## Rogue Community College Catalog 2023-24

The Rogue Community College Academic Catalog contains everything you need to know about our programs and courses. In addition, you'll find helpful information about admissions and registration, student services, tuition and fees, academic requirements, and more.

## The RCC Catalog is a publication of Rogue Community College.


#### Abstract

Every effort is made to ensure accuracy at the time of publishing; however, the information contained herein is not to be regarded as an irrevocable contract between a student and the college. RCC reserves the right to change or cancel a class at any time and to alter the stated policy of the RCC Board of Education.


www.roguecc.edu
3345 Redwood Highway, Grants Pass, Oregon 97527
541-956-7500 or Oregon Telecom Relay Service, 711

## Welcome to RCC

## President's Welcome

## Welcome New and Returning RCC Students

It is my great honor to be leading the incredible team here at RCC as your president. I know, as a student, you will benefit from the expertise and caring nature of every RCC staff and faculty member, and their deep commitment to your educational success.

RCC's mission sets a high goal, inspiring us to enhance the quality of life in our communities by providing accessible, exemplary educational opportunities for student success and economic development. RCC's vision - to be an inclusive and dynamic college that inspires, strengthens, and transforms - asks each of us to achieve that goal with the highest integrity and future-forward thinking. It is clear these core values at RCC remain strong. I am honored to be part of creating such a positive impact for our entire community.

As a community college graduate, I have personally experienced the access, affordability and opportunity a college like RCC provides to all who bring their dreams to our doorstep. Our College's commitment is to the success of each student. It is a privilege to witness, and share along with you, the power of education to transform our lives.

I am exceptionally appreciative of the students, staff, and faculty of RCC who continue to show resilience and innovation in reaching their goals. RCC faculty and staff have engineered courses to meet the evolving needs of today's learners. RCC students are thriving in online, in person and hybrid classes. Everyone has found creative ways to build and celebrate this college community as we strive to provide the best teaching and learning environment possible.

Thankfully, the casual connection that happens when we can all be together on campus, seeing people in the hallways, sharing ideas after class, and developing personal relationships, enrich our learning experience. As your president, I will continue to seek and support creative ideas for community building from
each and every one of you. We are in this together, strong relationships help us all succeed, and together we will continue to strengthen our communities.

Thank you for your ongoing support of our faculty, staff, and your fellow students as we all engage in teaching, learning, outreach, and many other activities to advance RCC's diversity, equity and inclusion. Our joint efforts to be an open, welcoming and accessible educational choice for every Southern Oregon student, no matter their background or obstacles, is inspiring.

We have many educational opportunities for you to choose from at RCC as you pursue the ideas, skills, certificates and degrees to enhance your economic and personal life. The great news is that our programs and pathways are flexible and designed to meet you at whatever your starting point.

As you begin or continue your journey at RCC this academic year, our entire college welcomes you with enthusiasm, hope and dedication toward your success. You have made it to our open door and, on behalf of the RCC community, I wish you happiness, resilience and perseverance as you travel your path and achieve your dreams.

- President Randy Weber


## Strategic Plan

## Mission

Rogue Community College enhances the quality of life in our communities by providing accessible, exemplary educational opportunities for student success and economic development.

## Vision

Rogue Community College will be an inclusive and dynamic college that inspires, strengthens, and transforms.

## Core Values

- Integrity drives us as an institution and individuals to demonstrate clear communication, transparency, ethics, and accountability.
- Collaboration promotes a communicative, agile, responsive culture that fosters vibrant, productive partnerships to benefit our students and strengthen our communities.
- Diversity, Equity and Inclusion create an accessible, welcoming, respectful and safe environment which engages all individuals, beliefs, and ideas fairly
- Sustainability guides us to be responsible and thoughtful stewards of our human, economic, environmental, and cultural resources.
- Courage frees the institution and individuals to creatively pursue best practices supporting student success.


## Wildly Important Goals

WIG 1: Equitable Access creates a welcoming and inclusive environment for all.
Objective 1: Improve community access to our educational opportunities and support systems.
Objective 2: Increase participation of under-served populations in our programs.
Objective 3: Improve participation in adaptable and responsive training and learning opportunities designed to improve college access.

WIG 2: Student Success helps all students progress on their learning pathway.
Objective 4: Implement holistic student supports to ensure students meet their learning goals.
Objective 5: Use effective student engagement strategies to increase student persistence.
Objective 6: Decrease student time and number of credits to completion of a credential.
WIG 3: Building Community strengthens and expands internal and external collaborative partnerships.

Objective 7: Increase comprehensive outreach with business and industry partners.
Objective 8: Determine local employer satisfaction with our graduates for program quality improvement.
Objective 9: Strengthen relationships with community partners for the benefit of students.
WIG 4: Institutional Excellence builds a campus culture of continuous improvement.
Objective 10: Apply assessment and evaluation data to improve curriculum, course delivery, and services to support student success.
Objective 11: Increase participation in professional development that enhances teaching and learning, student success, and institutional effectiveness.
Objective 12: Make effective use of new and emerging technologies to improve teaching, learning, communication, and institutional operations.

## Welcome to RCC

RCC is a regionally accredited, comprehensive, two-year public college serving Jackson and Josephine counties on three campuses:

1. Redwood Campus (Grants Pass).
2. Riverside Campus (Medford).
3. Table Rock Campus (White City).

Other learning sites include the Illinois Valley Business Entrepreneurial and Illinois Valley Learning centers in Josephine County, and the Fire Science Center in Jackson County.

## Authority and Governance

The College is one of 17 community colleges in the state, each independently governed by its own local Board of Education and managed by the Department of Community Colleges and Workforce Development (CCWD) under the Higher Education Coordinating Commission (HECC) for the state of Oregon.

CCWD is granted legal authority for approval of courses and curricula through Chapter 589, Division 6 of Oregon Administrative Rules adopted by the State Board of Education under Chapter 341 of Oregon Revised Statutes.

The HECC and CCWD, in coordination with the State Board of Education, are responsible for distribution of state aid, review and approval of new programs and courses, and governance rules for Oregon community colleges.

In addition, the Oregon Community College Association serves as liaison between the colleges, state legislators, and partners on issues from funding to legislative policy, special studies and reports.

## Accreditation

www.roguecc.edu/Accreditation

RCC has been continuously affirmed for accreditation since 1971. It is accredited by the regional authority Northwest Commission on Colleges and Universities (NWCCU). NWCCU is recognized by and accountable to the U.S. Department of Education. NWCCU establishes the standards and processes by which public and private colleges and universities in the region are evaluated every 3 to 4 years in a 7 -year cycle to ensure student learning through quality education and overall college effectiveness. Accreditation also qualifies RCC for federal grants and other funding, including financial aid for students enrolled at the College.

## Americans with Disabilities Act \& Section 504

RCC does not discriminate on the basis of disability in admission to, access to, or operation of its instruction, programs, services or activities, or in its hiring and employment practices. The college provides reasonable accommodation to facilitate the participation of individuals with legally protected disabilities.

## Budget

For information, visit www.roguecc.edu/Budget.

## Campus Crime Awareness and Security

For information, visit www.roguecc.edu/security
The safety of students, faculty, staff and guests is a top priority at RCC. Safety is a cooperative effort, and it is the responsibility of each individual to assure a safe campus. RCC prepares an annual security report to comply with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act. Institutions of higher education are required to distribute to all current students, employees, and applicants for enrollment or employment two types of information: descriptions of policies related to campus security and statistics concerning specific types of crimes. This information is disclosed in the annual security report published by October 1 each year. For more information regarding safety and security or in order to obtain a copy of the annual security report, contact Risk Management or visit Risk Management's Campus Security page.

## Closures

If inclement weather conditions or other hazardous or emergency conditions require the closure or delayed opening of one or more campuses, announcements will be sent to students using the emergency notification system, and through postings on www.roguecc.edu/alerts and RCC social media accounts. Information will also be shared with local radio and television stations for public announcement.

## Consumer Information

All consumer information is available online at the RCC Consumer Information page.

## Electronic Communication

RCC primarily communicates with students via their RCC student email. When applying for admission, an RCC student email address will be provided. Check your RCC email regularly for messages from the college.

## Foundation

www.roguecc.edu/foundation | 541-956-7327
H Building, Redwood Campus
The RCC Foundation is a private, non-profit organization that accepts tax-deductible gifts and bequests, sponsors fund-raising events, and makes funds available in support of students and the college.

Today, the RCC Foundation has more than $\$ 14$ million in assets and supports the college through scholarships and direct funding to programs.

## Faculty and Staff

www.roguecc.edu/Directory
RCC employs approximately 282 regular employees: 46 exempt staff, 75 full-time faculty, 145 full-time classified, and 16 part-time classified staff. In addition, the college employs more than 365 adjunct faculty.

## Right to Learn

www.roguecc.edu/President/rightToLearn
Rogue Community College (RCC) Administration recognizes all people's Right to Learn. Our mission is to provide quality education for all segments of society through open access admission offering equal and fair treatment to all students who desire to learn.

To achieve these ends, promote the physical safety and emotional well-being of RCC students, and keep our campuses secure and inviting to them and their families, Rogue Community College will do the following:

Pursuant to the Family Educational Rights and Privacy Act (known as FERPA) and relevant law, RCC staff shall not disclose personal information including but not limited to any RCC student's immigration status. In addition, no RCC staff member shall ask about any student's immigration status or that of a student's family members.

In support of this, Rogue Community College will provide safe zones for students to communicate their concerns and access resources such as:

- Bilingual counselors/academic and career coaches with whom students share a common identity.
- A means to report hate incidences.
- Advocates for sexual harassment complaints.

RCC, under FERPA, approves what Directory Information is published and shall not release "non-directory" student record information unless legally compelled to do so.

RCC security personnel do not have the authority to, and therefore will not enforce federal immigration laws.
RCC Administration has the authority and responsibility to control access to college property owned, leased, rented or occupied for the purpose of RCC-related education, service or operations, and restricts the facilitation or consent to immigration code enforcement unless under court order or in the event of an imminent health or safety risk.

## Students

In the 2021-22 school year, approximately 7,711 students enrolled at RCC. That number represents a fulltime equivalent (FTE) of 2,782 students. For more information, visit the RCC At-a-Glance page.

## Frequently Called Numbers

www.roguecc.edu/Directory
New to RCC? Go to www.roguecc.edu/start or www.roguecc.edu and click on "Virtual Student Center."

| Department | Number |
| :--- | :---: |
| Main Number | $541-956-7500$ |
| Access and Disability Resources | $541-956-7337^{* *}$ |
| Admission (Recruitment/Campus Tours) | $541-956-7217$ |
| Adult Basic Skills (ABE/GED®/ESL) | $541-956-7490$ |
| Advising | $541-956-7192$ |
| Bookstore (Textbooks/Student Store) | $541-956-7303$ |
| Community Education (Including Truck-CDL) | $541-956-7424$ |
| Computer Labs | $541-956-7443$ |
| Counseling | $541-956-7116$ |
| Driver Training (High School and Adult) | $541-956-7427$ |
| Enrollment Services | $541-956-7150$ |
| Financial Aid Advising (Financial Aid Cashier)FinAidAdvising@roguecc.edu \| 541-956-7501 |  |
| Library |  |


| Department | Number |
| :--- | :---: |
| Registration Help | Registrar@roguecc.edu |
| Student and Employment Services | $541-956-7323$ |
| Testing Center/Placement Assessment | $541-956-7100$ |
| Transcripts ordering information | $541-956-7427 \mid$ Registrar@roguecc.edu |
| TRIo Educational Opportunity Center | $541-956-7097$ |
| Tutoring Centers | $541-956-7100$ |
| Veterans Resources |  |
| 541-956-7288 |  |
| Cial Media at RCC |  |

Stay in touch with Rogue Community College through the following services:
www.facebook.com/RogueCommunityCollege/
Facebook is a social networking site where users create profiles, upload photos and videos, send messages, and keep in touch with others.
www.instagram.com/roguecommunitycollege/ Instagram is a mobile social media where users share photos and videos publicly or privately. Follow @roguecommunitycollege for current RCC images and video.
www.twitter.com/rogueCC
A social broadcasting service that allows users to communicate through short text-based posts or "tweets" of up to 280 characters. Find us @RogueCC.

RCC Campus App. A mobile platform for RCC students to network, learn, and keep up on campus activities. Available at the Apple Store, Google Play, or RCC's Campus App page.

Wordpress Blog: roguecommunity.net Rogue Community is a news and student stories blog built to engage with the community of RCC and beyond.
www.youtube.com/RogueCCVideos
YouTube is a site for viewing, uploading and sharing videos. Visit the RCC channel for fun and informative videos about RCC.

RCC website www.roguecc.edu.

## Admissions and Registration

## Get on the Path

## Steps to Getting Started

## Find your Path

The RCC Career Coach and Guided Pathways
Discover how your passions and skills can best be used in the workplace - because people who do what they love, love what they do. Let us help you get on the right path from the beginning, saving you money and time.

## 1. Apply for Admissions

Completing an admission application is fast, free and is required for all programs. When you are done, you will receive an email with the RCC ID number that you will need during your college career. Contact recruitment@roguecc.edu for help

## 2. Apply for Financial Aid

Save your money! Spend ours. More than 3 billion dollars of federal aid goes unclaimed. * Financial assistance can make your education affordable. Complete your FAFSA/ORSSA early.

Complete your FAFSA (studentaid.gov/h/apply-for-aid/fafsa). Email TRIO-EOC for help with your FAFSA at trioeoc@roguecc.edu. Complete your ORSAA (www.oregonstudentaid.gov).

Email recruitment@roguecc.edu or call 541-956-7217 for help with your ORSAA.
Need to work? Check out our campus jobs.

## 3. Connect with Your Advisors

After completing the placement process, you will meet with your advisors. Your advising team includes: An Academic \& Career Coach (ACC), who will assist you with course registration and advising, updating your major, and much more. A Financial Aid Advisor will assist you in determining the cost of your education and how to pay for it including grants, loans, scholarships and jobs.

## 4. Complete New Student Orientation (NSO)

Complete the online New Student Orientation (NSO). During your online orientation, you will receive the information and resources you need to make a strong start in college. More information can be found at www.roguecc.edu/newStudents/NSO.asp.

## 5. Register for Classes

Log into your myRogue Student Portal and register for classes. Order books and supplies online at Ambassador Bookstore.

## Admissions Policy

Students 18 years and older may be admitted to RCC. Students under the age of 18 who have graduated from high school or completed a GED® may be admitted. For enrollment under 18 years old, see "Underage Enrollment."

Questions may be directed to the Transition Specialists at recruitment@roguecc.edu.

## Enrollment Limitations

The college may restrict enrollment in a class or program due to limited space, staff or equipment. Enrollment also is limited for some programs or classes due to special admission requirements such as minimum age, safety issues or criminal background.

## Special Admission Programs

The following programs have their own applications and admissions requirements:

- Addiction Studies
- Apprenticeship
- Dental Assistant
- Human Services
- Massage Therapy
- Administrative Medical Assistant
- Medical Assistant
- Nursing (Enrollment is limited and admission is not guaranteed.)
- Paramedicine
- Pharmacy Technician
- Phlebotomy
- Practical Nursing

See the Programs of Study section of this catalog for specific requirements and contact information.
NOTE: Some health care programs require students to submit verification of certain immunizations and medical tests.

## International Admission

RCC is authorized under federal law to enroll non-immigrant students. International Admissions is open for the 2023-24 academic year. For all international questions, please see RCC's International Student webpage.

## Underage Enrollment Standards for Credit Classes

Prospective students under the age of 18 who have not graduated from high school or completed a GED® must meet additional criteria for acceptance. The college reserves the right to approve or deny the request for enrollment by underage students.

## First Term Course-Placement

www.roguecc.edu/placement
The Placement Process is designed to enable a student with the assistance of RCC staff to determine the most appropriate class to match each student's academic skill level.

Students who plan to enroll in any course with a prerequisite or intend to pursue a degree or certificate, must participate in the placement process. Many RCC credit-courses have prerequisites for a certain level of math, reading, and writing competency. Knowing which courses are best for you is important and will save you time, money, and frustration. RCC has multiple ways for you to be placed into your first term of classes that best fit your current skills.

The Placement Process may be met based on any of the following conditions:

- An official or unofficial college transcript with successfully completed college-level reading and math classes.
- High School cumulative GPA, Senior English course grade, and highest high school math course and grade within the last two (2) years.
- SAT or ACT scores within the last five (5) years.
- GED test scores within the last five (5) years.
- Placement Assessment results from another college.
- AP (Advanced Placement) or IB (International Baccalaureate) scores.
- Placement Assessment

For more information about your placement process options, contact the Transition Specialists at recruitment@roguecc.edu.

## Placement Assessment

## www.roguecc.edu/PlacementAssessment/

If you are unable to be placed using the multiple options, RCC provides a placement assessment called Accuplacer NextGen. Students take an untimed, user-friendly computerized assessment. RCC offers a free placement assessment at either our Redwood Campus (Grants Pass), or our Table Rock Campus (White City). We sometimes offer placement assessments at our Riverside Campus in Medford, also.

To request a placement assessment with accommodations due to a disability, contact Access and Disability Resources: by emailing accessOffice@roguecc.edu, calling 541-956-7337, or Oregon Telecom Relay Service, 711.

The following classes have no prerequisites and do not require a placement process or test:

- ART 115 Basic Design (Composition)
- ART 116 Basic Design (Color Theory)
- ART 120 Introduction to Digital Art
- ART 131 Introduction to Drawing (Value)
- ART 132 Introduction to Drawing (Line)
- ART 133 Introduction to Drawing (Mixed Media)
- ART 222 Graphic Design (Typography)
- ART 234 Figure Drawing I
- ART 237 Illustration (Black and White Media)
- ART 238 Illustration (Color Media)
- ART 239 Illustration (Perspective)
- ART 253 Ceramics I
- ART 256 Ceramics IV
- ART 257 Beginning Jewelry and Metalsmithing
- ART 276 Sculpture
- ART 281 Painting I
- ART 287 Aqueous Media/Airbrush I
- ART 294 Watercolor I
- CG 100 College Success and Survival
- CG 147 Decision Making
- CG 150 Exploring Careers in Science and Technology
- CIS 60 PC Basics I
- CIS 120 Concepts in Computing I
- DDM 120 Digital Graphic Design I
- DDM 125 Digital Photography
- DS 111 Basic Electricity for Diesel Technicians I
- DS 120 Diesel Practices
- DS 151 Heavy Equipment Brakes
- DS 290 Diesel Repair Lab
- ED 120 Leadership I
- EET 100 Orientation to Electronics Technology Fields
- EET 101 Electronics Fundamentals for Non-Majors
- EET 108 Wearable and Lighting for Electronics
- EET 112 Computer Programming for Technology
- EMS 160 Electrocardiogram (ECG) Interpretation
- ES 105 Introduction to Emergency Services
- FRP 211 Hiring Practices in the Fire Service
- FRP 242 Introduction to Codes and Ordinances
- FRP 261 Hazardous Materials Awareness and Operations
- FRP 262 Fundamentals of Fire Prevention
- FRP 264 Building Construction for Fire Protection
- FRP 272 Fixed Systems and Extinguishers
- FRP 274 Firefighting Strategy and Tactics
- FRP 285 Fire Instructor I
- HD 114 Life Planning
- HD 215 Transfer Success
- HE 112 Emergency First Aid
- HE 145 Stress Management - Healthy Living
- HE 261 CPR/Basic Life Support Provider
- HS 152 Stress Management
- MEC 130 Hydraulics I
- MEC 135 Mechanical Drives I
- MUS 101 Music Fundamentals
- MUS 105 Music Appreciation
- MUS 131 Class Piano I
- MUS 135 Beginning Hand Drums
- MUS 136 Introduction to Ukulele
- MUS 137 Group Guitar - Beginning
- MUS 142 Music Technology I
- MUS 150 Rogue Chorus
- MUS 151 Riverside Chorus
- MUS 158 Chamber Music
- PE 185 Physical Education (activity courses)
- TA 141 Fundamentals of Acting
- TA 144 Improvisational Theater
- TA 153 Theater Rehearsal and Performance
- TA 190 Theater Practicum
- WLD 101 Welding Fundamentals I

NOTE: Students receiving financial aid are limited to taking the required and elective courses in the graduation guide for their declared major.

