Introduction to Psychology** 4 credits (4 lec hrs/wk)

This course is a survey of psychological perspectives into human behavior. It introduces the student to the overall field of psychology to prepare them for advanced study in psychology. The course is designed to briefly touch on the major tenants of the discipline. This will include a brief description of history and scientific methods and biopsychosocial aspects of human behavior. The major emphasis will be on the practical application of varied topics.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY180 Internship: Psychology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**PSY201 General Psychology** 3 credits (3 lec hrs/wk)

Introduces principles and theories of human behavior. Stresses scientific methodology, brain and other physiological influences on behavior, learning, sensory and perceptual processes.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY202 General Psychology** 3 credits (3 lec hrs/wk)

Focuses on memory, intelligence, language and thinking, motivation and emotion, lifespan development, gender and sexuality.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY203 General Psychology** 3 credits (3 lec hrs/wk)

Focuses on personality, social psychology, stress, health and coping, psychological disorders, treatment of psychological disorders, and ends with a look at what psychologists do in the workforce.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY216 Social Psychology** 3 credits (3 lec hrs/wk)

Social Psychology is the scientific study of social variables on an individual's behavior, attitudes, perceptions, and motives. In this course, the learner will have the opportunity to specifically explore how we distort reality. They will be able to evaluate their self control with the respect to others along with their levels of conformity and obedience. They can test strong emotions such as altruism, aggression and passion in different scenarios. The course ends with a look at prejudice and the importance of great leadership within groups

This course may be taken 1 time for credit.

Course classification: LDC

**PSY228 Introduction to Social Science Research** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( MTH60 )

This course is an introduction to the basic research methods used by social scientists. The course includes an introduction to statistical analysis, observational studies, survey research, and experimental design.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY231 Human Sexuality** 3 credits (3 lec hrs/wk)

This course is designed to help students explore their attitudes and feelings regarding human sexuality. It will promote an open examination of various dimensions of sexual behaviors and attitudes in a safe, judgement-free classroom environment.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY232 Psychology of Humor** 3 credits (3 lec hrs/wk)

This course explores the psychological underpinnings of humor. It includes a theoretical discussion of humor from research in cognitive, social, biological and developmental psychology. It also explores practical ways to create and implement humor at home, in the workplace, and other personal encounters. The goal is to enhance both mental and physical health.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY237 Life Span Development** 3 credits (3 lec hrs/wk)

Designed to survey the major principles of behavior and patterns of change in people over the life span. Revolves around the area of development in physical, intellectual, social, personality and cross-cultural diversity for infants, children, adolescents, adults and the elderly. Within the psychological framework, students will be able to research and apply development concepts to relevant problems in daily life.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY239 Introduction to Abnormal Psychology** 3 credits (3 lec hrs/wk)

Discusses the diagnosis, etiology and therapy of emotional, disturbances and behavioral disorders.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY243 Drugs and Behavior** 3 credits (3 lec hrs/wk)

This course is a basic introduction to the principles of drug action on the mind and body and the relationship of substance abuse to crime. Drug metabolism and psychopharmacological research findings on legal and illicit drugs are addressed including drug effects and theories of abuse. Treatment issues and prevention models are discussed in relation to diverse cultures, lifestyles, gender, age, and the needs of people with disabilities.

This course may be taken 1 time for credit.

Course classification: LDC

**PSY280 CWE: Psychology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course offers career exploration and workplace experience within a widely defined number of supervised settings which provide professional experience in the field of psychology.

This course may be taken 12 times for credit.

Course classification: LDC

## SOCIOLOGY (SOC)

**SOC180 Internship: Sociology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options in the field of sociology.

This course may be taken 12 times for credit.

Course classification: LDC

**SOC204 Introduction to Sociology** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

This course explores how social context shapes people's lives by systematically analyzing culture, socialization, social interaction, social stratification, race and ethnic relations and the general dynamics of human groups. The course also analyzes development and application of sociological concepts, perspectives and research methodology. May be taken independently of SOC 205/206.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC205 Social Institutions and Change** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

This course explores how societies change over time, focusing on recent social changes. Using sociological theories, concepts, and methodologies, the course examines the impacts of changes on individuals and social institutions such as the family, religion, education, economics, media, political systems, health and medicine. May be taken independently of SOC 204/206.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC206 Social Problems and Issues** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

This course investigates causes and consequences of social problems – and feasible solutions to such problems – within specific cultural and historical contexts. Social problems examined include: crime and delinquency; group discrimination; inequality, poverty, alienation; domestic and international violence; immigration; environment and energy. May be taken independently of SOC 204/206.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC208 Sociology of Sport** 3 credits (3 lec hrs/wk)

This course discusses identification and analysis of social problems in relation to sport and the world. Topics include (but are not limited to) the following: sport and culture, sport and socialization, sport and race, sport and gender, sport and collective behavior, sport and social behavior with focus on feasible solutions.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC210 Marriage and Family** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

Examines intimate relationships, courtship, marriage and family patterns, old, new, and unconventional. The course focuses on how relationships are built, maintained, and change over time, including analysis of love, sexuality, children, conflict, divorce, blended families, and the ways in which race, class, gender, and social policies shape family conditions.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC213 Racial and Ethnic Relations** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

The course extensively discusses the nature of the relationships among racial and ethnic groups in America and in societies around the world. Explores major topics such ethnic stratification, prejudice and discrimination, assimilation and pluralism, multiculturalism and current trends in intergroup relations.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC218 Sociology of Gender** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

This course provides a sociological analysis of gender relations within and beyond the United States. We explore a range of topics, from the social construction of gender and everyday forms of gender socialization to the economic and political structures through which gendered inequalities are maintained and reinforced. We critically examine how gender categories have been challenged and contested over time, as well as the changing meanings and practices of feminism in historical context. And, finally, we employ intersectional and global perspectives to gain a better understanding of how gendered meanings and experiences vary across time and space.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC228 Environmental Sociology** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR90R )

This course examines human-nature interactions in the context of global social, economic, and political change. We explore the social and historical factors that have shaped environmental challenges (including environmental degradation and inequality) as well as efforts to promote ecological sustainability. Relations of power shaped by economic, institutional, and political systems, as well as those conditioned by race, class, gender, and nationality will be analyzed in the context of global environmental change.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC250 Field Studies - Sociology** 3 credits (3 lec hrs/wk)

This course provides students with hands on experience conducting social science research in a field setting. Fieldsites will vary annually and may include opportunities for international travel. Students will study a range of topics in the respective locations including rural and urban livelihood strategies, ecological sustainability, and efforts in achieving social and economic justice. Research will be conducted collaboratively with international students, providing Southwestern students the opportunity to interact with and learn from people with diverse cultural backgrounds.