## Transfer Credits

RCC accepts 100-level and above lower-division collegiate courses from regionally accredited colleges when they meet the following transfer credit acceptance criteria:

- Are graded C- or better.
- Apply to an RCC program.
- Have credit/contact hours, curriculum and outcomes that are equivalent to courses offered at RCC, are graded on a similar basis and taught by qualified professionals.
- Meet the above criteria or are otherwise deemed appropriate substitutions for RCC courses.


## Transfer Credit Evaluation

Evaluation of transfer credit may take up to six weeks, so it is important to apply early.

- Get admitted to RCC.
- Declare a major at RCC.
- Order official transcripts from all previous colleges.
- Provide course descriptions for any course taken more than 10 years ago that will be considered toward the evaluation.
- For evaluation of military credit, order an official military transcript.
- See "Credits earned through other programs."


## New Student Orientation

The RCC New Student Orientation is designed to help students explore their new college, meet the instructors and advisors who will help them through the next few years, and make friends! This means students don't have to arrive already knowing the answers to all their questions as they learn from the NSO what RCC has to offer to make them successful as college student.

During the orientation process, students will receive guidance on declaring a major, ways to pay for college, play games, tour the campus, and be introduced to social activities and clubs on campus.

## Freshman Experience

For students who are new to the college environment and first-time freshmen, and/or have not yet decided on a major, there is a combination of classes designed to help them get started successfully in an academic career. By the end of this series they will understand what educational goals are and the skills required to complete them. Each of the following courses will count toward general education and/or elective requirements:

- Appropriate math course each term.
- Appropriate writing course each term.
- CG100 College Success and Survival.
- CG140, CG150 or CG155 Career Development Course.
- CIS120 Concepts in Computing I.
- COMM115 Introduction to Intercultural Communication.
- RD120 Critical Reading and Thinking.
- PSY101 Psychology of Human Relations.

See an Academic and Career Coach for details.

## Freshman Experience Program Learning Outcomes

1. Financial Literacy: RCC students will be able to manage and understand the relationship between income, expenses, credit and debt over time.
2. Social Skills/Soft Skills: RCC students will adapt to and follow the social structures, formal rules and cultural norms of college.
3. Connection: RCC students will be able to recognize the importance of developing and maintaining relationships with people and resources.
4. Study Skills: RCC students will commit and persist in completing their goals through a purposeful selection of tools and strategies that work for them.
5. Persistence: RCC students will commit to and persist along their chosen academic path through a purposeful and self-aware selection of tools and strategies.
6. Navigate Systems: RCC students will identify and use key systems in the appropriate order at the appropriate t17ime.
7. Major Secure: RCC students will purposefully pursue a career based on interests, abilities and career information.
8. Awareness of Cultural Diversity: RCC students will respectfully engage with a variety of ideas, viewpoints and differences in spite of their implicit bias.

## Registration

See the online registration schedule for priority registration times and additional information about registration options. Email Registrar@roguecc.edu for answers to questions about the registration process.

Credit students register using the online registration system at www.roguecc.edu/myRogue.
Students should register carefully as they are liable for tuition/fees for any registered courses. Students must drop themselves online if they do not plan to attend. Only those who have paid in full are eligible for priority registration.

For special registration arrangements due to a disability, contact Access and Disability Resources: 541-9567337 or Oregon Telecom Relay Service, 711.

## Rogue Central

Registration, advising, cashiering and financial aid services are available at one convenient location on each campus in Rogue Central.

## myRogue

myRogue has many helpful tools including account history, course schedule, a link to report cards, and a link to online registration and Degree Audit. Students also receive important information via their RCC issued student email from registrar@roguecc.edu.

## Logging on to myRogue

1. Visit the RCC home page.
2. Select myRogue Student Portal.
3. Log in with RCC username and password that was created when completing the online admissions application.
4. To reset password, click the "Forgot Your Password?" link, and follow the directions.

## Change of Registration

Schedule changes may be made at www.roguecc.edu/myRogue.

## Adding a Class

Classes may be added by registering online during registration periods through Monday of the second week of term.

NOTE: This deadline does not apply to Continuing Education or other classes that may begin at irregular times during the term.

## Full or Waitlisted Classes

Classes that are full or waitlisted require instructor permission to register. Students must contact the instructor and request the class permission code. The deadline to register online with a permission code is Monday of the second week of the term.

## Non-Attendance Drop

For term-length credit classes or non-term-length classes that start during the first week of the term, students must attend at least fifty percent of the class session for in-person classes or submit the first week assignment by Wednesday for web classes during the first week of the term, or they may be dropped for non-attendance from the class by the instructor.

NOTE: Drop only applies to classes students registered prior to the first day of the term.
Students unable to attend the class during the first class session should contact the instructor prior to the class meeting if they wish to avoid being dropped for non-attendance from that class. Contact information for instructors is online at the RCC Directory.

A tuition refund will be applied to the accounts of students who have been administratively dropped from class(es) due to non-attendance.

NOTE: This procedure does not relieve students of the responsibility to drop from classes. Students need to officially drop or withdraw from classes that begin at irregular intervals.

## Official Drop or Withdrawal from Classes

- Students may drop from a term-length class through Monday of the second week of the term until 11:59 p.m. Tuition is refunded in full (and financial aid adjusted if necessary) when a student drops from a class. There is no notation of the dropped class on the student's grade report or transcript. See the chart below for the credit class refund and withdraw deadlines for non-standard term length classes.
- Students may withdraw from classes until the Friday of the eighth week of the term (Thursday of fifth week in summer term). There is no refund when a student withdraws from a course. A grade of "W" is assigned for a withdrawn class; the "W" grade appears on a grade report and on a transcript.

NOTE: Students may drop or withdraw using internet registration in myRogue. The official withdraw date is the day a student withdraws online. Students who stop attending a class, but do not officially drop or withdraw will receive a grade for the course that will become a permanent entry on their academic records.

## Credit Class Refund and Withdraw Deadlines

| Class length | Last day for a refund, $\mathbf{1 0 0 \%}$ refund, <br> nothing on transcript | Last day to withdraw, no refund, W <br> grade on transcript |
| :--- | :--- | :--- |
| Regular term length <br> classes | Monday, week two of the term <br> One-day classes <br> One day prior to class meeting <br> One-week classes <br> Thursday of week five |  |
| The day of the first class meeting | First day of class |  |
| Two-week classes <br> or longer | The day of the first class meeting | One day before last class meeting |

## Unofficial Drop or Withdrawal from Classes

Students who stop attending but do not officially drop or withdraw receive the grade they earned based on syllabus requirements. If that grade is F or NP, the instructor must enter the last date of attendance on the online grade roster, which becomes the official withdrawal date.

## Cancellation of Classes

The college reserves the right to cancel any class due to extenuating circumstances such as low enrollment. Students will receive a full refund for canceled classes. Because changes do occur, students should verify their class schedules, before the term begins, at RCC's myRogue student portal.

## Tuition and Fees

The Rogue Community College Board of Education establishes tuition and fees. Current tuition and fee rates are posted at www.roguecc.edu/tuition.

Tuition is based on a per credit rate and determination of residency. (See "Residency policy.") Tuition rates, fees and refunds are subject to change; current information is published on the RCC website. Search for "tuition rates." Tuition and fees for auditing a course are the same as normal tuition fees.

Following are the tuition rates and fees for 2023-24:

- Oregon residents - $\$ 120$ per credit hour.
- Out-of-state residents - $\$ 148$ per credit hour.
- International students - $\$ 400$ per credit hour.
- Technology fee - $\$ 7$ per credit.
- College services fee - $\$ 17$ per credit up to 15 credits.
- ESL/ABS/GED® - $\$ 65$ per term.
- $\mathrm{GED®}$ test fee -4 tests, $\$ 38$ each $=\$ 152$.
- Non-credit classes - tuition varies by class or workshop and is published each term. A \$7 technology fee may be assessed in addition to the workshop or class fee.
- Penalty for Non-Payment - $5 \%$ of the outstanding balance or $\$ 5$ whichever is greater charged on accounts that have not set up an installment plan or been paid in full by the first payment deadline, second week of term.
- Late Fees: $\$ 15$ late fee on delinquent accounts, assessed after the second and final installment payment deadlines, week 5 and week 8 of term.
- Installment fee - \$25.
- Returned check fee - $\$ 25$.


## Residency

## Tuition

A student's residence determines the tuition he or she will pay for classes. The college has three tuition schedules: in-state, out-of-state, and international. Documentation may be required to establish residency. Items that may be considered valid proof of residency include an Oregon driver's license, property tax bill or
utility bills (dated 90 days prior to the first day of the term). Students who cannot provide any one of the appropriate documents will be charged tuition as determined by the Director of Enrollment Services. Students may request a reclassification to in-state residency by submitting the Request to Establish Residency Status form to the Enrollment Services department. Requests must be submitted prior to the start of the term for which reclassification is to be effective. Documentation will be required of the student in support of the reclassification request.

## In-state

A student may register and pay in-state tuition if one of the following requirements is met:

- Has maintained a permanent address in Oregon for at least 90 continuous days prior to the first day of the school term.
- Is a permanent resident of Oregon but currently is stationed for military duty outside of Oregon.
- A veteran using educational assistance under either chapter 30 (Montgomery GI Bill - Active Duty Program) or chapter 33 (Post-9/11 GI Bill), of title 38, United States Code, who lives in Oregon while attending a school located in Oregon (regardless of the student's 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 (See page 30 for details).
- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of the student's 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 remaining 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 31 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. $\S 3311(\mathrm{~b})(9)$ ) who lives in Oregon while attending a school located in Oregon (regardless of his or her formal State of residence).
- Was considered a resident at the time of admission, has maintained continuous enrollment and is a spouse or dependent of an active military member assigned to duty out-of-state.
- Is a resident of Oregon who left the state for summer employment.
- Is a resident of California, Idaho, Nevada or Washington.
- Is a Native American or Alaska Native who graduated from an Oregon public or private high school.


## Out-of-state

Students who list their permanent addresses outside of Oregon must pay out-of-state tuition. This includes:

- Students who list their parents' address as outside Oregon and who are claimed as dependents by their parents on their income tax return.
- Alaska residents who wish to receive the Alaska Permanent Fund Dividend while attending RCC and must maintain their out-of-state residency status.
- Non-citizens on a visitor's visa or student visa certified by another college.


## International

Students who are citizens of another country and are attending RCC on a student visa certified by RCC will pay the international tuition rate.

## Payment Deadlines

Payment dates are indicated on the Academic Calendar each term. All tuition and fees must be paid in full by Friday of the second week of the term (Thursday in summer term) or an installment plan must be in place. Students whose tuition is paid by an agency need a voucher or purchase order on file before the payment deadline.

Students will be responsible for all tuition charges unless classes are dropped by drop deadline.

## Payment Methods

It is strongly encouraged that payments be made either by credit card on myRogue or by check to our lockbox processor (see Payment address and cashiering locations). The following are available methods of payment:

- Cash - U.S. funds only. Accepted in-person, see Cashiering locations section for hours.
- Checks - Personal checks, cashier's checks and money orders are accepted for the amount of purchase only. Please make checks payable to Rogue Community College and remit to our lockbox processor (see Payment address section). Print the student's name and the student ID number clearly on the face of the check. A $\$ 25$ charge is assessed on any returned check.
- Credit Card (VISA, MasterCard, Discover and American Express) - Payment is available online on myRogue. RCC student username and password are required.
- Agency or company payments - Arrangements for payment by an agency or company must be preapproved by the college. Please contact AR@roguecc.edu for the process. Once approved, agencies or companies will email vouchers for tuition, fees, books and supplies to the same email. If payment is not received from the agency, the student is responsible for the full amount.


## Payment Address and Cashiering Locations

All checks must be sent to RCC's lockbox at:
Rogue Community College
PO Box 3678
Portland, OR 97208-3678
For your convenience, postage-paid, pre-addressed envelopes are located at the cashiering locations below and can be dropped in any U.S. postal mailbox.

Cashiering locations - payments may be made in-person at the following campus locations and hours (closed for lunch from noon-1:00 p.m. and on Fridays during the summer):

- Rogue Central, Redwood Campus, Grants Pass: Monday - Friday, 8:00 a.m. to 5:00 p.m.
- Rogue Central, Table Rock Campus, White City: Monday - Friday, 8:00 a.m. to 5:00 p.m.
- Rogue Central, Riverside Campus, Medford: Monday - Friday, 8:00 a.m. to 5:00 p.m.

Please help us manage our payment process by either mailing your check payment to the lockbox address, or making a credit card payment on myRogue at www.roguecc.edu/myRogue. If you would like to make a payment by phone, please call 541-956-7430. Should you have any payment-related questions you can also email us at STAR@roguecc.edu. Please direct all financial aid inquiries to your financial aid advisor.

Visit the Contact your Financial Advisor link, for your specific Financial Aid Advisor's email based on your pathway.

## Student Installment Plan

www.roguecc.edu/payment
Students who have no delinquent accounts with RCC and have not defaulted on any previous payments at the college may defer payment of tuition and fees through the use of the student installment plan.

Students qualify if they have an account balance of more than $\$ 75$ for credit courses or are enrolled in a short-term skills training course with tuition of $\$ 180$ or more, provide a valid Social Security number, and have a satisfactory credit history with RCC.

Students who use the installment plan must pay $\$ 50$ of the current term's charges and a $\$ 25$ non-refundable administrative fee by the payment deadline, listed on RCC's Academic Calendar.

The balance is payable in the next two months in equal installments. The installment plan may be started after the payment deadline, but the two equal installments will be due by the regular tuition installment deadlines, and late fees will be assigned (see consequences of non-payment).

Students have until the payment deadline to make payment arrangements before additional fees apply.
Students who have entered into an installment plan and withdraw after the 100 percent refund period or unofficially withdraw are responsible for the balance. Although accounts may not be delinquent when priority registration begins, only those who have paid in full may register for a future term.

Installment plan applications are available on myRogue. Request more information via email:
STAR@roguecc.edu.

## Consequences of Non-payment

When students register for a class, they are liable for payment of the charges for that class. To remove charges, students must go online to drop the class by the refund deadline. Students are responsible for full payment of all charges by the payment due date even if the account is paid by another party or through financial aid.

Failure to pay in full or enter into an installment plan by the payment due date may result in the following fees:

- Penalty for non-payment fee - 5 percent of past-due balance; minimum of $\$ 5$.
- Late registration - After initial registration and payment deadline, $\$ 15$ plus 5 percent of tuition; after second installment deadline, $\$ 30$ plus 5 percent of tuition; after last installment deadline, $\$ 45$ plus 5 percent of tuition.

Student accounts with a balance at the end of the term will be sent to a collection agency. Students will be responsible for all collections costs and fees. Collection agencies will pursue all means of collecting the amount due including but not limited to the garnishment of wages, tax refunds or litigation.

RCC also may impose penalties on delinquent accounts. Registration may be denied or canceled, and the extension of credit, provision of services, grade reports, official transcripts, and diplomas may be withheld until such time that the indebtedness is paid in full.

## Refunds

## Tuition and fees refunds:

If the college cancels a class, students are entitled to a refund of tuition and fees. Financial aid is adjusted to the decreased enrollment level.

Tuition refunds are based on the date that students drop online rather than the last day class was attended. A "withdrawal" occurs when a class is not dropped within the refund deadlines as specified above. No refunds are issued for withdrawals.

## Financial aid refunds:

RCC delivers your refund with BankMobile Disbursements, a technology solution, powered by BMTX, Inc. Visit this link for more information: BankMobile Refund Choices.

Please refer to RCC Financial Aid for details on financial aid, and the Business Office for more information about refunds, including timing. All students must select their refund preferences at BankMobile Refund Choices in order to receive payments from RCC.

## Refund Policy for Noncredit Classes:

Full payment for non-credit classes (e.g. community education, workforce development, and community education sponsored events) is due at the time of registration. Community Education and Workforce Development classes must be dropped at least three working days prior to the class start date to be eligible for a full refund.

If RCC cancels a non-credit class for any reason, all paid fees will be refunded. Please be certain of your intent to complete a class prior to registration. Classes may be canceled or postponed by RCC for insufficient enrollment one working day prior to the first class session. Appeals may be made by completing the account appeal form (found on the Continuing Education website) and returning it to the Continuing Education \& Workforce Development Office at Redwood Campus, building A, for committee review.

See the RCC Continuing Education website for refund policies on non-credit courses.

## Student Record Appeals

Students who think they have documented circumstances (such as hospitalization or a death in the family) that might warrant an exception to this policy may submit a Student Record Appeal to the Enrollment Services Department, available at the Forms for Students page.

Appeals must be received by the college within two years from the end of the term the student is appealing. If the student was awarded financial aid during the term and is requesting to be dropped, then the appeal must be received within the same academic school year, or 60 days from the end of spring term.

## Academic Information

## Academic Standing

## www.roguecc.edu/enrollmentServices/academicStanding.asp

Academic difficulty results when a student is not maintaining academic standards by earning at least a 2.0 grade point average each term and completing $66.67 \%$ of their term attempted credits. A student whose term grade point average is below 2.0 , and/ or who does not complete $66.67 \%$ percent of their term attempted credits will be placed first on Academic Alert I and second on Academic Alert II, and eventually will be academically suspended if academic difficulty continues. NOTE: For the complete Academic Standing Standard, see the Policies section of this catalog.

## Choosing a Major

RCC Academic and Career Coaches are available to help undecided students identify a major that will support their academic and career goals.

For the initial declaration of major, please consider the following:
Certificate programs and Associate of Applied Science (AAS) degrees prepare students for specific careers and do not include general education requirements for transfer to a four-year college or university.

Students who plan to transfer to a four-year college or university in Oregon, but are undecided about a specific major or focus, should declare the Associate of Arts Oregon Transfer degree (AAOT).

Associate of Science (AS) degrees are focused in a specific area, are articulated with one or more Oregon universities, and allow students to transfer to those institutions.

A student pursuing a certificate or degree that is "special admission," including Additction Studies, Dental Assistant, EMS/ Paramedicine, Human Services, Massage Therapy, Medical Assistant, Medical Assistant: Administrative Office Assistant, Nursing, Pharmacy Technician, Phlebotomy, and Practical Nursing should list Associate of General Studies (AGS) as their first major before being admitted to the program, and the limited entry program as the second major. An AGS degree may also be customized to be the first two years of a four-year degree and allows elective credits to be targeted toward the intended bachelor's degree.