This course may be taken 1 time for credit.

Course classification: LDC

**SOC280 CWE: Sociology** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

This course offers career exploration and workplace experience within a widely defined number of supervised settings in the field of sociology.

This course may be taken 12 times for credit.

Course classification: LDC

## SPANISH (SPAN)

**SPAN101 First Year Spanish** 4 credits (4 lec hrs/wk)

Introduces the written and spoken language of Spanish-speaking people. Includes pronunciation, grammar, vocabulary, and comprehension.

Emphasizes speaking, listening comprehension, reading comprehension and writing. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**SPAN102 First Year Spanish** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( SPAN101 )

Introduces the written and spoken language of Spanish-speaking people. Includes pronunciation, grammar, vocabulary, and comprehension.

Emphasizes speaking, listening comprehension, reading comprehension and writing. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**SPAN103 First Year Spanish** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( SPAN102 )

Introduces the written and spoken language of Spanish-speaking people. Includes pronunciation, grammar, vocabulary, and comprehension.

Emphasizes speaking, listening comprehension, reading comprehension and writing. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**SPAN201 Second Year Spanish** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( SPAN103 )

Continues the review and expansion of language, grammar, conversation, composition and culture. Emphasizes speaking, listening comprehension, reading comprehension and writing. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**SPAN202 Second Year Spanish** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( SPAN201 )

Continues the review and expansion of language, grammar, conversation, composition and culture. Emphasizes speaking, listening comprehension, reading comprehension and writing. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

**SPAN203 Second Year Spanish** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( SPAN202 )

Continues the review and expansion of language, grammar, conversation, composition and culture. Emphasizes speaking, listening comprehension, reading comprehension and writing. Must be taken in sequence.

This course may be taken 1 time for credit.

Course classification: LDC

## SPEECH (SP)

**SP100 Basic Speech Communications** 3 credits (3 lec hrs/wk)

Applies general communication theories of interpersonal, and group communication. Develops an awareness of interpersonal communication as it relates to employment and informational interviewing, group problem-solving, and communication climates.

This course may be taken 1 time for credit.

Course classification: LDC

**SP111 Fundamentals of Public Speaking** 3 credits (3 lec hrs/wk)

Prepare and present original speeches, with emphasis on content, organization, delivery, and technique.

This course may be taken 1 time for credit.

Course classification: LDC

**SP112 Persuasive Speech** 3 credits (3 lec hrs/wk)

Examine the psychology of persuasion, as well as methods speakers use to persuade an audience. Use evidence, reasoning skills, emotional appeal, credibility, critical thinking, organizational patterns, outlining techniques and audience analysis. Prepare and present original persuasive speeches.

This course may be taken 1 time for credit.

Course classification: LDC

**SP180 Internship: Speech** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**SP218 Interpersonal Communication** 3 credits (3 lec hrs/wk)

Prerequisite(s): (WR115)

Focuses on improving communication with oneself in order to improve relationships. Addresses perception, emotions, language, verbal and non-verbal communication, listening, and conflict resolution skills.

This course may be taken 1 time for credit.

Course classification: LDC

**SP219 Small Group Discussion** 3 credits (3 lec hrs/wk)

Prerequisite(s): (WR115)

Focus on skill building and theory in decision making, problem solving, presentation planning, and knowledge of group process. Examine effective small group techniques in a variety of settings. Plan and present group discussions and group presentations.

This course may be taken 1 time for credit.

Course classification: LDC

**SP220 Gender and Communication** 3 credits (3 lec hrs/wk)

Prerequisite(s): (WR115)

Increase understanding and awareness of differences in gendered communication styles. Explore how culture, media, attitudes, and gender roles influence and impact communication.

This course may be taken 1 time for credit.

Course classification: LDC

**SP280 CWE: Speech** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

## WELDING (WLD)

**WLD100 Welding Process I** 3 credits (1 lec, 4 lec lab hrs/wk)

Emphasizes oxy-acetylene welding and cutting, introduction to gas tungsten arc welding (GTAW) and plasma arc cutting, oxy-fuel cutting and scarfing plus air arc gouging and plasma arc gouging. Topics include brazing, and oxy-acetylene welding in flat, horizontal and vertical positions using several joint designs, efficient use of hand and machine oxy-acetylene torch cutting, and industrial safety.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD101 Shielded Metal Arc Welding** 6 credits (2 lec, 8 lec lab hrs/wk)

This course covers shielded metal arc welding (SMAW) including safety, arc welding fundamentals, polarity, amperage ranges, weld techniques, weld defects, causes, and cures. Students learn through lecture, demonstration, and practical application of skills and concepts. Lab activities will cover flat, horizontal, vertical welds and overhead using E6010 and E7018 electrodes. Students will be exposed to properties of steel, manipulative techniques for welding, proper joint design and preparation. American Welding Society (AWS) certification standards and testing methods will be used. Lab will apply AWS certification test standards

This course may be taken 1 time for credit.

Course classification: CTE

**WLD102 Welding Lab A** 3 credits (1 lec, 4 lec lab hrs/wk)

Development of the student's ability to weld on a variety of metals using a variety of welding processes. The skill development of the course will include print reading and interpretation, material layout and cutting, joint preparation, process determination, machine setup, welding and inspection of final project. Emphasis will be on welding techniques that meet or exceed industrial standards.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD103 Gas Metal Arc Welding** 3 credits (1 lec, 4 lec lab hrs/wk)

Covers gas metal arc welding (GMAW) process. The semi-automatic gas metal arc welding (GMAW) process and manual welding techniques will be presented. Equipment needs, setup, joint design, filler metals, shielding gases, welding techniques, along with safety will be stressed. Proper joint design, preparation, and welding techniques. Lab activities will cover all position butt and fillet welds on mild steel, and basic techniques on aluminum and stainless steel.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD104 Flux Cored Arc Welding** 3 credits (1 lec, 4 lec lab hrs/wk)

Covers flux cored arc welding (FCAW) process. The semi-automatic flux cored arc welding (FCAW) process, both with and without shielding gas, and manual welding techniques will be presented. Equipment needs, setup, joint design, filler metals, shielding gases, welding techniques, along with safety, will be stressed. Proper joint design, preparation, and welding to American Welding Society (AWS) certification standards and testing methods will be emphasized. Lab activities will cover all position welds.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD105 Pipe Fitting and Welding I** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): (WLD100) or (WLD101)

Introduces pipe layout, fitting, and arc welding covering basic pipe and piping information, basic pipe layout practices, and basic pipe welding techniques. Safety, quality, and proper weld technique will be stressed according to industry standards for appearance and weld soundness.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD106 Welding Lab B** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD102 )

Continuation of WLD\*4165 in developing the student's ability to weld on a variety of metals using a variety of welding processes. The skill development of the course will include print reading and interpretation, material layout and cutting, joint preparation, process determination, machine setup, welding and inspection of final project. Emphasis will be on welding techniques that meet or exceed industrial standards.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD107 Gas Tungsten Arc Welding** 3 credits (1 lec, 4 lec lab hrs/wk)

Covers all aspects of manual gas tungsten arc welding (GTAW) from safety and process operation through welding techniques and applications. Emphasis will be on safety, equipment setup, manual welding techniques, and procedures for both ferrous and non-ferrous materials, quality control and inspection, and industrial codes and procedures.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD110 Welding Cert for 1st Year** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD101 )

Corequisite(s): ( WLD103 and WLD104 )

Provides experienced welders with lab time for practice in basic welding techniques for skills upgrading and/or certification. The instructor is available for technical assistance.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD150 Welding & Joining Processes** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD101 and WLD103 )

Introduces the application of modern welding, joining, and forming processes on manufacturing materials. The focus is on new welding and joining processes for ferrous and non-ferrous metals and various materials used in manufacturing. Metallurgy of ferrous and non-ferrous materials will be studied and procedures practiced.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD180 Internship - Welding** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**WLD200 Welding Process II** 3 credits (1 lec, 4 lec lab hrs/wk)

Introduction to Electric Arc Welding Processes emphasizing the basics of Shielded Metal Arc Welding, Gas Metal Arc Welding and Flux Cored Arc Welding. Students will develop basic knowledge and skill in setup and safe use of Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) to industry standards

This course may be taken 1 time for credit.

Course classification: CTE

**WLD201 Pipe Fitting and Welding II** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD105 )

Theory and practical application of pipe joint preparation and design; API (American Petroleum Institute) and AWS (American Welding Society) welding codes specifications for pipe and pipe fittings; geometric curve design for branched joints for piping system; wire and electrodes selections; advanced welding blue print and pipe welding symbols, SMAW, GMAW, and GTAW of pipe joints; metallurgical transformation of weld Heat Affected Area (HAA); welding discontinuities and defects; destructive and non-destructive testing; and methods of inspection and testing.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD202 Forklift Operator Training and Cert** 1 credit (2 lec lab hrs/wk)

Prerequisite(s): Instructor consent

Corequisite(s): ( WLD106 )

This course provides all the necessary instruction and training required by the forklift operator regulations.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD203 Advanced Individual Welding** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD4155 )

Allows the students to either specialize in welding techniques and processes they find appropriate for their needs and/or design, draw, estimate, order material, lay out, and fabricate an individualized project. Student will utilize practical application of industry methods in accomplishing these goals.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD205 The Welding Business** 3 credits (3 lec hrs/wk)

This course introduces students to business aspects of the welding industry. Topics will include relevant business issues such as entrepreneurship, business planning, leadership, management, quality control, risk management, productivity, safety, and estimating.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD207 Gas Tungsten Arc Welding II** 3 credits (1 lec, 4 lec lab hrs/wk)

Continued study of Gas Tungsten Arc Welding (GTAW) introduced in WLD 107. Through classroom discussions, video tapes, and hands on application, the course will cover intermediate and advanced techniques in the GTAW. Covering advanced ac wave control, distortion control and weld defects and discontinuities.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD210 Welding Cert for 2nd Year** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD101 and WLD103 and WLD104 )

Provides experienced welders with lab time for practice in basic welding techniques for skills upgrading and/or certification. The instructor is available for technical assistance.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD280 CWE: Welding Tech** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to test knowledge learned in the classroom and explore the variety of workplaces in which to apply that knowledge.

This course may be taken 12 times for credit.

Course classification: LDC

**WLD4152 Advanced Pipe Fitting and Fab** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD105 )

With continuance of WLD4151, this class introduces students to the inservice welding on pressurized piping and hands-on tapping and plugging, utilizing pipe line pressure control fittings (PCFs).

This course may be taken 1 time for credit.

Course classification: CTE

**WLD4153 Pipe Fitting Workshop: Certification** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD4152 )

This course prepares students for pipe fitting and fabrication certification tests. The course emphasis will be applied to 5G and 6G pipe certifications.

This course may be taken 1 time for credit.

Course classification: CTE

**WLD4155 Fitting & Fabrication** 3 credits (1 lec, 4 lec lab hrs/wk)

Prerequisite(s): ( WLD101 )

Emphasizes layout and fitting skills applicable to an industrial welding and fabrication shop including reading prints, estimating and ordering material, performing layout and cutting work, fitting pieces into assemblies, and weld-out procedures applicable to fabricating a finished product. Emphasizes problem-solving and cooperation within an industrial-like environment. Safety, accuracy, quality, and a commitment to excellence emphasized.

This course may be taken 1 time for credit.