Academic department faculty advisors can help students identify career goals within their declared majors and can provide information on local vocational trends in their fields.

At registration each term, students are required to verify that the major(s) in their academic record accurately represents the degree or certificate they are pursuing.

## Example Student Transcript

| Course | Credit hours | Grade | Grade points |
| :--- | :--- | :--- | :--- |
| Biology and lab | 4 | A | 16 |


| Course | Credit hours | Grade | Grade points |
| :--- | :--- | :--- | :--- |
| Figure drawing | 3 | C | 6 |
| Mathematics | 3 | F | 0 |
| $\mathbf{1 0}$ total credit hours attempted |  |  | $\mathbf{2 2}$ total grade points |

To calculate GPA, the total grade points are divided by the total credit hours attempted.
Total grade points: 22
divided by
Total credit hours attempted: 10
Equals: 2.20GPA

## Course Grading

## Program Courses

The quality of student work in most core program courses is measured by a system of grades consisting of five letter grades which are used in calculating grade point average. Instructors may assign a plus or minus to grades A, B, C or D. Plus and minus do not calculate into a student's grade point average.

A (Superior) 4 points

B (Above average) 3 points

C (Average) 2 points

D (Below average) 1 point

F (No credit) 0 points

NOTE: A "D" or "F" grade are non-passing grades and will not satisfy prerequisite or program requirements.

## Academic Success Courses

Pass ("P") or No Pass ("NP") are used for most academic success classes. A "P" grade indicates the student has earned a "C" or better.

Generally "P" and "NP" grades may not be used for individual students in core program courses, nor are "A" through "F" grades used for students in academic success classes. An NP grade does not satisfy prerequisites.

## Grade Point Average Calculation

Your grade point average (GPA) is calculated by dividing the total amount of grade points earned by the total amount of credit hours attempted. Your grade point average may range from 0.0 to 4.0.

For example:
A $=4$ grade points
$B=3$ grade points
$C=2$ grade points
D = 1 grade point
$\mathrm{F}=0$ grade points
Pass/No Pass (P/NP) courses are not factored in the student's GPA. I (Incomplete), R (Retaken Course), Y (grade pending), AU (Audit), and W (Withdrawals) do not receive grade points

## Other Grades

- Audit (AU) is an enrollment status which allows students to take classes but not receive credit or a grade. Students who choose this option should do so when registering. Students receiving financial aid should consult with their Financial Aid Advisor. (Financial aid will not pay for audits.)
- Pending $(\mathrm{Y})$ is used to indicate a grade has not been posted by an instructor.
- Incomplete (I) may be assigned when a student has successfully completed at least 75 percent of the coursework and a prolonged excusable absence causes inability to finish the course by the end of the term. Faculty are not required to grant an I grade. Students are required to complete the coursework within one term in term-length classes. Otherwise, the grade is automatically changed to an F or the assigned grade as noted on the incomplete form.
- Withdrawal (W) is assigned when a student officially withdraws from a class after the second Monday of the term, or for classes with irregular meeting dates after completing one third of the course. Students may withdraw any time until Friday of the eighth week. Grades of W are not included in GPA calculations.


## Last Date of Attendance

Faculty are required to report a last date of attendance when they submit a non-passing grade. Non-passing grades are F and NP. The last date of attendance is determined in this manner:

Seat Class: last date of in-person attendance.
Online Class: last date that a student submitted an assignment or test.

## Retaking a Course

Only the highest grade (defined by grade points) will be counted towards a student's (GPA) calculation for classes that are retaken. All classes and grades will remain on the student's transcript, but only the higher grade will be included in the grade point average (GPA) calculation. The lower grades will have ** symbols next to the grade. This applies only to grades that are included in GPA calculations, not $\mathrm{W}, \mathrm{Y}, \mathrm{NP}, \mathrm{P}, \mathrm{I}$ or AU
grades. Retaking a previously passed course is aid-eligible only once. Notify Financial Aid Advising before registering in a class passed twice so that aid can be adjusted prior to payment.

This process requires that students submit the Repeat Course form available at RCC's Enrollment Forms for Students.

## Course Numbering

- Personal Enrichment. Courses with numbers below 1.000 (e.g., 601 and .200 ) are considered to be personal enrichment courses and are not intended for program completion or transfer and are not financial-aid eligible.
- Academic Success. Courses with letters (e.g. CIS, CG, MTH, RD, WR) followed by numbers of less than 100 (e.g., MTH 20) are generally considered academic success courses and are sometimes financial-aid eligible.
- Career Technical Education (CTE). Courses identified by the following prefixes: AH, AM, APR, BT, CIS, CPL, DA, DDM, DS, ECE, EET, EMS, ES, FRP, HC, HS, MEC, MET, MFG, MT, NRS, PN, PRX, SRV, WLD are career and technical courses. Most of these courses apply to career and technical degrees and certificates at RCC. They are financial-aid eligible if required or are an approved elective of an aid eligible program.
- Occupational Supplementary. These courses, numbered 9.xxx (e.g., 9.263), are designed to upgrade the skills of workers currently employed in occupations or industries. These courses generally do not lead to a degree or certificate. Continuing education units (CEUs), a form of recognition given to units of training, are often given in lieu of credit and are generally not financialaid eligible.
- Lower Division Collegiate. These courses that are generally accepted by four-year colleges are identified with letters and numbers (e.g., WR 121Z), with the exception of courses with the career and technical prefixes previously listed and are generally financial-aid eligible.


## Credits Earned Through Other Programs

Submit documentation as outlined below.
A minimum of 12 credits toward any one-year certificate program and a minimum of 24 credits toward any two-year degree must be earned at RCC.

## Transfer Credit

Submit all official transcripts and declare a major at RCC.
RCC accepts 100-level and above lower-division collegiate courses from regionally accredited colleges when they meet the following transfer credit acceptance criteria:

- Are graded C- or better.
- Apply to an RCC program.
- Have credit/contact hours, curriculum and outcomes that are equivalent to courses offered at RCC, are graded on a similar basis and taught by qualified professionals.
- Meet the above criteria or are otherwise deemed appropriate substitutions for RCC courses. Courses from non-accredited institutions must meet the criteria listed above to be considered for transfer acceptance. Prospective students who want to transfer-in courses from non-accredited institutions must
produce evidence of the above criteria to RCC department chairs or program coordinators for review and possible credit award.

College-level courses taken in countries other than the United States need to be evaluated by a member of the NACES accredited agency and then compared to the RCC transfer credit acceptance criteria. A list of current National Association of Credential Evaluation Services (NACES) members may be found online at www.naces.org. Students may use the NACES member of their choice for a course-by-course or comprehensive evaluation, including grades.

## Dual Credit (High School Partnerships)

Dual Credit requires students to submit a completed RCC application online. Contact your high school counselor/liaison for assistance, or the High School Partnerships coordinator at LBowles@roguecc.edu with questions.

## College Now

## www.roguecc.edu/collegenow

The College Now program allows high school students to earn college credit for free in selected high school classes at the same time they are earning credit toward their high school diploma. College Now courses are taught at the high school by high school teachers. These teachers work with RCC academic departments, including CTE, to align the content of the high school class with the rigor of the college class. Schools may apply college credit earned to the high school diploma.

## Early College

## www.roguecc.edu/earlyCollege

This dual enrollment program allows high school students at participating high schools to become traditional RCC students during their high school years. Early College students take RCC campus or online courses taught by RCC instructors with the intention of completing an RCC certificate or education plan of study. High schools approve students to enroll in college courses and may grant college credit towards the student's high school diploma. Approved Early College classes are subject to be billed to the high schools at a discounted rate.

## Credit for Prior Learning (CPL)

Credits earned through these various programs do not count toward the minimum number of credits that the college requires to be completed at RCC toward certificate and degree requirements, nor are they an eligible basis for financial aid. Any exceptions to this policy must be approved by the appropriate department chair and the RCC chief academic officer. No more than 25 percent of total program credits may come from credits granted for prior learning. Visit the RCC Enrollment Services Forms for Students page for required forms.

## American Council on Education (ACE)

RCC only accepts ACE credit recommendations for awarding military credit. Credits awarded based on ACE credit recommendations are considered Credit for Prior Learning (CPL). See the Military course credit section.

## Challenge Exam

Currently enrolled students pursuing an approved program of study at RCC are eligible to petition for a challenge exam if it is available through the academic department. Contact the department chair or coordinator for availability. Successful challenge exam results apply to program requirements at RCC but do not count toward cumulative RCC credits, GPA, or financial aid eligibility. Full tuition and college fees are charged. The Challenge Exam Form is available at www.roguecc.edu/Enrollment/Forms.

## Placement Exams

In addition to RCC's Placement Process, the following charts list additional information for transfer and new students.

## Advanced Placement (AP)

AP credit can be earned in high school for college-level classes based on successful completion of AP exams offered through the College Board. Submit official AP score reports from www.Collegeboard.org.

## Advanced Placement Exam Chart

| Advanced Placement Examination | Scores | Credits | Course |
| :--- | :--- | :--- | :--- |
| Art - Drawing | $3+$ | 3 | ART 131 |
| Art - History | 3 | 4 | ART 204 |
| Art - History | $4+$ | 8 | ART 204, ART 205 |
| Art - Studio - 2D | $3+$ | 3 | ART 115 |
| Art - Studio - 3D | $3+$ | 3 | ART 276 |
| Biology | 3 | 12 | BI 102/BI 102L, |
| Biology |  |  | BI 103/BI 103L |
|  | B+ 101/BI 101L, |  |  |
| Calculus AB** | 12 | BI 212/BI 212L, |  |

Advanced Placement Exam Chart

| Advanced Placement Examination | Scores | Credits | Course |
| :---: | :---: | :---: | :---: |
| Calculus $\mathrm{AB}^{* *}$ | 4+ | 10 | MTH 251, MTH 252 |
| Calculus BC** | 3 | 10 | MTH 251, MTH 252 |
| Calculus BC** | 4+ | 15 | MTH 251, MTH 252, MTH 253 |
| Chemistry | 3 | 5 | CHEM 104/CHEM 104L/CHEM 104R |
| Chemistry | 4+ | 15 | CHEM 221L/CHEM 221R/CHEM 221, CHEM 222L/CHEM 222R/CHEM 222, CHEM 223L/CHEM 223R/CHEM 223 |
| Chinese Language and Culture | $3+$ | 12 | Humanities Elective |
| Comparative Government and Politics | 3 | 4 | PS 201 |
| Comparative Government and Politics | 4+ | 8 | PS 201, PS 202 |
| Computer Science A | 3 | 4 | CS 160 |
| Computer Science A | 4+ | 4 | CS 161J |
| Computer Science Principles | 3 | 3 | Meets Computer Proficiency |
| Computer Science Principles | 4+ | 4 | CS 160 |
| English Language and Composition | 3+ | 4 | WR 121Z |
| English Literature and Composition | 3+ | 4 | ENG 104 |
| Environmental Science | 3+ | 4 | ENV 111 +1 credit non-lab Science Elective |
| French Language and Culture | 3 | 12 | FR 101, FR 102, FR 103 |
| French Language and Culture | 4+ | 12 | FR 201 FR 202, FR 203 |
| German Language and Culture | $3+$ | 12 | Humanities Elective |


| Advanced Placement Exam Chart |  |  |  |
| :---: | :---: | :---: | :---: |
| Advanced Placement Examination | Scores | Credits | Course |
| Government and Politics (United States) | 3 | 4 | PS 201 |
| Government and Politics (United States) | 4+ | 8 | PS 201, PS 202 |
| History (European) | 3 | 4 | Social Science Elective |
| History (European) | 4+ | 8 | Social Science Elective |
| History (United States) | 3 | 4 | HST 201 |
| History (United States) | 4+ | 8 | HST 201, HST 202 |
| History (World, Modern) | $3+$ | 8 | HST 104, HST 105 |
| Human Geography | $3+$ | 4 | GEOG 110 |
| Italian | 3 | 12 | Humanities Elective |
| Italian | 4+ | 12 | Humanities Elective |
| Japanese Language and Culture | $3+$ | 12 | Humanities Elective |
| Latin | 3+ | 12 | Humanities Elective |
| Macro Economics | 3+ | 4 | ECON 202 |
| Micro Economics | $3+$ | 4 | ECON 201 |
| Music Theory | 3+ | 8 | MUS 111, MUS 112 |
| Physics 1 | 3 | 4 | GS 104 / GS 104L |
| Physics 1 | 4+ | 5 | PH 201/PH 201L/PH 201R |
| Physics 2 | 3 | 4 | GS 104 / GS 104L |
| Physics 2 | 4+ | 5 | PH 202/PH 202L/PH 202R |
| Physics C (Electricity and Magnetism) | 3 | 5 | PH 202/PH 202L/PH 202R |


| Advanced Placement Exam Chart |  |  |  |
| :---: | :---: | :---: | :---: |
| Advanced Placement Examination | Scores | Credits | Course |
| Physics C (Electricity and Magnetism) | 4+ | 5 | PH 212/PH 212L/PH 212R |
| Physics C (Mechanics) | 3 | 5 | PH 201/PH 201L/PH 201R |
| Physics C (Mechanics) | 4+ | 5 | PH 211L/PH 211R/PH 211 |
| Pre-Calculus | 3 | 4 | MTH 111Z |
| Pre-Calculus | 4+ | 8 | MTH 111Z, MTH $112 Z$ |
| Psychology | $3+$ | 4 | PSY 201 |
| Spanish Language and Culture | $3+$ | 12 | SPAN 101, SPAN 102, SPAN 103 |
| Spanish Literature and Culture | $3+$ | 4 | Humanities Elective |
| Statistics | $3+$ | 4 | STAT $243 Z$ |
| ** Credit not granted in both, only one or the other, depending on the examination taken. |  |  |  |

## International Baccalaureate (IB)

IB credit can be earned in some high schools for college-level classes upon successful completion of the IB Exam. Submit an official IB score report from www.ibo.org.

## International Baccalaureate (IB) Examination Chart

|  | Standard Level Exam Score of 4 <br> or higher <br> (except where noted) | High Level Exam score of 4 or higher <br> (except where noted) |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Exam | Credits | Course | Credits | Course |
| Art History | 4 | Art History Elective | n/a | n/a |
| Astronomy | 4 | GS 107/GS 107L | n/a | n/a |


| Biology |  |  |  | BI 211/BI 211L, |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | BI 211/BI 211L |  |


| Language and Literature (other than English) | 4 | 100 Level Foreign Language | 12 | 100 Level Foreign Language |
| :---: | :---: | :---: | :---: | :---: |
| Literature (English) | 4 | WR $121 Z$ | 8 | WR 121Z, ENG 104 |
| Literature (other than English) | 4 | 100 Level Foreign Language | 12 | 100 Level Foreign Language |
| Language $B$ (all languages except English) | 4 | 100 Level Foreign Language | 12 | 100 Level Foreign Language |
| Literature and Performance | 4 | Humanities Elective | n/a | n/a |
| Literature and Performance (other than English) | 4 | Humanities Elective | n/a | n/a |
| Marine Science | 4 | GS 108/GS 108L | n/a | n/a |
| Math Studies (standard level only) | 4 | MTH $105 Z$ | n/a | n/a |
| Mathematics | 4 | MTH 111Z | 9 | MTH 112Z, MTH 251 |
| Mathematics: Further Math (higher level only) | n/a | n/a | 14 | $\begin{aligned} & \text { MTH 251, MTH 252, STAT } \\ & 243 Z \end{aligned}$ |
| Mathematics: Applications and Interpretation | 4/8 | Score of 4: MTH $105 Z$ <br> Score of 5+: MTH <br> 105Z, MTH 111Z | 8/12 | Score of 4: MTH 111Z, STAT $243 Z$ <br> Score of 5+: MTH 111Z, MTH 112Z, STAT $243 Z$ |
| Mathematics: Analysis and Approaches | 4/9 | Score of 4: MTH $111 Z$ <br> Score of 5+: MTH <br> 111Z, MTH 251 | 8/17 | Score of 4: MTH 111Z, MTH 251 <br> Score of 5+: MTH 111Z, MTH 112Z, MTH 251, STAT $243 Z$ |
| Music (Solo, Group or Composition) | 3 | MUS 101 | 7 | MUS 101, MUS 108 |
| Philosophy | 4 | Philosophy Elective | 8 | Philosophy Elective |
| Physics | 5 | $\begin{aligned} & \text { PH 201/PH 201L/PH } \\ & \text { 201R } \end{aligned}$ | 15 | PH 201/PH 201L/PH 201R, <br> PH 202/PH 202L/PH 202R, <br> PH 203/PH 203L/PH 203R |


| Psychology | 4 | PSY 201 | 8 | PSY 201, PSY 202 |
| :--- | :--- | :--- | :--- | :--- |
| Social and Cultural <br> Anthropology | 4 | ANTH 110 | 4 | ANTH 110 |
| Sports, Exercise and Health <br> Science | 4 | PE Elective | 4 | PE Elective |
| Theater | 4 | Theater Elective | 4 | Theater Elective |
| Visual Arts | 4 | Art Elective | 6 | ART 115, ART 131 |
| World Religions | 4 | REL 201 | n/a | n/a |

## College Level Exam Placement (CLEP)

Students can receive credit for knowledge gained outside of a formal college environment. CLEP credit can be earned upon successful completion of the CLEP exam offered through College Board. See the CLEP chart for passing scores and recognized subject areas. Submit an official CLEP score report from www.Collegeboard.org. RCC is not a CLEP testing center. See the College Board website for current testing center locations.

## College Level Exam Program (CLEP) Chart

| College Level Exam Program | Scores | Credits |  |
| :--- | :--- | :--- | :--- | :--- |
| Composition and Literature |  | Course |  |
| American Literature | n/a | 0 | No equivalent |
| Analyzing and Interpreting Literature | n/a | 0 | No equivalent |
| College Composition | n/a | 0 | No equivalent |
| College Composition Modular | 50 | 3 | No equivalent |
| English Literature | 50 | 3 | HUM 199 |
| Humanities |  |  |  |
| World Languages | 50 | 8 | FR 101, FR 102 |
| French Language, Level 1 Proficiency | 59 | 12 | FR 101, FR 102, FR 103 |
| French Language, Level 2 Proficiency |  |  |  |


| German Language, Level 1 Proficiency | 50 | 8 | Humanities Elective |
| :---: | :---: | :---: | :---: |
| German Language, Level 2 Proficiency | 60 | 12 | Humanities Elective |
| Spanish Language, Level 1 Proficiency | 50 | 8 | SPAN 101, SPAN 102 |
| Spanish Language, Level 2 Proficiency | 63 | 12 | SPAN 101, SPAN 102, SPAN 103 |
| History and Social Science |  |  |  |
| American Government | 50 | 3 | PS 199 |
| History of the United States I: Early Colonialization to 1877 | 50 | 4 | HST 201 |
| History of the United States II: 1865 to the Present | 50 | 4 | HST 202 |
| Human Growth and Development | 50 | 4 | PSY 215 |
| Introduction to Educational Psychology | n/a | 0 | No equivalent |
| Introductory Psychology | 50 | 8 | PSY 201, PSY 202 |
| Introductory Sociology | 74 | 4 | SOC 204 |
| Principles of Macroeconomics | 50 | 4 | ECON 202 |
| Principles of Microeconomics | 50 | 4 | ECON 201 |
| Social Sciences and History | 70 | 8 | Social Science Elective |
| Western Civilization I: Ancient Near East to 1648 | 50 | 4 | AAOT History Elective |
| Western Civilization II: 1648 to present | 50 | 4 | AAOT History Elective |
| Science and Mathematics |  |  |  |
| Calculus | 50 | 5 | MTH 251 |
| Calculus | 60 | 10 | MTH 251, MTH 252 |
| College Algebra | 50 | 4 | MTH 111Z |
| College Mathematics | 50 | 4 | MTH $105 Z$ |


| Natural Sciences | $50^{*}$ | 9 | Non-lab Science Elective |
| :--- | :--- | :--- | :--- |
| Precalculus | 50 | 8 | MTH 111Z, MTH 112Z |
| Trigonometry | 50 | 4 | MTH 111Z |
| Biology | 50 | 9 | Non-lab Science Elective |
| Chemistry | 50 | 9 | Non-lab Science Elective |

## Business

| Information Systems | 52 | 4 | BA 131 |
| :--- | :--- | :--- | :--- |
| Introductory Business Law | 56 | 4 | BA 226 |
| Principles of Management | n/a | 0 | No equivalent |
| Financial Accounting | 50 | 4 | BA 211, BA 212 |
| Principles of Marketing | 52 | 4 | BA 223 |

*Score of 500 or above required prior to 1999.

## DANTES (DSST)

DANTES (DSST) scores will be individually reviewed by the department for possible credit award toward programs at RCC. Students submit official exam reports.

## Industry Certifications Inservice Training Credit

Credit is awarded by certain academic departments for successful completion of standardized competencies and training obtained through recognized career experience in addition to college coursework. These are Apprenticeship; Early Childhood Education; Emergency Medical Services; Fire Science, and Industrial Welding.

These trainings have been determined to be identical in content and proficiency requirements to content taught in college classrooms as part of degree programs. Requirements for documenting such competencies differ slightly between departments. Students should contact the appropriate department chair or program coordinator for more information. Students pay $\$ 10$ per credit for credit awarded in this manner.

## Military Course Credit

Military course credit is granted based on the guidance of the American Council on Education's "Guide to the Evaluation of Educational Experiences in the Armed Forces" and recommendations from department
chairs. At least 3 credits of health and physical education are awarded for completing basic training. An Official Joint Services transcript must be submitted. At RCC, military courses are considered transfer credit.

## Portfolio Credit

Some departments may allow credit for prior learning based on portfolio development and review, a process that allows students to demonstrate mastery to earn college credit for existing RCC classes by submitting a written portfolio as evidence of relevant experiential learning for faculty assessment.

Portfolio credit is based only on the assessment of documents; it is not a graded process. If students must receive a letter grade, they may apply for credit through the challenge exam process or register for the actual class.

Portfolio credit is awarded to students only as part of a current degree or certificate program based on departmental approval. It is awarded course by course, not in blocks. Students may be required to enroll in CPL 120, a course that guides them through the portfolio process. To be eligible for portfolio review, students must have completed at least 12 non-CPL credits at RCC and be enrolled in at least three credits at the time application is made.

## Honor Rolls

Rogue Community College recognizes superior academic achievement in college level classes through a President's List and a Vice President's List. To earn inclusion a student must complete all in one term at least 12 college-level RCC credits or more (numbered 100 or higher), that are graded A-F, and meet the following criteria:

- President's List: 4.0 term GPA.
- Vice President's List: 3.5 term GPA.

Courses graded Pass/No Pass are not included in GPA calculations and do not count toward the 12 collegelevel RCC credit requirement for the honor rolls. See "GPA calculation" above.

## Institutional Award of Degrees and Certificates

www.roguecc.edu/commencement
RCC will grant two-year associate degrees, one-year certificates, less than one-year certificates and career pathway certificates, when the college recognizes that a student has completed necessary credits, regardless of whether the student applied to receive the degree or certificate. Students must be sure that a major in their academic record accurately represents the degree or certificate they are pursuing. To attend the June Commencement ceremony, students must submit a graduation application by February

## Report Cards

```
www.roguecc.edu/myRogue
```

End of term grades are available online by Thursday of the week following the end of each term.

## Social Security Disclosure Statement

Oregon Administrative Rule 589-004-0400 authorizes RCC to ask students to provide their Social Security numbers. Numbers will be used by the college for reporting, research, recordkeeping, extending credit and collecting debts.

Numbers also will be provided by the college to the Data for Analysis (D4A), which is a group consisting of all community colleges in Oregon, the Oregon Department of Community Colleges and Workforce Development, and the Oregon Community College Association.

D4A gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research and develop programs. This information helps the colleges to support the progress of students and their success in the workplace and other education programs.

D4A or the college may provide students' Social Security numbers to the following agencies or match them with records from the following systems:

- State and private universities, colleges, and vocational schools to find out how many community college students go on with their education, and to find out whether community college courses are a good basis for further education.
- The Oregon Employment Department, which gathers information, including employment and earnings, to help state and local agencies plan education and training services to help Oregon citizens get the best jobs available.
- The Oregon Department of Education to provide reports to local, state, and federal governments. The information is used to learn about education, training, and job market trends for planning, research and program improvement.
- The Oregon Department of Revenue and collection agencies, only for purposes of processing debts and only if credit is extended to the student by the college.
- The IRS for the purpose of Hope Scholarship and Lifetime Learning tax credit.

State and federal law protects the privacy of students' records. Students' Social Security numbers will be used only for the purposes listed above.

## Student Directory Information

www.roguecc.edu/FERPA
In accordance with the Family Education Rights and Privacy Act (FERPA), Rogue Community College considers the following to be "directory information."

1. Name, mailing address, telephone number and e-mail address.
2. Dates of enrollment.
3. Major field of study.
4. Awards, honors, certificate(s) and degree(s) conferred.
5. Participation in officially recognized college activities and sports.
6. Most recent educational agency or institution attended.
7. Academic credit information.
8. Photograph.
9. Student ID (institutional user ID).

This information may be released without the student's written consent unless the student completes a

Directory Exemption form in the Registrar's Office. Exemption status keeps the student's name from appearing in print for press releases or for commencement or other awards and recognition by the college.

To accommodate written requests for an individual student's directory information, Student Records will forward written messages to the student whose information is requested. RCC does not contact groups of students for the purpose of solicitation. For information about this service or directory information, email StudentRecords@roguecc.edu.

## Student Educational Records

www.roguecc.edu/FERPA
Rogue Community College follows the Family Education Rights and Privacy Act (FERPA) of 1974 in regard to educational records. With some exceptions, federal legislation gives students the right to inspect their educational records while attending RCC. A student who believes the contents are inaccurate, misleading or a violation of privacy or other rights has the right to file a written request with the Registrar or Designee to amend their student records.

The college normally will comply with requests to inspect records within 10 days but in no case more than 45 days from the date of request. For information regarding review of official records or to challenge the content of those records, students may contact the Director of Enrollment Services/Registrar.

A student has the right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements. The name and address of the office that administers FERPA is:

Family Policy Compliance Officer
U.S. Department of Education

400 Maryland Ave., SW
Washington, DC 20202-5901

## Student Right-to-know

## Graduation Rate

www.roguecc.edu/grad-rates
The following graduation rates are the result of a three-year study of each fall term's first-time freshmen entering RCC. These students must meet the following criteria:

- Have been a first-time freshman entering RCC in fall 2016-17.
- Have never previously attended any college.
- Have attended RCC full time (at least 12 credit hours) during their first fall term.
- Be identified as degree seeking using their declared majors.

Rates are reported as a three-year tracking period. This allows for the reporting of completions (graduations) within 150 percent of the normal time. Transfer rates are for transfers to any college or university in the United States.

Rates are reported as a three-year tracking period. This allows for the reporting of completions (graduations) within 150 percent of the normal time. Transfer rates are for transfers to any college or university in the United States.

- $11 \%$ graduated by the end of Winter Term 2019 (certificate seeking), or by the end of Spring Term 2020 (degree seeking)
- $22 \%$ transferred to another college or university.


## Tax Credits for Education

The Taxpayer Relief Act of 1997 (TRA 97) provides tax benefits for persons who are paying higher education costs for themselves and/or for members of their families. These benefits include a deduction for student loan interest, available for taxpayers who have taken loans to pay the cost of attending an eligible educational institution for themselves, their spouses, or their dependents. Taxpayers may deduct interest they pay on these student loans. The American Recovery and Reinvestment Act of 2009 provides an American Opportunity Tax Credit worth up to $\$ 2,500$ annually.

The 1098-T form and a detailed statement of charges and payments are available online at RCC's 1098T page. For questions about your 1098T form please email 1098T@roguecc.edu. For additional information and FAQs, visit the 1098T FAQ page.

It is strongly recommended that students consult a tax advisor for specific information about eligibility and potential benefits. RCC cannot answer tax-related questions. For additional information from the Internal Revenue Service, contact the Internal Revenue Service at 800-829-1040 or the IRS.gov website at www.irs.gov.

## Transcripts

Each transcript is a permanent record of all the student's academic accomplishments at RCC. It reflects all grades, including retaken courses, and degrees or certificates earned at RCC. Students may obtain a copy of their unofficial transcripts on myRogue at www.roguecc.edu/myRogue. Students also may order official transcripts from the Enrollment Services Transcript page at www.roguecc.edu/transcripts.

## Understanding College Terms

## Academic Alert I

Status given to students who do not meet Good Academic Standing Standards for the first time. Refer to "Academic Standing" in the policy section or the RCC Academic Standing Standards page.

## Academic Alert II

Status given to students who do not meet Good Academic Standing for the second consecutive term. Refer to "Academic Standing Standards" in the policy section or the RCC Academic Standing Standards page.

## Academic Suspension

Status given to students who do not meet Good Academic Standing for the third or more consecutive term. Refer to "Satisfactory Academic Standing (SAP)" in the policy section or RCC Satisfactory Academic Standing (SAP) Policy page.

Academic Success classes
Credit classes are offered in basic reading, writing and math to prepare students for college-level courses. Students must go through a placement process to determine their academic level before enrolling in these classes.

## Adult Basic Skills

Students who need to learn basic reading, writing and math skills, prepare for GED® exams, learn English or prepare for college placement tests may receive assistance through basic skills programs.

## Alpha Zeta Pi

A Rogue Community College honor society recognizing academic excellence.

## Articulation

An articulation agreement is created when two (or more) institutions agree that the content and difficulty level of courses offered by each institution is equivalent and that students taking the articulated course at one institution will not need to repeat it when they transfer to the other institution.

## Associate of Arts Oregon Transfer (AAOT)

A two-year degree that fulfills all lower-division general-education requirements of a bachelor's degree. Upon admission to any public college in Oregon, students who have completed the AAOT ( 90 credits minimum) will qualify for junior standing. The AAOT degree does not guarantee that a student meets prerequisites for a particular major. The student may need additional coursework to be accepted into the major.

## Associate of Applied Science (AAS)

A two-year program ( 90 credits minimum) designed to prepare students for work in a specific career technical field. A wide range of AAS programs are available at RCC, from Automotive Technology to Nursing.

## Associate of General Studies (AGS)

A two-year program (90 credits minimum) that incorporates both lower division college transfer courses and career and technical education courses with general education coursework.

## Associate of Science (AS)

A two-year program ( 90 credits minimum) based on signed articulation agreements with specific public and private universities and designed for students transferring to a designated baccalaureate degree program.

## Academic Calendar

Start and end dates of each academic term. Includes important dates for tuition payment, deadlines to add, drop or withdraw from classes, holidays and registration dates, etc.

## Academic Probation

Status given to students who, after returning to RCC after a suspension status, successfully pass 100\% of their classes, but still do not meet good academic standing requirements. These students may enroll in classes for the upcoming term, so long as they successfully pass $100 \%$ of their classes with a C or better grade, they will remain in a Probation status until they meet good academic standing requirements.

## Advanced Placement

Credit granted or eligibility for an advanced course based on the student having mastered the equivalent of an introductory course.

## Aid Package

A combination of aid offered (possibly scholarships, grants, loans and work) determined by the Financial Aid Office per eligibility rules.

## Award Letter

An offer of aid (scholarships, grants, loans and work) determined by the Financial Aid Office.

## Career and Technical Education (CTE)

A program of study at the secondary and postsecondary levels that is a key component of Oregon's education and workforce development system. CTE integrates technical career skill proficiencies with academic content and prepares students for the workplace, further education, training, and family and
community roles. At the postsecondary (college) level, CTE helps students complete Associate of Applied Science (AAS) degrees and certificate of completion programs, preparing them for workplace entry and career success. CTE courses are identified by the following prefixes: AH, AM, APR, BT, CIS, CPL, DA, DDM, DS, ECE, EET, EMS, ES, FRP, HC, HS, MEC, MET, MFG, MT, NRS, PN, PRX, SRV, WLD. Most of these courses apply to RCC career and technical education degrees and certificates.

## College Now

The College Now program allows high school students to earn college credit for free in selected high school classes at the same time they are earning credit toward their high school diploma. College Now courses are taught at the high school by high school teachers. These teachers work with RCC academic departments, including CTE, to align the content of the high school class with the rigor of the college class. Schools may apply college credit earned to the high school diploma.

## College Transfer Courses

College transfer courses are courses generally accepted by four-year colleges, and identified with letters and numbers (e.g. WR 121Z), with the exception of courses with the career and technical prefixes listed.

## Career Pathway Certificates

Career Pathway Certificates (CPCs) are 12-44 credit certificates offered in career/technical programs and are usually three or fewer terms in length. CPCs serve as the first step in a career pathway, providing employer validated skills training along with academic preparation for continuing the educational pathway. Career Pathway certificates are stackable. This means all credits earned in the CPC count toward the related one-year certificate or two-year Associate of Applied Science degree.

## Cooperative Work Experience (CWE)

A capstone experience taken in final terms of a student's degree or certificate program. Students and participating businesses develop written training and evaluation plans to guide instruction. Students receive course credit for their work experience.

## Core Classes

Core classes are classes which all students in a major program are required to take.

## Counselor

A faculty member who is certified and/or licensed as a personal counselor and who provides personal and on-call counseling free of charge to students. They are also available for career counseling, and as advocates through the student concern and complaint process (See Administrative Procedure 5530).

## Credit

A unit of academic credit that represents the hours of class time per week; granted in recognition of coursework completed.
A one credit course offered as lecture or recitation format can range between 10 to 12 class hours per term.
A one credit course offered as lecture/lab format can range between 20 to 24 class hours per term.
A one credit course offered as lab or CWE format can range between 30 to 36 class hours per term.

## Cumulative Pace (cPace)

Credit completion rate calculated by dividing cumulative credits completed by cumulative credits attempted.

## Curriculum

Courses necessary to complete a degree or certificate; also refers to the material covered in a course.

## Declare a Major

Officially indicate a major or program of study. See "Major."

## Degree Audit

An individualized report that reflects a student's academic progress toward a specified certificate or degree.

## Discipline

A field of study or a category of classes such as humanities or social science. See "Major."

## Dismissal

Students may be dismissed or expelled for consistently poor grades or breaking rules.

## Distance Education

Classes taught over the internet.

## Early College

A program where high school students attend college classes on one of the RCC campuses or online while still in high school. Courses are generally paid for by the high school or school district.

## Elective

An optional rather than required class.

## Fee

Money charged by a college for services provided to students. Fees are often charged for lab materials and recreational facilities.

## Financial Aid

Federal, state, college and private aid that helps students pay for college costs. Financial aid can be in the form of grants, scholarships, loans or work-study programs.

## Financial Aid Satisfactory Academic Progress

Financial Aid status for students who have earned at least a RCC 2.0 cumulative GPA and at least an RCC $66.67 \%$ cumulative credit completion rate. Students must also complete their program of study within the $150 \%$ maximum time frame, calculated by taking program credit length and multiplying that by $150 \%$. Refer to "Financial Aid Satisfactory Academic Progress" in the policy section or RCC Satisfactory Academic Standing (SAP) Policy page.

## Financial Aid Suspension

Status given to students who do not meet Satisfactory Academic Progress for the second time. Refer to "Financial Aid Satisfactory Academic Progress" in the policy section or RCC Satisfactory Academic Standing (SAP) Policy page at www.roguecc.edu/sap.

## Financial Warning

Status given to students who do not meet Satisfactory Academic Progress requirements for the first time. Refer to "Financial Aid Satisfactory Academic Progress" in the policy section or RCC Satisfactory Academic Progress (SAP) Policy page at www.roguecc.edu/sap.

## Free Application for Federal Student Aid (FAFSA)

The annual application required for students to be considered for federal financial aid programs. Available beginning October 1 of each year at www.FAFSA.gov.

## Freshman Experience

For first-year freshmen and/or students who have not yet decided on a major.

## Full-time Student

A student taking 12 or more credits per term.

## General Education Requirements

Courses required in a variety of academic areas such as science, writing and math.

## Good Academic Standing

Students who have at least a 2.0 cumulative GPA (cGPA) and a $66.67 \%$ cumulative Pace (cPace) will be
considered in Good Academic Standing. Students who are receiving financial aid must also meet the Maximum Time Frame requirement.

## Grade Point Average (GPA)

An indicator of a student's term or overall scholastic performance calculated by dividing the total course points by the total applied credits. $A=4$ points, $B=3$ points, $C=2$ points, $D=1$ point, $F=0$. (Grades not included in applied credits are AU, I, NP, P, R, W, Y, and Z.)

## Grant

Award based on financial need that does not require repayment.

## Honor Roll

Student list based on a GPA calculation based on completion of six graded credits or more. (numbered 100 or higher), that are graded A-F in one term.
President's List - 3.75 term GPA.
Dean's List - 3.5 term GPA.

## Interlibrary Loan Service (ILL)

The library can obtain materials from academic and public libraries nationwide.

## Incomplete

A grade of "I" requires an agreement between the instructor and the student about the completion of the last 25 percent of course requirements. Requires minimum successful completion of 75 percent of the work required in the class prior to the end of the term. Faculty are not required to grant an incomplete.

## Independent Study

An arrangement that allows a student to earn college credit through individual study, usually planned with and supervised by a faculty member.

Informational Interview
An interview to find out about a job or a career such as the training needed and responsibilities.

## Internship

Paid or unpaid positions in which students work with an employer for a specified period of time to learn about a particular industry or occupation.

## Loan

Financial aid that must be repaid, with interest, after a student leaves school.

## Major

The subject of study in which the student chooses to specialize or graduate.

## Matriculation

Advancing through the educational process toward a goal, particularly related to enrolling in a college or university (e.g., upon completing the Associate of Arts Oregon Transfer degree, to matriculate to Southern Oregon University).

## MTuWThFSaSu

(Shown in schedule of classes) Represents days of the week. "Course offered TuTh," indicates Tuesday and Thursday class.

## Occupational Outlook

A prediction of the number of job openings there will be at a certain time for specific jobs.

## Open Educational Resources (OERs)

Open Educational Resources are teaching and learning materials that students may use, share and often adapt, without charge, and are made available in the form of low- or no-cost textbooks.