Course classification: CTE

## WRITING (WR)

**WR115 Fundamentals of Report Writing** 4 credits (4 lec hrs/wk)

As an introduction to report writing, this course presents the fundamentals and development of writing strategies for technical and business professionals. It introduces these basic strategies through frequent, business related writing exercises. It is designed to help students learn the use of unity, clarity, coherence, and detail in the development of written ideas for the workplace.

This course may be taken 1 time for credit.

Course classification: LDC

**WR121 English Composition** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( WR90R )

This course presents the fundamentals and development of expository prose through frequent writing exercises. It is designed to help students learn the use of unity, clarity, coherence, and detail in the development of written ideas.

This course may be taken 1 time for credit.

Course classification: LDC

**WR122 English Composition** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( WR121 )

This course continues the preparation of the fundamentals of expository prose, with special emphasis on rhetorical principles of argumentation. Special attention is given to audience and style. The basic principles and use of logic in argumentative/persuasive writing are introduced.

This course may be taken 1 time for credit.

Course classification: LDC

**WR123 English Composition** 3 credits (3 lec hrs/wk)

Prerequisite(s): ( WR122 )

Plan, research and write papers based on an argumentative or analytical thesis from collected information. This necessitates critical reading, persuasive writing and using conventions to write and document a research paper.

This course may be taken 1 time for credit.

Course classification: LDC

**WR180 Internship: Writing** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Practical on-site experience that will allow students to explore workplace environments and career options.

This course may be taken 12 times for credit.

Course classification: LDC

**WR227 Report Writing** 4 credits (4 lec hrs/wk)

Prerequisite(s): ( WR115 ) or ( WR121 )

Report Writing studies the composition of reports required in the technical and business professions. It includes fact gathering, organization, graphic layout, and other methods of compiling data. Students will learn to quote, paraphrase and summarize sources effectively, and to cite sources and list them with a style sheet.

This course may be taken 1 time for credit.

Course classification: LDC

**WR241 Imaginative Creative Writing Fiction** 3 credits (3 lec hrs/wk)

This course introduces the theory, techniques, and practice of fiction writing to the beginning student. It emphasizes the short story. Part of the term is spent reading and analyzing published work in terms of such writing techniques as characterization, scenes, dialogue, thematic content, and structure. Writing exercises, both to take home and to do in the classroom, complement these discussions, and are critiqued. Part of each week is spent in a writers' workshop where student writing is discussed, analyzed, and critiqued by the whole class and the instructor.

This course may be taken 1 time for credit.

Course classification: LDC

**WR242 Imaginative Writing Poetry** 3 credits (3 lec hrs/wk)

This course introduces the theory, techniques, and practice of poetry writing to the beginning student through reading published work and through writing exercises. Part of each term is spent in a writer's workshop where student writing is discussed, analyzed, and critiqued by the class and the instructor.

This course may be taken 1 time for credit.

Course classification: LDC

**WR243 Imaginative Writing Explorations** 3 credits (3 lec hrs/wk)

This course centers on discussion of the techniques of play writing and monologue writing through the reading and analysis of published work and through writing exercises. Areas to be explored depend upon student and teacher interest. Part of each week is spent in a writer's workshop where student writing is discussed, analyzed, and critiqued by the class and the instructor.

This course may be taken 1 time for credit.

Course classification: LDC

**WR280 CWE: Writing** 1-12 credits (3 lab hrs/wk/cr)

Prerequisite(s): Instructor consent

Offers career exploration and workplace experience within a widely defined number of supervised settings which provide professional experience in the field of writing.

This course may be taken 12 times for credit.

Course classification: LDC

**WR90R Academic Literacy** 4 credits (4 lec hrs/wk)

A reading comprehension and writing skills course that prepares students to actively, purposely, and rhetorically engage in college-level literacy.

This course may be taken 1 time for credit.

Course classification: DEV

**WR95 English Composition Fundamentals** 1 credit (2 lec lab hrs/wk)

Corequisite(s): ( WR115 ) or ( WR121 )

English Composition Fundamentals provides intensive instruction and practice in writing coherent paragraphs and essays for specific audiences. It focuses on the recursive writing process, sentence structure, paragraph structure, essay structure, grammar, mechanics, and usage.

This course may be taken 1 time for credit.

Course classification: DEV

# FACULTY & STAFF

## ADMINISTRATION

Bacon, John; SBDC Director

D.B.A. Business Administration, George Fox University, 12/2014  
M.B.A. Business Administration, Northwest University, 08/2005  
B.A. Organizational Management, Northwest University, 08/2003

Belter, Joseph; Director of Residence Life

M.S. Educational Leadership and Policy, Portland State University, 03/2013  
B.S. Recreational and Leisure Studies, Winona State University, 12/2005

Benoit, Michelle; Director of TRIO and Student Support Services

M.S. Education, Oregon State University, 06/2011  
B.A. French, Michigan State University, 03/1990

Brown, Sharilyn; Director of Educational Talent Search/ Upward Bound

M.S. Counseling, Oregon State University, 06/2008  
B.S. Social Science and Behavioral Sciences, Linfield College, 12/2001  
A.A. Human Services, Southwestern Oregon Community College, 06/1991

Brunett, Emerald; Director of Facilities Services

Bunn, Doug; Executive Dean of Curry Campus

Ph.D. Economics, Washington State University, 05/1996  
M.A. Economics, Washington State University, 07/1995  
B.S. Economics, Utah State University, 08/1989

Corriea, Megan; Recreation Center Supervisor/Softball Coach

M.A. Coaching and Athletic Administration, University of Concordia Irvine, 02/2012  
B.S. Kinesiology, Humboldt State University, 12/2007  
A.A. Physical Education, Sacramento City College, 06/1998

Dixon, Kathy; Executive Director Business Office

B.S. Accounting, University of Oregon, University of Oregon  
A.S. Accounting

Gardner, Jared; Dean of Student Success and Transfer

M.C. Student Affairs Counseling, Idaho State University, 05/2010  
B.S. Philosophy, Utah State University, 12/2004

Hamner, Elise; Dean of Resource Development/College Foundation

M.A. Organizational Leadership, Gonzaga University, 05/2017  
B.A. Technical Journalism/Business Administration, Oregon State University, 08/1987

Herbert, Mike; Athletic Director

Ph.D. Health, Physical Education and Recreation, University of New Mexico, 12/2007  
M.S. Kinesiology, Humboldt State University, 05/2002  
B.S. Kinesiology, Sonoma State University, 05/1998

Koopman, Daniel; Instructional Dean Career Technical Education

Ed.D. Adult and Higher Education Administration, University of South Dakota, 12/2015  
Ed.S. Educational Administration, University of Idaho, 06/2000  
M.Ed. Educational Administration, University of Idaho, 06/1992  
B.A. Religion, Walla Walla University, 06/1982

Lyon, Rachele; Chief Human Resources Officer

M.B.A. Human Resource Management; Organizational Development, Upper Iowa University, 06/2004  
B.S. Business Management, Linfield College, 05/2001  
A.S. Business Administration, Southwestern Oregon Community College, 03/2000

Mageehon, Ali; Vice President of Instruction

Ph.D. Higher Education/Adult Education, University of Denver, 08/2004  
M.A. English, University of Colorado, 06/1999  
B.A. English/Creative Writing, University of Denver, 06/1996  
Milkewicz, Ciera; Director of Institutional Effectiveness  
B.A. Urban Environment, San Francisco State University, 06/2013

Miller, Joannie; Nursing Director

M.A. Nursing, Family Nurse Practitioner, Clarkson College, 08/2002  
B.A. Nursing, Eastern Mennonite University, 04/1996

Noland, Taya; Childhood Education Director

M.A. English, Portland State University, 06/2006  
M.F.A. Creative Writing, University of Idaho, 08/2003  
B.A. English, University of Oregon, 06/1999

Scott, Patty; President

Ed.D. Community College Leadership, Oregon State University, 03/2004  
M.A. College Student Personnel, Bowling Green State University, 06/1986

B.S. Sociology, University of Oregon, 06/1984

Singh, Avena; Dean of Financial Aid and Registration

M.B.A. Business Management – Marketing, American InterContinental University, 06/2005  
B.S. Information Technology, University of Phoenix, 08/2002  
A.A.O.T., Southwestern Oregon Community College, 06/1998

Stone, Meredith; Vice President of Enrollment and Student Services

M.A. English, California State University, 08/2013  
B.A. English, California State University, 12/2004

Torres, Randy; Executive Director of OCCl

A.A.S. Culinary Arts, Orange Coast College, 05/1998  
C.E.C. Culinary Arts, Orange Coast College, 12/1999

Whitey, Jeff; Vice President of Administrative Services

M.B.A. University of the Southwest, 2015  
B.B.A. University of San Diego, 1984

## BOARD OF EDUCATION

Harry Abel, Jr

Susan Anderson

Dave Bassett

David Bridgman

Mark Gagnon

Marcia Jensen

Ken Messerle

## EMERITUS ADMINISTRATION AND FACULTY

Pat Alvey

John Anderson

Phillip Anderson

Thomas Bennett

Jerri Bennett-Stillmaker

John Berman

Margie Boak

Hans Boettcher

Brenda Brecke

Jane Briggs

Don Burdg

Jill Christiana

John Christiansen

Harvey Crim

Kris Crusoe

Ray Daniels  
Barbara Davey  
Evan Davis  
Michael Detwiler  
Barbara Dodrill  
Nathan Douthit  
George Elkins  
Steve Erickson  
Katherine Flores  
Larry Fourmet  
Willi Furrer  
Peggy Goergen  
Dorothy Gillett  
Shirley Gitchell  
Linda Grosso  
Dennis Hanhi  
Sarah Harrold  
Catherine Hockman  
Charles Hower  
Thomas Humphrey  
Zita Ingham  
Barbara Johnson  
Beverly Kemper  
Howard Kubli  
N. William Lemoine  
Ronald Lilienthal  
Sharleen Lillebo  
Gerry Livingston  
Bruce Locker  
Jim Love  
Phyllis Love  
Rocky Lavoie  
Hugh Malafry  
Bonnie Maxwell  
William McGuire  
Dave McKinney  
Jacqueline McNeill  
Sheldon Meyer  
Sharon Miller  
Eleanor Montagna  
Carol Moore  
Deb Nicholls  
Tom Nicholls  
Jean Noland  
John Noland  
Ron Olson  
Joy Parker  
Patricia Parker  
Janet Pretti  
Jon Richards  
Christian Rosman  
Diana Schab  
Beverly Segner  
Billie Shannon  
Jim Shumake  
John Speasl  
Linda Stagg-Brown  
Veneita Stender  
Mary Stricker  
Ann Sylvia

Mike Turner  
Stephanie VanHorn  
Susan Walker  
Sheila Ward  
Terry Weaver  
Robin Bunnell  
Tim Dailey

## FACULTY

### A

Heather Aldrich, Assistant Professor, Nursing  
B.S. Nursing, 2002, Oregon Health & Science University; A.S. Nursing,  
1996, Southwestern Oregon Community College

### B

Ronald Bell, Professor, Counseling  
M.C. Counseling Education, 1989, Arizona State University; M.F.A.  
Playwriting, 1980, University of California, Los Angeles; B.S. Theatre Arts,  
1978, University of California, Los Angeles

Fred Brick, Professor, History/Political Science  
M.A. History/Political Science, 1990, University of Minnesota; B.A.  
History/Education, 1986, College of St. Thomas

Dr. Daniel Brouse, Professor, Biology  
DC Chiropractic, 1998, Western State Chiropractic College; B.S.  
Biochemistry/Biophysics, 1995, Oregon State University

### C

Jason Cash, Assistant Professor, Health/PE, Track Coach  
M.S. Physical Education Sports Management, 2007, Minnesota State  
University Mankato; B.S. History, 1994, Western Oregon University

Chelsea Clemens, Associate Professor, Welding/Manufacturing  
A.A.S. Welding & Fabrication, 2013, Southwestern Oregon Community  
College

Anthony Collins, Professor, Learning Resources  
M.Ed. Adult Education, 2000, Western Washington University; B.A.  
Linguistics, 1999, Western Washington University

Elizabeth Cooper, Assistant Professor, Nursing  
M.S. Nursing, 2015, Walden University; B.S. Nursing, 2011, Linfield  
College; A.S. Nursing, 2005, Southwestern Oregon Community College