## Oregon Student Aid Application (ORSAA)

The ORSAA is an alternative to the FAFSA for undocumented Oregon students, including students who have Deferred Action for Childhood Arrivals (DACA) status or temporary Protected Status (TPS). Available on October 1 each year at the Oregon Student Aid website.

## Part-time Student

A student enrolled in 1-5 credits (less than half time); 6-8 credits (half time); 9-11 credits per term (threequarter time).

## Placement Assessment

Used to determine starting levels in reading, writing and math for new students.

## Placement Process

A variety of measures used to determine starting levels for students in reading, writing and math. This process may be completed based on college transcripts, placement test results from another college, qualifying SAT/ ACT scores, a placement assessment and more. Contact recruitment@roguecc.edu for more information.

## Prerequisite

Courses that must be successfully completed (grade of $A, B, C$, or $P$ ) before proceeding in the curriculum (e.g. BT 113 or WR 115 must be completed prior to PSY 101).

## Probation (Aid Eligible)

Status given to students who have an approved Satisfactory Academic Progress Appeal and are financial aid eligible. Probation (Aid Eligible) status allows students to receive aid while working toward the Satisfactory Academic Progress Standing requirements.

## Program Map

List of courses necessary to complete a degree or certificate.

## Quarter or Term

An academic period of 11 weeks in fall, winter or spring terms, or eight weeks in summer term. Four per academic year.

## Recitation

Required component for most chemistry and physics classes. Provides a forum to discuss lecture and lab activities, review materials, take quizzes, etc.

## Registration

Officially enrolling in classes for an upcoming academic term.

## Satisfactory Academic Progress (SAP)

Students must maintain at least a 2.0 cumulative grade point average (cGPA) and successfully complete 66.67 percent of credits attempted, earning A, B, C, D, or P grades. Unsatisfactory progress may result in being placed on academic alert I or II, and subsequently suspension. Financial aid recipients have additional SAP requirements to maintain eligibility.

## Scholarships

Awards to students that do not have to be repaid and are based on merit or merit plus financial need.

## Sequence

Set of two or three courses in one subject area usually taken in numerical order (e.g., CHEM 104, CHEM 105, CHEM 106).

## Transcript

The official record of high school or college courses and grades generally required as part of college applications.

## Transfer

When students apply credits earned at one institution toward the graduation requirements of a program at another institution.

## Transfer Courses

Courses that usually share a common description or course number at multiple institutions (such as WR 121Z) and that typically are acceptable at a four-year college or university.

Tuition
The cost of classes or credits.

## Work Study

A form of financial aid in which students earn money by working part time at their college. Students apply for work study by filling out the FAFSA.

## Student Resources and Services

## Academic Advising

## Contact an Advisor

Academic advising is provided by trained faculty and staff who can answer questions about college and educational objectives, help with program planning and class selection to meet academic goals, and answer questions about transferring to other colleges. Advising is required for all new students prior to registering for classes.

Advising for ABS students is available with faculty advisors through Zoom. To make an appointment, call 541-956-7490 and specify that you're calling for Advising, or email ABS-Josephine@roguecc.edu or ABSJackson@roguecc.edu. If you email, be sure to put "Advising help" in the subject line.

Career and technical education students and those who are program-ready (have a declared major or have completed or have a designated placement above RD90, WR115, and MTH60) should see their program advisors. Call the number listed for individual departments, which is included with specific program information on the Programs of Study link in this catalog.

Students enrolling in the following programs should speak with an Academic \& Career Coach prior to start of first term in order to be connected with a faculty advisor right away:

- Apprenticeship, 541-956-7184
- Automotive Technology, 541-956-7140
- Computer Science, 541-956-7066 (Grants Pass) and 541-956-7127 (Medford)
- Dental Assistant, 541-956-9446
- Design and Digital Media, 541-956-7140 (Grants Pass) and 541-956-7127 (Medford)
- Diesel Technology, 541-956-7305
- Electronics Technology, 541-956-7305
- Emergency Medical Services, 541-956-7305
- Fire Science, 541-956-7415
- Industrial Welding Technology, 541-956-7335.
- Medical Assistant: Administrative Office Assistant, 541-956-9446
- Pharmacy Technology, 541-956-9446
- Phlebotomy, 541-956-9446
- Science, 541-956-7140 (Grants Pass) and 541-956-7127 (Medford)

Students who are undecided about their majors or who are not yet program ready receive advising from an Academic \& Career Coach until they have selected an academic pathway.

## Access and Disability Resources

www.roguecc.edu/accessResources

- Redwood Campus, Wiseman Building Tutoring Center (summer only)
- Riverside Campus, Student Success Center Building, Room 9
- Table Rock Campus, A Building, Room 191

Access and Disability Resources provides academic support services to help ensure all qualified students have equal access to education. Documentation to verify a disability is required in order to receive accommodations.

Access and Disability Resources coordinates note-takers, sign language interpreters, disability advising, conversion of class materials to alternate text format, and adaptive technology for RCC students with disabilities; see also Accessible Technology Lab.

Students who suspect they have a disability are encouraged to make an appointment for possible services.

## Accesibilidad y Recursos para Discapacitados

www.roguecc.edu/accessResources

- Redwood Campus, centro de tutoría del edificio Wiseman (solo en verano)
- Riverside Center, Student Success Center, habitación 9
- Table Rock Campus, Edificio A, habitación 191

El departamento de Accesibilidad y Recursos para Discapacitados proporciona servicios de apoyo académico para asegurar que todos los estudiantes que califiquen para este servicio tengan igual acceso a la educación. Se requiere documentación para verificar la discapacidad y poder hacer los arreglos apropiados al tipo de discapacidad del estudiante.

Los servicios de Accesibilidad y Recursos para Discapacitados coordinan con personas quienes toman apuntes y quienes interpretan con lenguaje de señas. También, brindan los servicios de consejeros para estudiantes con discapacidades de aprendizaje y/o con discapacidades físicas. Ofrecen conversión de material de clases al formato de texto alternativo, y tecnología adaptativa para los estudiantes de RCC con discapacidades.

El Laboratorio de Tecnología Adaptativa provee al estudiante de ayuda y evaluaciones por medio del acceso adaptativo a equipos y tecnologías.

Se sugiere que los estudiantes que supongan tienen una discapacidad, soliciten una cita para explorar la posibilidad de tener acceso a nuestros servicios.

## Athletics

## www.roguecc.edu/athletics

The Rogue Community College Ospreys compete in the South Region of the Northwest Athletic Conference (NWAC). The college hosts men's and women's soccer and women's volleyball.

National data collected by the NCAA consistently shows that college athletes graduate at a higher rate than other students, and that many companies prefer to hire student athletes because they have developed the ability to set goals, stick to a training program and achieve results. Athletic tuition waivers are offered at the coach's discretion.

If you would like to know how you can support or join the Ospreys, please visit www.roguecc.edu/athletics.
The Northwest Athletic Conference is the parent athletic organization for 36 community colleges located in Idaho, Oregon, Washington, and British Columbia. Click the link to learn more about NWAC.

## Counseling

www.roguecc.edu/counselingDept

- Advising Center "Looking Glass (L)" Building, Redwood Campus
- Student Success Center Building, Riverside Center
- Student Success Center, A Building, Table Rock Campus

RCC provides comprehensive counseling services to assist students with education and career plans and with personal or social concerns. Licensed professional counselors are available and offer the following services on a limited drop-in basis and by appointment:

- Crisis intervention.
- Conflict resolution.
- Career and life planning.
- Career, job market and scholarship information.
- Early intervention for academic success.


## Career Counseling and Planning

Students may receive career counseling and planning assistance. Computerized information on careers, job market information, and related training programs are also available from Counseling.

The RCC website provides useful career exploration resources. Student Employment Services provides assistance and information for resume writing, interview skills, and job search tools.

## Retention and On-call Counseling

College students often experience challenges coping with stress. Meeting with a counselor may help with the demands of college. Counselors provide professional counseling services to assist students with concerns that may create barriers to success. Students at RCC may obtain short-term, solution-focused counseling at no charge. Support groups for specific populations are also available. Please contact Counseling for more information. Some of the reasons why students seek counseling services are:

- To reduce test and math anxiety.
- To increase self-esteem and enhance personal growth.
- To gain stress management skills.
- To develop and maintain healthy relationships.
- To better integrate family, school, and work.
- To learn conflict resolution strategies.
- To become a more effective problem solver.
- To receive referrals for off-campus counseling services or other resources.
- To cope with loss or grief.
- To cope with changes and issues brought on by COVID.


## Counseling FAQs

## Are services confidential?

RCC Counseling follows the ethical and legal standards of the state of Oregon, which insures confidentiality except in the following situations:

- The student provides a written request to release information.
- There is an imminent danger to the student or others.
- There is concern about child or elder abuse or neglect.
- A court orders a release of a student's records.


## How do I know if I need counseling?

Rogue Community College encourages students to make an appointment with the Counseling department and talk to a Counselor who can help a student decide if counseling is needed. The following questions may be helpful to consider:

- Do you have intense feelings of depression?
- Do you experience feelings of anxiety or panic?
- Do you have difficulty concentrating on assignments in class?
- Do you feel that your usual coping strategies are not working?
- Do you recognize a pattern of behavior that creates personal and academic problems?


## Will counselor services become part of my academic record?

Counselor contact and files are protected by confidentiality regulations and are not part of a student's academic record.

## Who are the counselors?

For counselor names, phone numbers and locations visit the Meet the Counselors page on the RCC website.

## What other services are offered?

- Assistance with grade appeals.
- Conflict mediation.
- Student concern and complaint support.
- Substance abuse referrals.
- Title IX reporting support.


## Enrollment Services

www.roguecc.edu/EnrollmentServices

- Redwood Campus, Wiseman Loft 541-956-7427
- Table Rock Campus, A Building, Room 187, 541-956-7427

Enrollment Services is responsible for Student Records and Registrar office functions, such as enrollment and degree verifications, transcripts, grades, degree audits, transfer and military credit evaluations, graduation, conferring degree and certificates, providing myRogue portal support, answering registration questions, and family education rights and privacy act (FERPA) compliance.

## Financial Aid

www.roguecc.edu/RCCfinAid
Visit RCC's Applying for Financial Aid page for information about the financial aid application process.
Financial assistance for educational purposes comes from federal, state, institutional and private sources. Types of financial aid include grants, part-time employment, scholarships and loans.

Visit the Financial Aid webpage (above), email Financial Aid Advising at FinAidAdvising@roguecc.edu, or stop by Rogue Central at these locations:

- Redwood Campus (Grants Pass) - Welcome Center
- Riverside Center (Medford) - HEC-102
- Table Rock Campus (White City) - Building A, Rm 187

Contact the Financial Aid Office by mail: 3345 Redwood Hwy., Grants Pass, OR 97527; by FAX: 541-4713585 or by email: FinAidAdvising@roguecc.edu.

Watch your RCC Student Email for award letters, requests for information, and other information about your financial aid.

## Eligibility

Generally, students may participate in federal student financial aid programs if they are:

- U.S. citizens or eligible non-citizens.
- Have a high school diploma (not "extended") or a recognized equivalent (e.g. GED®).
- Admitted to the college.
- Enrolled in and working toward the completion of an aid-eligible certificate or degree program (see RCC's Satisfactory Academic Progress policy).
- Not in default or do not owe a repayment of federal financial aid.
- Can demonstrate applicable need for financial assistance.

Eligibility for state aid generally follows federal rules, except for undocumented residents who may apply for state grants with an Oregon Student Aid Application (ORSAA).

Eligibility requirements differ for various types of aid, and awards may also be limited to the availability of resources.

## How to Apply

1. Complete one annual Free Application for Federal Student Aid (FAFSA or Renewal FAFSA) for the academic year. Online applications are available at www.fafsa.gov. The RCC federal school code is \#010071. (Undocumented Oregon residents may complete an ORSAA in lieu of the FAFSA for state aid.)
2. RCC recommends submitting an annual FAFSA on or as soon as possible after October 1 preceding the school year. Applications completed at least six weeks before summer, fall and winter terms (four weeks for spring) will receive priority processing. If your FAFSA is federally processed after you are no longer eligibly enrolled, you won't qualify for any financial aid for that academic year. If enrolled at RCC when your FAFSA is federally processed and it's selected for
verification, all required documents must be submitted to RCC Financial Aid one week prior to the end of your enrolled term to be considered for a Financial Aid Award Offer.
3. Complete and return any requested documents right away. Applicants will be notified of financial aid eligibility per an official Financial Aid Award Offer, both issued by RCC in good faith and based on information available at the time. Recipients must review and accept the Conditions of Accepting Financial Aid which includes policies such as Satisfactory Academic Progress and Return of Title IV prior to accessing their award letter.
4. Students interested in part-time work and/or student loan options may apply once the Financial Aid Award Offer is issued and prior to term application deadlines. The loan application process opens in June prior to the start of the academic year. More information about these programs and application deadlines is available from Financial Aid Advising and on the RCC website on the Financial Aid webpage.

## Where's the Aid?

"Disbursement" is the process where your financial aid funds are applied to your student account to pay your tuition, fees, and other authorized charges. The disbursement process generally begins the 2nd Wednesday of each term. If your financial aid exceeds your account balance, a refund will be processed by the Business Office beginning the second Friday of each term with BankMobile Disbursements, a technology solution, powered by BMTX, Inc. Select your preferences at the BankMobile Disbursements Refund Choices website to avoid delays to your refund.

## Return of Title IV Funds Policy

In the event you drop all your classes (official withdrawal), stop attending your classes (unofficial withdrawal), or receive all F grades, RCC must calculate how much aid was unearned and you may owe a repayment of your financial aid award offer. The RCC Financial Aid office will contact you with information about the amount you may owe. You are responsible for arranging repayment with the RCC Business Office and/or your federal loan servicer (if applicable). Repayments and overdue account balances may make you ineligible for enrollment and future financial aid until it is resolved.

## How to Get and Keep Financial Aid

- Be admitted to RCC and declare an aid-eligible major.
- Enroll in courses that satisfy graduation requirements for your major(s).
- Attend classes.
- Maintain satisfactory academic progress (SAP) for financial aid recipients. Any time you earn at least an associate degree, future financial aid access will be through a Credit Extension Appeal process.

Aid will be adjusted each term to match your aid-eligible enrollment level as of the drop deadline.
RCC defines term enrollment levels as follows:

- Full-time, 12 or more aid-eligible credits.
- Three-quarter-time, 9-11 aid-eligible credits.
- Half-time, 6-8 aid-eligible credits.
- Less-than-half-time, 1-5 aid-eligible credits.

Awards made after the drop deadline will be based on actual aid-eligible enrollment. Awards generally are
not adjusted after eligible payment except in the case of no attendance, a complete withdraw through 60 percent of the term, or documented institutional error.

## Satisfactory Academic Progress Requirements

To qualify for or maintain financial aid eligibility, a student must be making satisfactory academic progress for financial aid toward an aid-eligible program.

For more information, see the RCC Financial Aid Satisfactory Academic Progress policy.

## Dual Enrollment (Degree Partnership Program or DPP)

If concurrently enrolled in program credits at RCC and another institution, RCC may be able to serve as the home institution and base financial aid on your combined credit load. For consideration, submit a DPP Form at the beginning of the term. Forms are available at RCC's Financial Aid Forms page.

Rogue Community College reserves the right to deny such a request if, for example, it is submitted late, the student does not maintain minimum credits, the credits are not applicable to the RCC program of study, or prior-term grades were not submitted or reflect a lack of successful completion.

## Types of Financial Aid

The amount and availability of financial aid and eligibility criteria may vary with each program. The following list provides general information about available student aid programs:

1. Grants and scholarships are awards that generally do not require repayment.

- Federal Pell Grants of up to 150 percent of $\$ 7,395$ annually are disbursed for up to four quarters. Lifetime maximum is 18 full-time equivalent quarters.
- Iraq and Afghanistan Service grants of up to maximum Pell, less up to 7.3 percent may be available in lieu of a Federal Pell grant to eligible dependents of those who become totally and permanently disabled or died as a result of qualified service.
- The Office of Student Access and Completion (OSAC) helps Oregon students pursue their college and career goals. OSAC offers scholarships and grants for students, including the Oregon Opportunity Grant and Oregon Promise Grant. They oversee the Oregon Student Aid Application for DACA students and undocumented students. For additional information, go to www.oregonstudentaid.gov.
- Federal Supplemental Educational Opportunity Grants (FSEOGs) are worth up to $\$ 100$ per term and awarded to early applicants who attend at least half-time and who demonstrate high financial need. Funding is limited; submit the FAFSA early.
- The RCC Foundation provides numerous scholarship opportunities. In addition, RCC maintains an online list of scholarships made possible by various organizations. Amounts, eligibility, and application deadlines vary. Peak application season is mid-fall through early March, but some opportunities exist year-round. Go to the RCC Foundation's Scholarship page for more information.

NOTE: RCC does not participate in the federal TEACH grant.
2. Part-time student work programs administered through RCC Student Employment Services.

- Redwood Campus (Grants Pass, Wiseman Rm 18, 541-956-7091)
- Table Rock Campus (White City, Building A, Rm 217I, 541-956-7091)

The Federal Work Study (FWS) program provides jobs for students who maintain at least half-time enrollment and demonstrate financial need. Once hired, students complete employment paperwork with Student Employment Services. An award of up to $\$ 1,500$ per term is added to the Award Letter. Awards are subject to the availability of funds. Eligibility does not guarantee a job. Due to limited funding, RCC reserves the right to convert FWS employment to the RCC institutional Learn and Earn program.

For information about other student employment opportunities, see Student Employment Services.
3. Federal Direct Loans (FDL) represent student debt that must be repaid with fees and interest. At least half-time, aid-eligible program enrollment is required. To monitor your student loan portfolio, visit the National Student Loan Data System website. Use your Social Security number, date of birth, last name, and federal PIN to access information.

RCC offers subsidized and unsubsidized Federal Direct Loans (DL).

- Subsidized DL eligibility is based on budgetary need and is awarded up to annual maximums based on dependency status and grade level. Interest is charged only after the borrower is no longer enrolled at least half-time.
- Unsubsidized DL eligibility is not based on financial need. Aid can be awarded up to the lesser of annual maximums based on dependency status and grade level or budgetary need (cost of attendance less aid and resources). Interest is charged to the borrower from the date of disbursement and may be paid quarterly, upon request, to avoid capitalization.
Rogue Community College accepts an annual FDL application after an Award Letter or Eligibility Notification has been issued and before the term's application deadline. The deadline is published on the Loan Request/Revision Form found on RCC's Financial Aid Forms page.

An application includes online and workshop-based loan-entrance counseling for first-time borrowers, a loan request form and an active master promissory note, which must be on file with the U.S. Department of Education. Borrowers may reduce or cancel a loan up to 14 days after disbursement or pre-pay anytime without penalty. Per HEA, sec. 479 (a)(c), 34CFR 685.301 (a)(g), RCC has the right to refuse or limit origination on a case-by-case basis.
4. Students who need more financial aid than RCC determines they are eligible for can pursue scholarship opportunities. Alternative educational loans may be available after all federal aid is exhausted, but these loans come at a higher cost, often require a co-signer to qualify and are not federally regulated. Consumers should carefully review terms and conditions. For more information, contact Financial Aid Advising. RCC has the right to refuse or limit origination.