Dr. Aaron Coyner, Associate Professor, Physics  
Ph.D. Physics, 2008, Rice University; M.S. Physics, 2005, Rice University;  
B.S. Engineering Physics, 2003, University of Tulsa

### D

Cheryl Davies, Professor, Psychology  
M.S. Psychology, 2001, Southern Oregon University; B.Commerce  
Communication, 1989, McMaster University

David Deutschman, Associate Professor, Health/PE, Baseball Coach  
M.S. Coaching & Athletic Administration, 2016, Concordia University;  
B.F.A. Business, 2012, Western Oregon University

Dr. Judith Dornbach, Assistant Professor, Nursing

DrNP Nursing, 2017, University of Pittsburgh; B.S. Nursing, 1984, University of Pittsburgh

## E

Noelle Ebert, Associate Professor, Info Resrcs/Instrl Librarian  
M.A. Museum Studies, 2016, Western Illinois University; M. Library and Information Science, 2013, Dominican University; B.A. English, 2007, Western Illinois University

Jessica Engelke, Professor, Business  
M.B.A. Human Resources Management, 2009, University of Phoenix; B.S. Business Management, 2006, University of Phoenix; A.A. General Education, 2004, Irvine Valley College

Leigh Eswonja, Assistant Professor, Nursing Clinical/CNA Coordr  
B.S. Nursing, 2001, Humboldt State University

## F

Dr. Robert Fields, Professor, Biology/General Science  
Ph.D. Zoology, 1991, Washington State University; M.S. Biology, 1984, University of Illinois; B.S. Biology, 1981, University of Illinois

Chris Foltz, Assistant Professor, Culinary Arts Instructor  
Cert. Professional Ice Carving Certi, 2005, Ice Sculpture Unlimited with Mike Vosburg; A.A.S. Professional cooking and Baking, 1998, Baltimore International Culinary College

Nicole Freim, Associate Professor, Writing  
M.A. English, 1998, University of Nevada, Las Vegas; B.A. English, 1994, Northern Illinois University; B.A. Theatre, 1994, Northern Illinois University

James Fritz, Professor, Art  
M.F.A. Sculpture/Metal Casting, 1989, Southern Illinois University; B.F.A. Liberal Arts/Studio, 1983, St. John's University

## G

Anthony Gantenbein, Assistant Professor, EMT/Paramedic  
A.A.S. EMT - Paramedic, 2016, Southwestern Oregon Community College; Cert. Emergency Medical Technician (EMT), 2016, Southwestern Oregon Community College; Cert. EMS Technician II, 2016, Southwestern Oregon Community; Cert. EMS Technician I, 2016, Southwestern Oregon Community

Chelsea Gaudette, Assistant Professor, Baking and Pastry  
Cert. Wood Fire Baking, 2018, Fire Within Mobile Wood Fired Ovens; Cert. Coffee Business and Barista, 2017, Bellissim Coffee; Cert. Permaculture Design, 2017, Oregon State University; A.A.S. Culinary Arts, 2015, Southwestern Oregon CommunityCollege; A.A.S. Baking and Pastry Arts, 2015, Southwestern Oregon CommunityCollege

## H

Rian Henderson, Assistant Professor, Dental Assisting  
A.G.S. General Studies, 2020, Southwestern Oregon Community College; Cert. Dental Assisting, 2004, Carrington College

Benjamin Holt, Assistant Professor, Mathematics  
M.S. Environmental Systems: Mathematical Modeling, 2008, Humboldt State University; B.A. Mathematics, 2002, Humboldt State University; A.A. Mathematics, 2000, Columbia College

Trevor Hoppe, Professor, Health/PE, Head Cross Country Coach  
M.A. Physical Education, 1996, Humboldt State University; B.A. Physical Education, 1992, Humboldt State University

Sean Hutcherson, Professor, Mathematics  
M.A. Mathematics and Science Education, 1994, University of California, Berkeley; B.S. Mechanical Engineering, 1989, University of California, Santa Barbara

## K

Bernadette Kapocias, Speech, Professor  
M.A. Communication, 1997, Washington State University; B.S. Communication, 1993, Southern Oregon State College

Zinzi Konig, Assistant Professor, Nursing  
M.S. Epidemiology of Microbial Disease, 2009, Yale University; B.S. Nursing, 2005, University of South Florida

Dr. Kyriakos Kypriotakis, Professor, Mathematics  
Ph.D. Mathematics, 2009, University of California; M.S. Mathematical Logic, 2002, National and Kapodistrian University of Athens; B.A. Mathematics, 2000, Aristotle University of Thessaloniki

## L

Piper Lisseveld, Associate Professor, Computer Information Systems  
M.S. Technology Management, 2009, George Mason University; B.S. Individualized Study, Database Systems Development, 2004, George Mason University

Tasha Livingstone, Associate Professor, Forestry/Natural Resources  
M.A. Interdisciplinary Studies, 2015, ; B.S. Forestry Management, 2013, Oregon State University

## M

Peter Mantey, Professor, Speech  
M.A. Communications, 1986, Regent University; B.F.A. Music Education, 1978, Heidelberg College

Dr. Ronald Metzger, Professor, Earth Sciences  
Ph.D. Geology, 1991, University of Iowa; M.S. Geology, 1988, University of Iowa; B.S. Geology, 1985, St. Lawrence University

## R

Amber Ridgway, Associate Professor, Writing/Humanities  
M.A. Humanities/English, 2010, California State University, Dominguez Hills; B.A. Liberal Arts, 2005, Oregon State University; A.A. , 2001, Chemeketa Community College at Oregon Coast

Dr. Maidie Rosengarden, Associate Professor, Childhood Ed/Family Studies  
Ed.D. Educational Leadership, 2004, Trevecca Nazarene University; M.Ed. Education/Early Childhood Education, 2002, Belmont University; B.F.A. Theatre/Art History, 1984,

Louis Rushton, Assistant Professor, Mathematics  
M.S. Mathematical Sciences, 2017, University of West Florida; M.S. Civil Engineering, 2013, Cleveland State University; M.S. Education, 2009, St Johns University; B.S. Applied Mathematics, 2007, University Oregon; A.A.O.T. , 2005, Southwestern Oregon CommunityCollege

## S

Dr. Michael Springer, Associate Professor, Chemistry  
Ph.D. Chemistry, 2014, University of Colorado; B.S. Chemistry, 2009,  
University of Nevada; B.S. Biology, 2008, University of Nevada; B.A.  
Philosophy & Sociology, 2005, University of Nevada

## T

Joseph Tremonti, Professor, Digital Design  
M.F.A. Electronic Visualization, 2002, University of Illinois; B.F.A.  
Interdisciplinary Studies, 1999, University of Georgia

Brian Truka, Associate Professor, Mathematics  
M.S. Mathematics, Stats & Computer Science, 2009, Marquette  
University; M.A. Philosophy, 2003, Marquette University; B.S.  
Mathematics, 1996, Bradley University

## W

Adam Whitlatch, Professor, Health/PE/Men's Wrestling Coach  
M.S. Pedagogy/Physical Education, 2001, University of Wisconsin - La  
Crosse; B.S. Physical Education, 2000, Ohio University; B.S. Recreation  
Studies, 2000, Ohio University

Laura Williams, Assistant Professor, Culinary Arts  
A.A.S. Culinary Arts, 2010, Southwestern Oregon Community College

Mark Wilson, Professor, Writing/Literature  
M.A. English, 1978, Washington State University; B.A. English, 1976,  
Northwest Nazarene College

Marta Wozniak, Professor, Writing  
M.A. English - Linguistics, 2004, Arizona State University; B.A. English,  
2001, Southern Oregon University; M.A. English - Literature, 2001,  
Nicholas Copernicus University

Jedediah Wyman, Associate Professor, Writing  
M.A. Creative Writing, 2009, Oregon State University; B.F.A. History, 2001,  
University of Montana

# RIGHTS & LEGAL NOTICES

---

## PUBLIC NOTICE OF NON-DISCRIMINATION

Southwestern Oregon Community College Board of Education Notice of Non-Discrimination

Students, their families, employees and potential employees of the Southwestern Oregon Community College District are hereby notified that Southwestern Oregon Community College does not discriminate on the basis of race, color, gender, sexual orientation, marital status, religion, national origin, age, disability status, gender identity or protected veterans in employment, education, or activities as set forth in compliance with federal and state statutes and regulations.

Any person having inquiries concerning Southwestern's compliance with Titles II and IV of the Americans with Disabilities Act of 1990, Titles VI and VII of the Civil Rights Act of 1964, Title IX of the US Education Amendments of 1972 - Public Law 92-318, or Section 504 of the Rehabilitation Act of 1973 may contact:

Jeff Whitey, Vice President of Administrative Services  
Southwestern Oregon Community College  
1988 Newmark Ave.  
Tioga Hall, Rm 511  
Coos Bay, OR 97420  
541-888-7402

Southwestern Oregon Community College offers the following career and technical education programs for all students regardless of race, color, gender, sexual orientation, marital status, religion, national origin, age, disability status, gender identity, or protected veteran status, including those with limited English proficiency: Business, Office Technology, Computer Technology, Childhood Education, Criminal Justice, Culinary, Fire Sciences, Health Sciences, and Welding.

Persons seeking further information concerning the vocational education offerings and specific prerequisite criteria should contact:

Dr. Ali Mageehon, Vice President of Instruction  
Southwestern Oregon Community College  
1988 Newmark Ave.  
Tioga Hall, Rm 506  
Coos Bay, OR 97420  
541-888-7417

While every effort is made to ensure the accuracy of the information in this catalog, Southwestern Oregon Community College has the right to make changes at any time without prior notice. This catalog is not a contract between Southwestern Oregon Community College and current or prospective students. Some policies and procedures are subject to change. See quarterly Schedule of Courses for details.

## EQUAL OPPORTUNITY

Southwestern Oregon Community College does not discriminate on the basis of race, color, gender, sexual orientation, marital status, religion, national origin, age, disability status, gender identity, or protected veterans in employment, education, or activities as set forth in compliance with federal and state statutes and regulations

# CATALOG A-Z INDEX

---

# INDEX

## A

Academic Information .....	7
Academic Policies .....	11
Accounting, Associate of Applied Science .....	24
Accounting Clerk, Certificate of Completion .....	25
Accounting Clerk, Entry-Level, Career Pathway Certificate of Completion .....	25
Administration .....	221
Admissions .....	9
Allied Health (AH) .....	150
American Sign Language (ASL) .....	151
Anthropology (ANTH) .....	152
Art (ART) .....	153
Articulated (Transfer) Degrees .....	143
Associate of Applied Science (AAS) General Education Requirements .....	144
Associate of Arts Oregon Transfer (AAOT) .....	27
Associate of General Studies (AGS) .....	31
Associate of Science (AS) .....	34

## B

Baking and Pastry Arts, Associate of Applied Science .....	37
Baking and Pastry Arts, Certificate of Completion .....	38
Baking Management, Associate of Applied Science .....	39
Basic Allied Health Care, Career Pathway Certificate of Completion .....	114
Biology (BI) .....	156
Business Administration (BA) .....	157
Business, Associate of Science Oregon Transfer .....	44
Business Management/Entrepreneurship, Associate of Applied Science .....	41

## C

Career Pathways .....	145
Catalog A-Z Index .....	226
Certificate of Completion .....	145
Chemical Engineering, Associate of Science .....	48
Chemistry, Associate of Science .....	49
Chemistry (CHEM) .....	159
Childhood Education and Family Studies, Associate of Science .....	51
Childhood Education and Family Studies, Preschool Children, Education and Development I, Career Pathway Certificate of Completion .....	133
Childhood Education and Family Studies, Preschool Children, Education and Development II, Certificate of Completion .....	134
CIS Cybersecurity, Associate of Applied Science .....	54