NOTE: RCC does not participate in federal PLUS or Perkins loan programs.
If annual financial aid was limited by a student's estimated cost of attendance, and the student's program of study requires a professional credential prior to graduation, RCC may be able to add this one-time cost in the student's budget, which may result in additional loan eligibility.

To apply, submit a Budget Revision Request to your Financial Aid Advisor along with all requested supporting documentation.

Students who have disability-related or other significant education-related, out-of-pocket expenses may submit a Budget Revision Request, with documentation, to have the cost of attendance adjusted.

## Tuition Awards

## Active Duty Members Tuition Awards

- National Guard/Selected Reserves Tuition Assistance (through the ArmylgnitED website)
The Tuition Assistance (TA) program provides financial assistance for voluntary off-duty education programs in support of a soldier's professional and personal self-development goals. TA is available for courses offered in the classroom or by distance learning and is part of an approved academic degree or certificate program. The courses must be offered by schools registered in ArmylgnitED, are accredited by accrediting agencies that are recognized by the U.S. Department of Education and are signatories to the current Department of Defense Memorandum of Understanding (DOD MOU).

All eligible soldiers will request TA through ArmylgnitED. You may contact Ann Browning at 503-584-3434, or ann.browning@us.army.mi.

- Oregon National Guard State Tuition Assistance (ONGSTA)

ONGSTA tuition assistance is offered through Higher Education Coordinating Commission (HECC) for the state of Oregon. Eligible Oregon National Guard members can use the Oregon National Guard State Tuition Assistance (ONGSTA) for undergraduate degree and certificate programs at Oregon community colleges, public universities, Oregon Health and Science University (OHSU), and eligible post-secondary private institutions. The program will provide funding for in-state residency tuition rates for Oregon's community colleges (up to 90 quarter credits), public universities, and OHSU (up to 180 quarter credits). For eligible private post-secondary institutions (up to 180 quarter credits or 120 semester credits), tuition will fund up to the average base in-state resident tuition rate of the seven Oregon public universities.

- Dependents of Fallen Oregon Service Members.

To honor military service to our country, RCC will grant tuition for up to 135 credits to dependents of an Oregon resident soldier who became totally (100 percent) and permanently disabled in connection with active military service if those dependents are not covered by financial aid, Veterans education benefits, or other funding source.

More information is available from RCC Military Coordinators. The DFOSM Tuition Award form is available on the RCC Enrollment Forms for Students page.

## Displaced Worker Tuition Award

Available to residents of RCC district who has been terminated or received notice of termination as a result of a plant closure or lay off within the district and within the last calendar year. The tuition award waives up to 6 credits of tuition when students register for at least 12 credits in their first term of enrollment at RCC. More information is available from RCC Enrollment Services office. The Displaced Worker Tuition Award form_is available on the Forms for Students page.

## Lifelong Learner Tuition Award

Senior tuition discount available to Oregon residents, ages 62 years and older who audit up to 8 credits of eligible classes per term. Students using the lifelong learner tuition discount do not receive credit for the classes and do not pay tuition for up to 8 credits, but are responsible for course fees, books, and supplies. Only lower-division collegiate classes (numbered 100 level or higher) are eligible for the tuition discount. Career-technical courses with the following course prefixes are not eligible for the tuition discount: AH, AM, APR, BT, CPL, DA, DS, ECE, EET, EMS, ES, FRP, HC, HS, MET, MFG, MT, NRS, PN, PRX, SRV, and WLD. More information is available from RCC Admission and Recruitment office.

## Financial Literacy

Rogue Community College has contracted for student loan default prevention assistance and financial literacy information for our students, as follows:

I3's "IonTuition" platform, specializing in helping student loan borrowers navigate repayment as well as providing financial literacy resources to the college community. For more information borrowers can call 855-456-2656 (toll-free). For more information, see the lonTuition FAQ page.

## Graduation

www.roguecc.edu/commencement
Enrollment Services, 541-956-7427
Graduates are formally recognized at commencement ceremonies each June. Students in degree or certificate programs must submit an application for graduation two terms prior to anticipated completion. To participate in the June commencement ceremony, submit applications by early February. Graduation applications are available online at the Enrollment Services Forms for Students page.

Students who completed their programs at the end of an academic term during the year prior to commencement and those who will complete requirements during the summer term after commencement are invited to participate in the ceremony. Graduation with honors is based on a cumulative GPA of 3.5 or higher computed through the end of winter term. Students who meet this criteria may wear an honor cord in recognition of academic achievement.

Degrees and certificates will be mailed to eligible graduates approximately six to eight weeks after final grades are available for verification. Diplomas will be mailed to students' addresses on file with the college.

## Graduation Requirements

To receive a state-approved degree or certificate from Rogue Community College, students must successfully complete the appropriate coursework with a minimum of " C " or "pass" and meet the following standards:

- General Education Requirements (applies to degrees, certificates and career pathways certificates).
- Fulfill requirements listed on a program map. The college may elect any set of catalog requirements for a student to complete from the year a student begins a program through the current year.
- Students must have a minimum cumulative GPA of 2.0 at the time the Associate of Arts Oregon Transfer or Associate of Science Oregon Transfer degree is awarded.
- Students must have a 2.0 GPA based on the RCC courses completed toward their Associate of Science or Associate of Applied Science degree or certificate.


## Time Limit for Program Completion

There is no time limit to complete a certificate or degree program as long as it has not been terminated or suspended, and the required program-specific courses are still offered at RCC. The college may elect any set of catalog requirements to complete from the year a student begins a program through the current year.

Degree and certificate awards are dependent on program availability at the time of completion.
Requirements for many programs are subject to change each year. If students have had a gap in enrollment of more than four consecutive terms, consult an academic and career coach about available catalog year options.

RCC has the right to terminate, suspend or reinstate its academic programs at any time. In the event a program is terminated or suspended, declared majors making significant progress each term in that academic year will be identified and formally advised of the program's status. RCC will then assist those students in completing requirements whenever possible as part of a formal teach out plan. Students who do not comply with the requirements of the plan may forfeit their rights to complete the program. Should that happen, students will be advised about other program opportunities that exist should they wish to choose another major.

## Graduation Residency Requirement

Students must earn a minimum of 24 credits toward the degree at RCC to earn a two-year degree, a minimum of 12 credits toward a certificate at RCC to earn a one-year certificate, or at least 25 percent of total credits toward a less than one-year certificate or a career pathway certificate. The remainder of credits required to graduate may be transferred from an accredited institution or earned through credits for prior learning. No more than 25 percent of a program's credits may be earned through credit for prior learning.

## Latino Services

www.roguecc.edu/LatinoServices

## Latino Outreach and Recruitment

RCC Latino Outreach \& Recruitment provides additional support for prospective and current Latinx students. Staff support students with the enrollment process, transitioning into college, and throughout their college experience.

## Be Beca Ready Workshops

Workshops designed to help Latinx students apply for scholarships. Students will receive help with the scholarship application process including their essay questions.

## Educación, un Mundo de Oportunidades (EMO)

EMO is a nonprofit one-day educational conference designed to assist Latino high school juniors and seniors from Jackson and Josephine counties. The purpose of this conference is to motivate youth on ways to overcome barriers, realize the dream of going to college and become their own success story. The conference provides relevant information about postsecondary education through encouraging speeches from keynote speakers, community members and current RCC students.

## Helping Oregon Latinos Advance (HOLA) Summer Bridge Program

www.roguecc.edu/HOLA
The HOLA Summer Bridge Program is an annual, multi-day event hosted in September designed to help Latinx students transition into Rogue Community College. This program is intended to orient new Latinx students to college, helping them research pathways, identifying ways to pay for college, and learning strategies to be successful college students.

## Southern Oregon Latino Scholarship Fund

www.solsf.org
The Southern Oregon Latino Scholarship is open to students from Josephine, Jackson, and Klamath Counties. This scholarship provides opportunities for Latinx students living in the Southern Oregon region to complete their post-high school career/degree goals. This scholarship's primary aim is to build leadership in our region's communities.

## Servicios Latinos

www.roguecc.edu/LatinoServices

## Latino Outreach and Recruitment

RCC Latino Outreach and Recruitment ofrece ayuda adicional para los actuales y futuros estudiantes Latinx. El personal de RCC ayudara a estudiantes con el proceso de inscripción, y la transición al colegio.

## Be Beca Ready Workshops (Taller De Becas)

Taller diseñado para ayudar a estudiantes Latinx que quieran aplicar a becas. Estudiantes van a recibir ayuda para llenar la solicitud de becas y ayuda con sus ensayos.

## Educación, Un Mundo de Oportunidades (EMO)

EMO, presentará por un dia solamente, una conferencia educativa para ayudar en los condados a estudiantes latinos de los grados 11 y 12. Esta conferencia tiene información relevante sobre la educación post secundaria y otros recursos valiosos para lograr el éxito en la Universidad y educación más avanzada.

## Ayudando a Los Latinx de Oregon a Progresar (HOLA) Programa de Verano

[^0]
## Beca para Latinos del Sur de Oregón

La Beca para Latinos del Sur de Oregón está abierta a estudiantes de los condados de Josephine, Jackson y Klamath. Esta beca brinda oportunidades para que los estudiantes latinos que viven en la región del sur de Oregón completen sus metas de carrera/título después de graduarse de la escuela secundaria. El objetivo principal de esta beca es desarrollar el liderazgo en las comunidades de nuestra región.

## Military Services

www.roguecc.edu/Military
Military Services Mission Statement: Rogue Community College (RCC) Military Services provides a safe and professional environment for our veterans, dependents, families, active-duty members, college community, and external partners by assisting students to achieve their educational and career goals. The staff seeks to guide, mentor, and advise Military Students as they navigate higher education, select a career goal, complete college, and move into a professional career.

Military Services are available to RCC students in Jackson and Josephine counties.

## Transcripts

Military Students receiving GI Bill® benefits while attending RCC are required to obtain official transcripts, military transcripts and all previously attended colleges, universities and technical schools. Military Students submitting transcripts will receive priority evaluation in an effort to not duplicate courses.

Send official transcripts to:
Rogue Community College
3345 Redwood Hwy
Grants Pass, OR 97527

## Getting started at RCC

For information about starting at RCC and obtaining Veterans Educational Benefits, visit the Military Services page, Getting Started as a GI Bill® Student The website will give you step by step instructions. If you have questions on how to get started at RCC, please contact our Military Coordinator on the Redwood or Table Rock campuses.

RCC offers military students assistance with the GI Bill® application process, priority registration, Boots to Books Orientation training, a military students college success class, campus Military Resource Centers (MRC), and VA Work-Study opportunities. Our Military Coordinators will help you make the transition from service member (and dependent) to a successful RCC student and graduate.

## Apply for Your Veterans Benefits

Click the link to apply for your Veterans Educational Benefits.
When you receive your Certificate of Eligibility (CofE), please see a Military Coordinator who will complete your Enrollment Certification Form 1999 and forward it to the VA for processing. Military Coordinators at RCC are unable to determine a student's eligibility for benefits. GI Bill® students are welcome to access Military Coordinators prior to receiving their CofE or Enrollment Certification (Form 1999) for planning purposes.

## Boots to Books GI Bill® Military Student Orientation

Military Services at RCC assists GI Bill® students who are utilizing their educational benefits to attend college. The Boots to Books orientation for new GI Bill® students is 30 minutes and mandatory when beginning at RCC. You will learn how to access benefits specific to your chapter, how to navigate the college systems, and find resources to complement your college experience. Visit the Military Resource Center (MRC) to sign up.

## CG100V College Success for Student Veterans

Rogue Community College's (RCC) CG100V (Student Veterans' College Success \& Survival) class for student veterans provides straightforward guidance for GI Bill® students, veterans, and active duty members looking to earn a degree.

CG100V is a term-long, two-credit class. This course is tuition and fee free for all GI Bill® student, veterans, and active-duty members. Topics include:

- The differences between military and college culture.
- Developing effective, efficient study habits.
- Career identification and degree planning.
- Managing finances and maximizing benefits.
- Cultivating the skills employers are seeking.


## Military Resource Centers (MRC)

- Redwood Campus - Student Center Building, 541-956-7289
- Table Rock Campus - A Building, Room 150, 541-956-7289


## MRC Mission Statement

At Rogue Community College our Military Resource Centers (MRC) are committed to assisting active military students, veterans, dependents and spouses to transition successfully from the military environment to campus life as they learn to navigate through the education process and progress toward completing their academic degree. Assistance includes:

- Financial aid and disability services.
- GI Bill® application.
- Peer-to-peer support.
- Campus and RCC website navigation.
- Scholarship applications.
- myRogue student portal assistance.

MRCs offer active military students, veterans, dependents and spouses, a collaborative and cooperative environment for every branch and era of service.

## Priority Registration for Gi Bill® Students, Active Duty Members, and Veterans

GI Bill® students are given a one-day priority registration for courses at RCC. RCC proudly complies with House Bill 2565, offering eligible student veterans and current military service member's (including spouses \& dependents) priority registration for each term.

## Veterans Access, Choice, and Accountability Policy

The following individuals shall be charged the in-state rate, or otherwise considered a resident, for tuition and fees purposes:

- A veteran using educational assistance under either chapter 30 (Montgomery GI Bill $®$ - Active Duty Program) or chapter 33 (Post-9/11 GI Bill®), of title 38, United States Code, who lives in Oregon while attending a school located in Oregon (regardless of the student's 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 GI Bill® benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of the student's 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 remaining 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. $\S 3311(\mathrm{~b})(9)$ ) who lives in Oregon while attending a school located in Oregon (regardless of his or her formal State of residence).
- Anyone using transferred Post-9/11 GI Bill® benefits (38 U.S.C. § 3319) who lives in Oregon while attending a school located in Oregon (regardless of the student's formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.
- 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.
- Federal and State Laws Protect Military Students on Orders: In 2010, the Department of Education published regulations implementing the Higher Education Opportunity Act of 2008. The regulation, 34 Code of Federal Regulations (C.F.R) section 668.18, went into effect July 1, 2010. The law is codified under 20 United States Code (U.S.C.) Section 1091c. The law and regulations accord the post-secondary education student whose education was interrupted by voluntary or involuntary military service the right to readmission to the educational program. These requirements apply to any educational institution that participates in Title IV Federal Student Financial Aid Programs, including Pell Grants, Stafford Loans, and the Federal Work-Study Program.


## RCC Mobile App for Students

Rogue Community College offers a free social media app for mobile devices that allows RCC students to easily communicate with each other, get important messages from departments and clubs, access myRogue, keep up with campus events, explore maps and college services, and more.

To download the RCC app, search "Rogue Community College" in the Apple App Store or Google Play. Find links on the web on RCC's Campus App page.

## Student Employment Services

www.roguecc.edu/studentEmployment/

## Looking for on-campus Employment?


#### Abstract

Student Employment Services offers support and assistance to students seeking on-campus employment. On-campus student employment is available to students enrolled in six or more credits with a $2.0+$ cumulative GPA. Join the team today and reap the rewards of on-campus employment!


- Advance toward your career goals.
- Flexible schedule that supports you being a student first.
- Prepare your application materials and hone interviewing skills.
- Great opportunity to network within the RCC community.
- Learn applicable on-the-job skills and competencies.

For open positions, please visit the Employment page of the RCC website.

## Student Life

www.roguecc.edu/studentLife/
Student Life at RCC provides opportunities for students to develop and strengthen leadership skills and gain experiences that enhance student life and the college community. Opportunities include student government, student activities, athletics, clubs and organizations, honor society and more. Check out the links below for more information on ways to engage with the RCC community!

## Associated Student Government

www.roguecc.edu/studentLife/ASGRCC.asp
The Associated Student Government of Rogue Community College (ASGRCC) is the voice for the student body and acts as a liaison for the students to the Administration, Staff and Faculty. The ASGRCC Executive Council appoints student leaders including, but not limited to: student body president, vice president of governance; director of publicity and media; director of clubs and organizations and activities; and director and vice president of student engagement. Student government leaders receive a stipend for their services to the student body and the college at large.

Student Government coordinates student activities that promote student engagement and leadership, maintains campus clubs and organizations. ASGRCC keeps abreast of legislative and political issues and strives to create and maintain an atmosphere of open discussion and inclusion.

## Athletics Department

www.roguecc.edu/athletics
The Rogue Community College Ospreys are a member of the Northwest Athletic Conference (NWAC). As a member of the south region of the NWAC, RCC hosts men's and women's soccer and women's volleyball.

RCC team colors are royal blue and kelly green. For more information or to apply as an athlete, go to RCC Athletics website. Go Ospreys!

## Clubs and Organizations

www.roguecc.edu/studentLife/clubs.asp
The Associated Student Government of Rogue Community College (ASGRCC) works to serve students through clubs and student engagement. ASGRCC works to connect existing clubs with RCC Guided Pathways and encourages RCC students to charter new clubs based on student interests. ASGRCC is intentional about providing access to resources for students, and clubs are a primary avenue for students to access college resources and unite students together for the common goal of creating a safe, successful, and welcoming educational environment.

## Honor Society (Alpha Zeta Pi)

www.roguecc.edu/AZP
Academic excellence is the primary hallmark of Alpha Zeta Pi along with service and leadership opportunities. Candidates are identified each term and invitations to join are sent to candidates meeting the following criteria:

- 3.65 GPA on the 4.0 scale
- Completed 24 transferable credits (May include professional/technical credits 100+)
- Enrolled in 8 or more credits
- Only one "W" on transcript within a two-term period

Member benefits include:

- Apply for Alpha Zeta Pi scholarships
- Honor society notation on RCC transcript
- Recognition at graduation
- Leadership and service opportunities
- Utilize membership on other academic and professional applications
- Certificate of recognition


## Ossie's Cupboard

- Redwood Campus - Student Center, Room 8
- Table Rock Campus - A Building, Room 170

Ossie's Cupboard is a free food pantry and hygiene service at Redwood (Grants Pass) and Table Rock Campuses (White City). Ossie's Cupboard partners with the Oregon Food Bank, the RCC Foundation, and community partners to provide healthy food and hygiene products to all students and staff at RCC. The team at Ossie's Cupboard realize that people struggle with food insecurities. Our goal is to provide access to nutritional foods and hygiene at no cost. Check out the online ordering form for easy access to food and hygiene.

## TRIO Programs

## TRIO Educational Opportunity Center (EOC)

www.roguecc.edu/TRIOEOC
TRIO EOC provides information and one-on-one help with the steps required to enroll in college. Prospective students can walk-in or schedule an appointment at one of the three main RCC campuses for free assistance with:

- College admissions
- Class placements and registration

Financial Aid / FAFSA Scholarships Next steps to successfully start college For more information or to schedule an appointment, click the link to visit the website or contact us at trioeoc@roguecc.edu or 541-9567097.TRIO Educational Talent Search

## TRIO Educational Talent Search

www.roguecc.edu/TRIOETS
TRIO Educational Talent Search serves middle and high school students in Jackson County who may benefit from services designed to enhance persistence, graduation rates, and college enrollment services are offered at no cost to eligible participants attending select schools. Services include:

- Support for high school and middle school students (grades 6-12)
- Grade-specific career investigation and "college-prep" workshops
- Academic and pre-college planning activities
- Assistance in completing financial aid and admissions applications
- Academic tutoring and mentoring
- Assistance with pre-college test preparation
- College application and test fee waivers
- Visits to Oregon colleges and universities
- Exposure to cultural events and volunteer opportunities

For more information, click the link to visit the website or contact us at trioets@roguecc.edu or 541-9557526.University Transfer - TRIO Student Support Services

## University Transfer - TRIO Student Support Services

www.roguecc.edu/TRIOSSS
University Transfer - TRIO Student Support Services assists RCC students who intend to transfer to a fouryear institution and complete a bachelor's degree. Students receive enhanced support at no additional charge as they successfully complete RCC courses and prepare to transfer.

Eligible students must meet one of the following criteria: have been raised by parents or caregivers who have not earned a bachelor's degree, have financial barriers, or have a documented disability.

Students also must have completed or be enrolled in MTH65 and WR115. Services provided by University Transfer -TRIO SSS include:

- Academic and transfer advising.
- Career guidance.
- Peer tutoring and mentoring.
- Scholarship and financial literacy workshops.
- Study groups for college success.
- A student lounge with computers and kitchen area.
- University tours and cultural activities.
- Tuition-free transfer classes.

For more information, click the link to visit the TRIO/SSS website or call or text program staff at (541) 9567342 on the Redwood campus or (541) 956-7382 on the Riverside campus. Each TRIO Student Support Services program at Rogue Community College is funded by federal TRIO grants that average $\$ 233,792$ per year.

## Voter Registration

Rogue Community College is committed to promoting voter registration and civic engagement among our students. The Associated Student Government is an active force in this effort and works to ensure each student is aware of voter resources. Click the link for more information and to register online.

## Additional Campus Resources

## Academic Success Centers

www.roguecc.edu/tutoring

- Student Success Center, Wiseman Center, Redwood Campus, Grants Pass
- Student Success Center, Riverside Center, Medford
- Student Success Center, Building A, Room 127, Table Rock Campus, White City

RCC provides free drop-in tutoring to students registered in credit courses. The primary areas of tutoring are math, writing and science, but professional tutors are prepared to assist students with most subjects. For current schedules, check the website given above.

RCC also has an online tutoring service for all RCC credit students. Visit the tutoring page on the RCC website for more options.

A technology center (computer lab) is located at each tutoring center. Services include assistance with a variety of subjects and computer access for any RCC student.

Tutoring is offered online also and can be accessed by logging into your RCC myRogue account.

## Activities Calendar

www.roguecc.edu/Calendar

College events and activities may be included on the RCC calendar on the college website. Community members may submit event information that would be of interest to RCC students and staff through the online form. Go to the RCC Calendar and select "Submit an Event." RCC employees add the details of the event and publish to the calendar in their 25Live room reservation. Events may also be viewed on the Rogue Connect campus app and the RCC Facebook page. Allow two to three days for the information to be posted.

## Accessible Technology Lab

www.roguecc.edu/accessResources

- Tutoring Center, Wiseman Building, Redwood Campus (L Building summer term only)
- Student Success Center, Room 25, Riverside Center
- Building A Room 189, Table Rock Campus

The Access and Disability Resources Accessible Technology Lab provides computer access and assistive technology for students who experience disability.
Access and Disability Resources also coordinates academic accommodations for eligible students with disabilities. Refer to "Access and Disability Resources" in this catalog.

## Art Galleries

www.roguecc.edu/Galleries
Works of visual art from a variety of aesthetic, cultural and social points of view in a variety of media are displayed throughout our campuses, and photographs of RCC's permanent collection can be accessed online. Exhibits celebrate a range of work by artists of local to national prominence, as well as annual exhibits of student and faculty work.

## RCC/SOU Higher Education Center Art Exhibits

101 S. Bartlett St., Medford

Art created by RCC students, faculty and alumni, community artists, and from the RCC collection is on display in the RCC/SOU Higher Education Center. Exhibits are meant to enrich the cultural life of the college at large; the artwork changes on a rotating basis.

[^1]
# Auto Repair 

S Building, Redwood Campus, 541-956-7175

Students in the RCC Automotive program repair cars that are 15 years old or newer when the work is related to their classes. Students and community members may bring their cars in for service. Call for an appointment. Charges are for parts, plus a $\$ 25$ service fee; there is no charge for labor.

## RCC Online Bookstore

## www.rogueccbookstore.com

bookinfo@roguecc.edu
Students may purchase texts and required supplies through RCC's bookstore partner, Ambassador. The online bookstore (www.rogueccbookstore.com), offers 24/7 shopping and convenient home delivery. RCC does not have a walk-in bookstore.

Students gain access to the Online Bookstore using the same username and password as their RCC student email accounts and RCC Blackboard account.

- Click the "Log $\ln$ " button
- Your username is your RCC student email: Enter your RCC student email address (e.g., ossie.Osprey.4567@student.roguecc.edu)
- Click "Next"
- Enter your password. If you have never logged into the Online RCC Bookstore, Blackboard or your RCC student email account, then your default password will be the number 0 plus your 7 -digit college ID. For example, if your RCC college ID is 123-4567, then your default email password will be: 01234567.
- Click "Sign in"
- If asked to "Stay Signed In?" Choose either "Yes" or "No," it doesn't matter which.
- You should now be signed into the bookstore


## Don't know your student email address?

- Login to your myRogue to find your RCC student email address
- Once you are logged into your myRogue account your RCC email will be displayed in the center of the screen below your ID number and Name.


## Open Educational Resources

To help students afford college, RCC aggressively pursues Open Educational Resources (OERs). OERs are teaching and learning materials that students may use, share, and often adapt, without charge. Most OERs have been created by educators and funded by colleges and universities. Students may access the materials online at no cost or purchase a low-cost print version. Classes using OERs are clearly designated as low- or no-cost in the online schedule of classes.

## Are eBooks Or Rentals Available?

Yes! eBooks and rentals are available for some items. Students are encouraged to look for these less expensive options when selecting their texts.

## Buyback

Buyback is available through the Online Bookstore. Buybacks are based on anticipated future national demand for a book and current stock level.

## Returns

For return of items purchased please visit the Return Policy page on the bookstore website.

## Other Questions?

Please see the FAQ page on the bookstore site

## Bulletin Boards and Posting

Third party flyers and other materials wished to be posted on RCC bulletin boards must be stamped with approval from the corresponding office below:

- Redwood Campus, Welcome Center, 541-956-7187
- Riverside Center, SSC, Welcome Center 541-956-7353
- RCC/SOU Higher Education Center, 541-956-7353
- Table Rock Campus, Building A, Room 127, 541-956-7101


## Bus Service

www.roguecc.edu/bus

Regularly scheduled bus service in Grants Pass, White City and Medford is available to RCC students with a current student ID and/or a bus pass purchased for the term. Transportation in Josephine County is provided by Josephine Community Transit. The service picks up and transports students to the Redwood Campus near the library. The Rogue Valley Commuter Line operates between Grants Pass and Medford with transfers available to stops in the Medford, White City and Ashland areas. Call 541-474-5452 ext. 2 for more information.

In Jackson County, Rogue Valley Transportation District provides bus service. The service picks up students at the downtown transit center in Medford and the Table Rock Campus.

## Check Cashing

Tuition, books, and supplies may be paid by personal check written for the exact amount.

## Community Resources

## 211 Info

www.211info.org or call 211
The Oregon 211 network provides free health and community-services resource information, including a guide to understanding the Veterans Health Administration, food-support grants, a guide to migrant worker health centers, and more.

## Mental Health Emergencies

911
24-hour crisis line hotline, Jackson County: 541-774-8201
24-hour crisis line hotline, Josephine County: 541-474-5360

## Options for Southern Oregon

www.optionsonline.org
541-476-2373
Options for Southern Oregon serves people of all ages who have mental health needs.

## Community Works HelpLine - Jackson County

Community Works HelpLine - Jackson County
541-779-2393

HelpLine is a free, 24 -hour crisis hotline serving Jackson County. Trained volunteers and staff address domestic violence, sexual assault, panic, depression, loneliness, isolation, suicide, homelessness, and other personal crises. HelpLine also connects people in need to local crisis services including Dunn House Shelter (domestic violence) and Sexual Assault Victim Services (SAVS).

## Women's Crisis Support Team - Josephine County

Women's Crisis Support Team - Josephine County<br>24-hour crisis line: 541-479-9349<br>Business line: 541-476-3877<br>Women's Crisis Support Team services are designed to help survivors of abuse, regardless of gender. Free and confidential services include 24-hour crisis line, support groups, court advocacy, information and referrals, children's advocacy, emergency shelter, emergency transportation, community education and more.

## Computer Labs

Student Computer Labs

541-956-7424

- Coates Hall, Redwood Campus
- Student Success Center, Riverside Campus
- A Building, Table Rock Campus

Excellent student computer facilities are available for all RCC students. Approximately 700 networked PC workstations are provided for student use. Most are connected to high-quality black and white and color laser printers.

In addition, all computers support access to the internet, email, word processors, spreadsheets, data bases, graphic illustration, and nearly 100 other computer applications. Student data files may be saved on RCC's network servers. All students must have a valid computer user ID and password to gain access to the computer network and applications.

Computer labs are open about 80 hours per week, Monday through Saturday. All computer labs, with the exception of the library, are staffed by aides who assist students with hardware and software use. There are also several specialized computer labs maintained by individual instructional departments to cater to the specified needs of their students.

## Copiers

Coin-operated copy machines for student use are available.

- Library, Wiseman Center, Redwood Campus
- Second floor, Room 218, RCC/SOU Higher Education Center, Riverside Campus


## Distance Learning - Rogue Online

roguecc.blackboard.com
RO@roguecc.edu, 541-956-7366
Earn credits toward a degree or brush up on work skills from home or office by taking Rogue Online courses. For many students, distance learning courses are the solution to managing full-time enrollment and full-time life.

Distance learning courses are similar to those held in a classroom. Students have a textbook, assignments and tests, an instructor and classmates. Students do not regularly attend class on campus but should devote at least as much time as they do for campus-based courses.

- Students register for distance learning courses as they would for other RCC classes.
- To successfully complete a distance learning course, students need to be self-motivated, practice good time management skills, and have access to proper technology.
- Some distance learning courses require on-campus testing, labs or meetings.
- Because many online courses require students to watch streaming video programming, students should have access to a computer connected to the internet (preferably high speed), a web browser, and good technical skills.
- You may have to download software for proctored exams.
- Full technical requirements may be found at the RCC Blackboard page.


## Getting Started

Orientations are required for all RCC distance learning courses. In the majority of classes, instructors post their orientations online within the class.

For students who are new to online learning or want to refresh their skills, technical orientation videos are posted on the Rogue Online website.

For more information or support, call 541-956-7366.
All online teachers expect students to participate in the class during the first week of the term. Students should check the syllabus to find out what instructors expect. Students not participating during the first week of classes will be subject to the administrative drop policy.

NOTE: RCC's regular administrative drop policy applies to distance learning courses. For specific information on the steps needed to maintain course enrollment, check your syllabus inside Blackboard.

## Early Childhood Education Center - Head Start

Redwood Campus, 541-956-7309
The center was developed through a collaborative effort of RCC, Southern Oregon Head Start, Southern Oregon Educational Service District Early Childhood Services, and the City of Grants Pass.

The Head Start center serves 80 children aged $3-5$ years old and their families. RCC parents who have low incomes or have children with special needs are encouraged to apply. The lab school also provides teaching, learning and observation opportunities for RCC Early Childhood and Elementary Education program students, as well as students from other RCC departments and high school students.

## Employer Services

Online job-posting services are offered at no cost to community employers. For job postings, see the RCC website or call 541-956-7323.

## Food Services

Vending machines or Micro-Markets (MM) are available at the following locations:

## Redwood Campus

- Josephine Building
- Student Center (The Cafeteria is also located in the Student Center. Monday through Thursday, hours vary.)
- Wiseman Building (MM)
- Y Building


## Riverside Campus

- RCC/SOU Higher Education Center
- Student Success Center


## Table Rock Campus

- A building
- West entrance, near room A-155
- East Commons (MM)
- B Building
- High Technology Center
- C Building
- Health Professions Center (MM)

Micro-Markets (MM) offer an assortment of lunch, breakfast, beverages, and snack items. Micro-Markets and vending machines are all available during regular business hours.

## Ossie's Cupboard

www.roguecc.edu/ossies-cupboard

- Redwood Campus - Student Center, Room 8
- Table Rock Campus - A Building, Room 170

Ossie's Cupboard is a free food pantry and hygiene service at Redwood (Grants Pass) and Table Rock Campuses (White City). Ossie's Cupboard partners with the Oregon Food Bank, the RCC Foundation, and community partners to provide healthy food and hygiene products to all students and staff at RCC. The team at Ossie's Cupboard realize that people struggle with food insecurities. Our goal is to provide access to nutritional foods and hygiene at no cost. Check out the online ordering form for easy access to food and hygiene.

## Health Services

Healthcare is not provided at the college. First aid kits are available in administrative offices. Dial 911 for emergencies.

RCC does not offer accident and illness insurance plans for students. Click the link to find information on the Oregon Insurance Marketplace.

# Instructional Media Services and IP Video Network 

541-956-7038

- Coates Hall, room 12, Redwood Campus
- Higher Education Center, room HEC-114, Riverside Campus
- Building A, room 130, Table Rock Campus

Instructional Media Services provides equipment and media services for faculty and students. In most classrooms at RCC there is a full range of equipment installed including projector, computer, document camera, and DVD or VHS player, all within a fully programmable touch panel system. Everything is available for staff and student use for presentations and projects.

Internet Protocol (IP) video network services are also provided. They include interactive video and audio connectivity available on all RCC campuses. Through this system, classes are shared between RCC locations, meetings are conducted without participants having to drive, and connections are made to other community colleges and government agencies throughout Oregon. Web conferencing is available using the software system Zoom. This service allows participation in live classes or meetings from a computer equipped with a microphone, web cam and headphones.

## International Education

International education at Rogue Community College prepares students to become globally literate and to possess cross-cultural skills necessary to function effectively in an interdependent world. To further this purpose, RCC offers instruction in world languages, international studies, and cross-cultural communication.

## Learning Centers

```
www.roguecc.edu/ABS
ABS-Josephine@roguecc.edu
ABS-Jackson@roguecc.edu
541-956-7490
```

- Illinois Valley Learning Center, Kerby
- Redwood Campus Learning Center, M Building, Grants Pass
- Table Rock Campus Learning Center, A Building, room 127, White City

General Education Development (GED®), English as a Second Language (ESL) / English Language Acquisition (ELA), and basic skills/skills brush up are offered at RCC Adult Basic Skills (ABS) learning centers or online.

Students must attend an Adult Basic Skills orientation to be enrolled. Contact one of the above learning centers for orientation information.

## Library Services

www.roguecc.edu/library

- Redwood Campus, Wiseman Center, 541-956-7152
- Riverside Center, B Building, adjacent to the Student Success Center
- Table Rock Campus, A Building, room 103

NOTE: RCC Libraries are closed during breaks between terms. Check the library website for normal hours of operation.

The RCC Library serves the college with comprehensive library services. Students may request books and other material online through the library catalog, which can be delivered to any RCC campus for pickup. The RCC Library provides database access to thousands of online journals and e-books.

Every RCC Library branch has computers available for student, staff and faculty use. Computers access the internet, email, Microsoft Office Suite applications and online learning portals. Printing is available.

Reserve Rooms provide short-term checkout of textbooks, laptops and other material including anatomical models and cameras. Graphing calculator and bicycle locker rentals (RWC and RVC only) are available.

Books, journal articles, and other materials not found in the library catalog may be borrowed from other libraries around the country using an interlibrary loan service.

Information services include drop-in reference assistance, ready reference by phone and email, and in-depth research consultation. Reference librarians instruct classes in research methods and technology, conduct library orientation tours, and collaborate with faculty in designing research assignments.

## Lockers and Showers

For students enrolled in physical education classes, lockers and showers are available in the Redwood Campus Gym in Grants Pass. Students must supply their own locks, towels and personal items.

Lockers and showers also are available at the RCC/SOU Higher Education Center in Medford. Lockers are available for day-use only, and students must provide their own locks and personal supplies.

## Lactation Rooms

Lactation rooms are dedicated spaces where students and staff can care for infants comfortably and privately express breast milk while at RCC, and are available at these locations:

- Riverside Campus, Higher Education Center, Room 316.
- Redwood Campus, Student Center
- Table Rock Campus, A Building, room 179.

The rooms are accessible any time the buildings are open. For more information, contact Facilities and Operations at 541-956-7333 or the counseling office at 541-956-7443.

## Parking

See the RCC maps identifying available parking areas on or near all campuses. Parking in undesignated or restricted areas may result in fines and/or towing.

- Redwood Campus: Parking is free in designated lots.
- Riverside Campus: All parking adjacent to the campus is provided by the City of Medford and monitored by Diamond Parking Services. Call 541-774-2082 for parking cost and permit information.
- Table Rock Campus Buildings A, B, and C: Parking is free in designated lots.


## Restrooms

Public restrooms are available at these sites when the buildings are open for classes:

- Redwood Campus: The Student Center/Cafeteria; Coates Hall; D, E, F, H, K, L, T and U (Gym) Buildings; and the Josephine, Rogue, Welcome Center, and Wiseman Buildings. All-Gender ADA restrooms are located in the Student Center/Cafeteria; E, H, K, L, S, and T Buildings; and the Josephine and Wiseman Buildings.
- Riverside Center: Student Success Center and the RCC/SOU Higher Education Center (HEC). AllGender ADA restrooms are located in the Student Success Center and the HEC.
- Table Rock Campus: First and second floors. All-Gender ADA restrooms are available near the EMT area and at the NE entry.


## Security

www.roguecc.edu/security
To contact RCC Security for any location, call 541-218-2930.
Rogue Community College has contracted security officers on site at the Redwood Campus 24 hours a day, seven days a week. RWC relies on the City of Grants Pass Police Department for law enforcement and on the City of Grants Pass Fire Department for fire safety services.

The Riverside Campus has security officers on site from 7 a.m. to 11 p.m., Monday through Friday and 8 a.m. to 5 p.m. on Saturdays. RVC relies on the City of Medford Police Department for law enforcement services, and the City of Medford Fire Department for fire safety services.

The Table Rock Campus has security officers on site 7 a.m. to 10:30 p.m., Monday through Friday and 7 a.m. to 7 p.m. on Saturdays. TRC relies on the Jackson County Sheriff's Department for law enforcement services and Fire District 3 for fire safety services.

## Reporting Crime

After contacting 911, or local law enforcement, Campus Security should be notified of all criminal activity, accident, injuries and emergency situations on campus. Reporting can be accomplished by the following means:

- Campus Security at the Redwood Campus may be reached 24 hours per day 7 days per week via cell phone at 541-218-2930.
- Campus Security at the Riverside Campus may be reached between 7 a.m. and 11 p.m. Monday Friday and from 7 a.m. - 7 p.m. on Saturday via cell phone at 541- 218-2931.
- Campus Security at the Table Rock Campus may be reached between 7 a.m. and 10:30 p.m. Monday - Friday and between 7 a.m. and 7 p.m. on Saturday via cell phone at 541-218-3639.
- Accident and Injury reports can be filed online here.
- Crime reports and incident reports submitted to Campus Security are covered under state law and are subject to public record requirements.


## Vehicle Emergencies

Students may call Campus Security if they have a dead battery. Staff will assist if possible.