CIS Digital Design, Associate of Applied Science .....	56
Clinical Laboratory Assistant (CLA) .....	160
Computer Information Systems, Associate of Applied Science .....	59
Computer Information Systems (CIS) .....	161
Computer Science, Associate of Science Oregon Transfer .....	61
Computer Science (CS) .....	163
Course Descriptions .....	148
Criminal Justice, Associate of Science .....	65
Criminal Justice (CJ) .....	164
Culinary Arts, Associate of Applied Science .....	67
Culinary Arts, Certificate of Completion .....	68
Culinary Arts (CRT) .....	169
Culinary Management, Associate of Applied Science .....	69

## D

Data Center Technician, Certificate of Completion .....	71
Dental Assisting, Certificate of Completion .....	72
Dental (DEN) .....	173
Digital Design, Certificate of Completion .....	57
Digital Design (DD) .....	175
Digital Image Foundations, Career Pathway Certificate of Completion .....	57
Digital Interactive Foundations, Career Pathway Certificate of Completion .....	58
Drafting (DRFT) .....	175

## E

Early Childhood Education (ECE) .....	176
Economics (ECON) .....	179
Education (ED) .....	179
Electrical/Computer Engineering, Associate of Science .....	74
Elementary Education, Associate of Arts Oregon Transfer .....	76
Elementary Education, Associate of Science .....	78
Emergency Management (EM) .....	181
Emergency Medical Services Technician I, Career Pathway Certificate of Completion .....	125
Emergency Medical Technician (EMT) .....	181
Emergency Medical Technology, Career Pathway Certificate of Completion .....	125
Engineering (ENGR) .....	183
English (ENG) .....	184
Enrollment and Student Services .....	6
Environmental Engineering, Associate of Science .....	80
Environmental Technology (ENV) .....	185

<b>F</b>			
Faculty .....	222	Human Development (HD) .....	193
Faculty & Staff .....	221	Human Services (HS) .....	195
Financial Aid .....	10	Humanities (HUM) .....	195
Fire and Emergency Services Higher Education, Career Pathway Certificate of Completion .....	83	<b>I</b>	
Fire Science, Associate of Applied Science .....	82	Infant and Toddler Development, Associate of Applied Science .....	106
Fire Science, Associate of Science .....	87	<b>L</b>	
Fire Science Level I, Career Pathway Certificate of Completion .....	83	Library Science (LIB) .....	195
Fire Science Level II, Career Pathway Certificate of Completion .....	84	<b>M</b>	
Fire Science Level III, Career Pathway Certificate of Completion .....	85	Machine Tool (MT) .....	196
Fire Science Level IV, Career Pathway Certificate of Completion .....	85	Manufacturing Technology (MFG) .....	196
Fire Science Technology (FS) .....	185	Marine Biology, Associate of Science .....	109
Food and Nutrition (FN) .....	187	Marketing, Career Pathway Certificate of Completion .....	42
Forest Engineering, Associate of Science .....	88	Mathematics (MTH) .....	197
Forest Renewable Materials/Advanced Manufacturing, Associate of Science .....	90	Mechanical/Civil Engineering, Associate of Science .....	111
Forest Renewable Materials/Art and Design, Associate of Science .....	92	Medical Assistant, Associate of Applied Science .....	113
Forest Renewable Materials/Marketing and Management, Associate of Science .....	94	Medical Assistant, Certificate of Completion .....	114
Forest Renewable Materials/Science and Engineering, Associate of Science .....	96	Music (MUS) .....	199
Forest Resources Technology (F) .....	188	Music Performance (MUP) .....	202
Forest Technology, Certificate of Completion .....	98	<b>N</b>	
Forestry Management, Associate of Science .....	99	Natural Resources, Associate of Science .....	116
Forestry Management/Forest Restoration and Fire, Associate of Science .....	101	Natural Resources (NR) .....	204
Forestry Management/Operations Management, Associate of Science .....	103	Nursing - CNA (NUR) .....	207
<b>G</b>		Nursing, Associate of Applied Science .....	118
General Education .....	146	Nursing (NRS) .....	205
General Science (GS) .....	188	<b>O</b>	
Geographic Information Systems, Certificate of Completion .....	105	Oregon Transfer Module (OTM) .....	120
Geography (GEOG) .....	189	<b>P</b>	
Geology (G) .....	189	Paramedicine, Associate of Applied Science .....	124
Graduation .....	16	Parenting Educator and Early Childhood Home Visitor, Career Pathway Certificate of Completion .....	135
<b>H</b>		Pharmacy Tech (PHAR) .....	207
Health (HE) .....	191	Pharmacy Technician, Certificate of Completion .....	127
Health Information Management (HIM) .....	191	Philosophy (PHL) .....	208
History (HST) .....	192	Physical Education (PE) .....	208
Honors Program (HON) .....	192	Physics, Associate of Science .....	128
Housing .....	17	Physics (PH) .....	213
Human Development and Family Studies (HDFS) .....	194	Pipe Fitting, Career Pathway Certificate of Completion .....	139
		Police Science, Associate of Applied Science .....	129
		Political Science (PS) .....	213
		Preschool Child Development, Associate of Applied Science .....	131

Programs A-Z .....	23
Programs, Degrees, Certificates and Pathways .....	143
Psychology (PSY) .....	214

## **R**

Retail Management, Less Than One Year Certificate of Completion ....	137
Rights & Legal Notices .....	225

## **S**

Sociology (SOC) .....	215
Southwestern Oregon Community College 2021-2022 .....	4
Spanish (SPAN) .....	216
Special Programs .....	17
Speech (SP) .....	216
Student Learning Outcomes .....	146
Student Services .....	19
Supervision, Career Pathway Certificate of Completion .....	42

## **T**

TRIO Student Support Services .....	19
Tuition and Fees .....	20

## **V**

Veterans Information .....	21
----------------------------	----

## **W**

Welding Assistant, Career Pathway Certificate of Completion .....	139
Welding, Associate of Applied Science .....	138
Welding, Certificate of Completion .....	141
Welding Technician, Career Pathway Certificate of Completion .....	140
Welding (WLD) .....	217
Writing (WR) .....	219



# SOUTHWESTERN

AN OREGON COMMUNITY COLLEGE

1988 Newmark Avenue • Coos Bay, Oregon 97420  
[www.socc.edu](http://www.socc.edu)