## State Government

Oregon elections are held in May and November. Click the link for a list of state elected officials.

## Student Centers and Lounges

On the Redwood Campus, the Student Center is open during normal college hours. Student government offices and a cafeteria are located in the center, as are vending machines, rest rooms, and study space.

At the Riverside Center, B Building the Student Success Center is open during normal college hours and is home to the Athletics office and TRIO SSS fulltime. A welcome center is also available to connect students to services they need and to schedule appointments to meet with advisors, counselors, and all other Student Affairs departments.

On the Table Rock Campus, the East Commons has an open space with tables, and a Micro-Market.

## Student Employment Services

www.roguecc.edu/studentEmployment
On-campus student employment is available to students enrolled in six or more credits and maintaining a minimum of 2.0 GPA. (Minimum GPA may be higher for some positions.) For job listings please visit the RCC student job listings.

Click the link for off-campus community positions.

## Student Housing

Rogue Community College does not provide student housing. Listings for private housing may be posted on RCC bulletin boards (with approval, contact 541-956-7187), or students may contact a local property management service.

## Substance Abuse Referrals

Rogue Community College is a drug-free institution on all campuses. Possession of or being under the influence of controlled substances could lead to sanctions from RCC. Students who would like information regarding alcohol or drug treatment agencies are urged to contact Counseling for assistance and referrals.

## Testing Centers

www.roguecc.edu/TestingServices
541-956-7100

- Library, Room 5, Redwood Campus, 541-956-7100, option 1
- Student Success Center, Room11, Riverside Campus, 541-956-7100, option 2
- Building A, Room127, Table Rock Campus, 541-956-7100, option 3

The RCC Testing Centers provide monitored supplemental testing services for RCC credit courses (makeup, retake, accommodated) and online courses. In addition, the centers offer testing services for nonRCC exams (other institutions and agencies) for a fee of $\$ 30$ per exam. Photo ID is required for all exams. See website for details.

## Vending Machines

Vending machines or Micro-Markets (MM) are available at the following locations:

## Redwood Campus

- Josephine Building
- Student Center
- Student Success Center (MM)
- Y Building


## Riverside Campus

- Student Success Center
- RCC/SOU Higher Education Center


## Table Rock Campus

- A building
- West entrance, near room A-155
- East Commons (MM)
- B Building
- High Technology Center
- C Building
- Health Professions Center (MM)

Micro-Markets (MM) offer an assortment of lunch, breakfast, beverages, and snack items. Micro-Markets and vending machines are all available during regular business hours.

## Walking and Jogging Trail

The Chuck Ruckman Memorial trail is a 1.6-mile walking and jogging trail on Redwood Campus dedicated to a former RCC Forestry instructor who died in a plane crash in 1985. The trail begins at the Josephine Building parking lot and ends at the Rogue Building parking lot. In between, it crosses College Avenue, then splits into upper and lower portions as it winds through the forested southwest area of Redwood Campus. A prominent feature along the trail near the Josephine Building is a 24 -foot-tall totem pole that was carved in 1990 by chainsaw artist Don Colp.

## Academic Success and Adult Basic Skills

## Academic Success

www.roguecc.edu/AcademicSuccess
Instruction and tutoring in basic academics are available to students enrolled in credit courses. Academic Success classes prepare students for post-secondary coursework and successful participation in the job market; tutoring provides one-on-one help and guidance in basic academics and is available in person and online.

## Credit Classes

Courses are offered in basic reading to prepare students for college-level courses. Students must go through the placement process to determine their academic levels before enrolling. Some Academic Success classes also may be required for certain career and technical programs.

NOTE: A student may receive federal and/or state financial aid for a maximum of 45 attempted developmental education credits (see the RCC Satisfactory Academic Progress policy for a definition of "developmental education" credits). A student who is receiving financial aid and who enrolls in necessary developmental education credits beyond 45 must notify the RCC Financial Aid Office in writing so that aid may be adjusted to reflect only eligible enrollment. Notification should be given to Financial Aid Advising on any RCC campus.

## Adult Basic Skills (ABS)

www.roguecc.edu/ABS<br>ABS-Josephine@roguecc.edu<br>ABS-Jackson@roguecc.edu<br>541-956-7490

- Illinois Valley Learning Center, Kerby
- Redwood Campus Learning Center, M Building, Grants Pass
- Table Rock Campus Learning Center, A Building, room 127, White City

Students who need to learn basic reading, writing and math skills, prepare for GED® exams, learn English, or prepare for college placement tests may receive assistance through basic skills programs. There is a nominal charge for services. Eligible students can earn free college credit while studying with the ABS program. New and returning Adult Basic Skills students should call the learning center in their area to schedule an ABS orientation. In addition, employers who want to provide basic skills training for their workers may contract for services that are designed especially for their work sites. Call one of the centers listed above for more information.

## Adult Basic Skills Classes

Adults who need to learn basic reading, writing and math skills, English as a Second Language, or workforce preparation may attend classes tailored for their needs or participate in guided study in a learning center or online with assistance from qualified instructors. Students also may use the RCC ABS learning
centers for basic skills review prior to taking the college placement test. Assessments are required during orientation to place students into the correct level of English as a Second Language/English Language Acquisition, or Adult Basic Education/GED® courses and/or guided study programs.

## General Educational Development (GED®)

www.roguecc.edu/GED
Students who are 16 years of age and older, and who do not have a high school diploma, may prepare to take the General Education Development (GED®) exam in English or in Spanish.

GED® preparation courses and guided study in English are available online and at all campuses. GED® preparation in Spanish is available online.

Students who are 16 or 17 years of age must present an exemption from compulsory education from the school district in which they live before enrolling. Students who are home schooled under the auspices of the Southern Oregon Education Service District and who are 16 or 17 years of age must present a notification of home school enrollment letter and a referral for instruction.

The four-part GED® examination covers social studies, science, language arts and mathematics.

## GED® Testing

www.roguecc.edu/GED

- Table Rock Campus GED® examinations, White City

The GED® exam is computer-based. Candidates register, schedule, and pay online at ged.com or by calling 877-392-6433. Four tests comprise the GED® battery. The cost is $\$ 38$ per test and free vouchers are available for RCC students as budget allows. GED® testing is available in White City at the Table Rock Campus. For an explanation of other requirements, visit the GED® website at ged.com.

## English as a Second Language/ English Language Acquisition (ESL/ELA)

www.roguecc.edu//ESL
esl@roguecc.edu
541-956-7490

- Redwood Campus Learning Center, M Building, Grants Pass
- Table Rock Campus Learning Center, A Building, room 127, White City

Students learn to speak, read, write and comprehend spoken English in ESL/ELA classes. They also learn to use computers and educational software with the help of qualified instructors. New students are required to attend an orientation- call or email for further information.

## Services for Employers

Basic Skills and ESL/ELA classes can be adapted to the specific needs of employers and their employees. The Adult Basic Skills and the customized training departments at RCC contract with employers to satisfy their needs, design curriculum, and provide instruction. Classes can be held at the employer or employee work site or at one of the RCC campuses.

## Habilidades Básicas para Adultos (ABS)

www.roguecc.edu/dept/ABS/abs.asp
ABS-Josephine@roguecc.edu
ABS-Jackson@roguecc.edu
541-956-7490

- Illinois Valley Learning Center, Kerby
- Redwood Campus Learning Center, M Building, Grants Pass
- Table Rock Campus Learning Center, A Building, room 127, White City


## Educación General Desarrollo (GED®) en Español

www.roguecc.edu/GED
Los estudiantes que tengan 16 años o sean mayores y que no tengan un diploma de la escuela preparatoria, pueden prepararse para tomar el examen de GED® en Inglés o en Español.

Las clases de GED® cuestan $\$ 65$ por término o trimestre. Las clases de preparación para el GED® y el estudio guiado en inglés están disponibles en todos los campus.

La preparación para el GED® en español está disponible en un ambiente de aula o en el línea.
Los estudiantes que tienen 16 o 17 años de edad deberán presentar una exención de la educación obligatoria del distrito escolar en el que viven antes de inscribirse.

Los estudiantes que reciben la educación en su casa, bajo los auspicios de Servicios Educativos del Distrito de Southern Oregon y que tienen 16 o 17 años de edad, deben presentar una notificación acerca de la instrucción educativa en su hogar y una referencia de instrucción.

Las cuatro partes del examen de GED® cubren las habilidades estudios sociales, ciencias, artes del lenguaje y matemáticas.

## Exámen de GED®

www.roguecc.edu/GED
El examen de GED® ahora es en la computadora. Los candidatos se registran, programan y pagan en línea en la página de internet de: ged.com o también pueden llamar al 1-877-392-6433.

El examen consiste de cuatro pruebas en total. El costo por examen es de $\$ 38$ por cada prueba.
El examen de GED® está disponible en:

- White City en el campus de Table Rock

Para una explicación de otros requisitos visite la página de internet del GED®: ged.com

# Inglés como Segundo Idioma/ Adquisición del Idioma Inglés (ESL/ELA) 

www.roguecc.edu/ESL<br>esl@roguecc.edu<br>541-956-7490<br>- Redwood Campus Learning Center, M Building, Grants Pass<br>- Table Rock Campus Learning Center, A Building, room 127, White City<br>Las clases de Inglés como segundo idioma/Adquisición del Lenguaje de Inglés (ESL/ELA) tienen un costo de $\$ 65$ por término. Los estudiantes aprenden a hablar, leer, escribir y comprender inglés hablado en las clases de ESL/ELA. Los estudiantes también aprenden a usar las computadoras y software educativo con la ayuda de instructores calificados.

## Servicios para Empleadores

Las clases de Habilidades Básicas (ABS) y las clases de Inglés como segundo idioma/Adquisición del Lenguaje de Inglés (ESL/ELA) pueden ser adaptadas a las necesidades específicas de los empleadores y sus empleados. El programa de Habilidades Básicas para Adultos (ABS) de RCC y el departamento de entrenamiento personalizado en RCC hacen un contrato con empleadores para satisfacer sus necesidades, diseñar un currículo, y proporcionar instrucción. Las clases pueden ser llevadas a cabo en el lugar de trabajo del empleador o del empleado, o en uno de los campus de RCC.

## Policies

## Academic Standing

The purpose of academic standards is to ensure students are progressing toward completing their program in a timely manner. A student's academic standing affects their ability to enroll in classes. All students registered in credit classes will be evaluated for their academic standing at the conclusion of each term. Academic difficulty results when a student is not maintaining academic standards. In addition to the Academic Standing requirements, for a student to maintain financial eligibility they must meet certain requirements.

## Good Academic Standing

A student is considered in Good Academic Standing and maintaining academic standards if the student meets the following minimum requirements:

- a 2.0 grade point average (GPA) each term and
- completes at least two-thirds or $66.67 \%$ of their term credits attempted (Pace) with grades of $A, B$, $C, D$ or $P$.


## Academic Alert I

Students who fail to meet the term GPA and/or term Pace standard will be placed on Academic Alert I status and still qualify for enrollment. These students will receive an Academic Alert I notification reminding them of the Academic Standing policy requirements along with a list of academic resources. The student will receive a Registration Hold, preventing enrollment in the current or future term, until they meet with an Acadmic \& Career Coach. At the end of their next term enrolled, students who meet the minimum term GPA and term Pace standards advance to Good Academic Standing, and students who are unsuccessful at meeting the minimum standards move to Academic Alert II status.

## Academic Alert II

Students who are on Academic Alert I status who do not successfully move toward Good Academic Standing status are immediately placed on Academic Alert II status. The student will receive a Registration Hold, preventing enrollment in the current or future term, until they meet with a Counselor.

## Academic Suspension

Students who are on Academic Alert II/ status who do not successfully move toward Good Academic Standing status are immediately placed on Academic Suspension status, which suspends enrollment at RCC. This status is noted on a student's permanent electronic file and on the student's transcript. The student will receive a Registration Hold and must sit out a term and meet with an RC Counselor before being eligible to submit an Academic Return Packet appeal to be reinstated for a future term.

## Reinstatement after Academic Suspension

After sitting out one or more terms and meeting with an RCC Counselor, students placed on Academic Suspension status may reestablish enrollment eligibility by submitting an Academic Return Packet. All Instructions provided in the academic return packet must be followed in order to be considered for return. The academic return packet must be submitted to the Counseling Department by the deadline noted in the return packet and the student will participate in an in-person or web conference meeting with the Academic Reinstatement Committee, if desired or required.

The appeal must describe the situation that led to losing their enrollment eligibility, including any supporting documentation, and explain what they will do differently to ensure success in future terms.

## Academic Reinstatement Decisions

The Academic Reinstatement Committee will review appeals and notify the student of the decision. If approved, the student is placed on a Probation status. If denied, the student will remain on Academic Suspension status and will not be eligible to re-enroll and/or receive financial aid for at least one term. After taking a term off, the student has the right to re-appeal, and must describe what they are doing differently to be successful. A student may appeal the decision of the Academic Reinstatement Committee in writing to the Vice President of Student Learning and Success within 7 working days of the date of notification of the decision of the Academic Reinstatement Committee. Students may appeal based on new information that was not provided to the Reinstatement Committee.

The following information is used to determine a student's Academic Standing status:

- Successful grades include A, B, C, and P
- Unsuccessful grades include D, F, I, NP, W, and Y


## Probation Status

Students on an Academic Suspension status who successfully submit an Academic Return Packet based on a corrective plan and not extenuating circumstances and are approved for reinstatement will be placed on a Probation status and are not financial aid eligible, however they will have an academic plan designed to bring the student back into good academic standing. Under the academic plan students will be limited in the number of classes they may take. Students who are placed on probation must show overall improvement at the end of each term.

At the end of the Probation term a student will have their academic standing re-evaluated.

- If a student meets the requirements of their academic plan by passing $100 \%$ of their classes with a $C$ or better grade in each class and has at least a 2.0 cumulative cGPA the student will be considered in Good Academic Standing.
- If a student meets the requirements of their academic plan, but does not have at least a 2.0 cumulative cGPA, they will remain on probation status until they have at least a 2.0 cumulative cGPA. The Probation status will display on student's transcript at the end of the next term following Academic Suspension. The student will receive a Registration Hold, preventing enrollment in the current or future term, until they meet with a Counselor.
- Students who do not fulfill the requirements of their academic plan by passing $100 \%$ of their classes with a C or better grade will be academically suspended again, see Second or More Academic Suspension section.


## Probation (Aid Eligible) Status

Students on a Probation (Aid Eligible) status are financial aid eligible. Students will have an academic plan designed to bring the student back into both Good Academic Standing and Good SAP Standing. Under the academic plan students will be limited in the number of classes they may take. Students who are placed on Probation (Aid Eligible) status must meet the requirements of their academic plan by passing $100 \%$ of their classes with a C or better grade in each class.

At the end of the Probation (Aid Eligible) term a student will have their academic standing re-evaluated.

- If a student meets the requirements of their academic plan by passing $100 \%$ of their classes with a C or better grade in each class and has at least a 2.0 cumulative cGPA the student will be considered in Good Academic Standing.
- If a student meets the requirements of their academic plan, but does not have at least a 2.0 cumulative cGPA they will be moved to a Probation status, which will display on student's transcript at the end of the next term following Academic Suspension. The student will receive a Registration Hold, preventing enrollment in the current or future term, until they meet with a Counselor.
- Students who do not fulfill the requirements of their academic plan will be academically suspended again (see Second or More Academic Suspension section below).


## Second (or more) Academic Suspension

Students academically suspended more than once will receive a Registration Hold and must sit out a term and they must meet with an RCC Counselor before being eligible to submit an Academic Return Appeal requesting to be reinstated. A student must appeal for reinstatement in-person or via a web conference to the Academic Reinstatement Committee.

## Children on Campus

Only students enrolled in classes or labs may sit in on those classes or labs unless the individual instructor or department chair/coordinator makes an exception.

Other minor children who are not necessarily connected to students or employees may be on campus by invitation for a special event or class field trip. Children under high school age (14 years or younger) are not permitted on college campuses, unless directly supervised by a responsible adult.

If children are disruptive, they may be asked to leave the campus and must be escorted by one of the group leaders.

## Copyright Infringement

RCC complies with all laws relating to copyright materials. See RCC Administrative Procedures at web.roguecc.edu/administrative-procedures.

Copyright infringement occurs when a copyrighted work is reproduced, distributed, performed, publicly displayed, or made into a derivative work without the permission of the copyright owner. This includes unauthorized peer-to-peer file sharing.

Copyright infringement may subject students to civil and criminal liabilities. They may be ordered to pay actual damages or "statutory" damages of not less than $\$ 750$ and not more than $\$ 30,000$ per work infringed. For "willful" infringement, a court may award up to $\$ 150,000$ per work infringed. A court also can assess costs and attorneys' fees.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $\$ 250,000$ per offense. For more information, visit the U.S. Copyright Office.

RCC librarians are available to help with copyright issues. Librarians may assist in obtaining copyright permissions and in locating materials in databases that may be used without the need to get copyright permission.

## Notice of Non-Discrimination and Title IX Compliance

www.roguecc.edu/nondiscrimination
Rogue Community College does not discriminate in any programs, activities or employment practices on the basis of race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender identity, marital status, veteran status, disability, age, pregnancy or any other status protected under applicable federal, state or local laws.

For the most up-to-date information about this policy visit the "Title IX Compliance" page on RCC's website.
For further policy information and for a full list of regulatory specific contact persons visit RCC's Nondiscrimination page.

## Financial Aid Satisfactory Academic Progress

www.roguecc.edu/SAP
In addition to the Academic Standing requirements, a student must meet Financial Aid Satisfactory Academic Progress (SAP) requirements in order to maintain Financial Aid eligibility. A student is considered to be in Good Standing for SAP and making satisfactory academic progress if the student maintains:

- At least a 2.0 cumulative grade point average (cGPA) and
- At least a $66.67 \%$ cumulative credit completion rate (cPace) by completing credits attempted and earning A, B, C, D, and P grades. (Calculated by dividing RCC cumulative earned credits by RCC cumulative attempted credits) and
- Students must complete their program of study within the $150 \%$ maximum time frame (calculated by taking program credit length and multiplying that by 150\%). Program length does not include up to 45 attempted developmental education (DE) credits. DE credits are courses numbered under 100, such as MTH20 and RD90.

The following Financial Aid SAP statuses do NOT appear on a student's transcript.

## Financial Aid Warning Status

A student will be placed on Financial Aid Warning status (and still qualify for financial aid) if either of the following occurs:

- A student does not earn a cumulative GPA of 2.0, and/or
- A student does not complete $66.67 \%$ of their total attempted RCC credits (cPace) with grades of A, $B, C, D$, or $P$.

At the end of the first term of unsatisfactory academic progress, a student will receive a SAP Warning letter notifying them of their SAP status and reminding them of the SAP requirements. At the end of their next term enrolled, a student on Financial Aid Warning status will have their financial aid SAP status re-evaluated.

- If the student has a cGPA of 2.0 or greater, and a cPace of at least $66.67 \%$, the student will be considered in Good SAP Standing and will be notified of such.
- If the student does not have at least a 2.0 cumulative GPA, and at least a $66.67 \%$ cumulative Pace credit completion rate, they will be moved to Financial Aid Suspension status.


## Financial Aid Suspension Status

Students on Warning status who do not successfully achieve Good Standing (meeting the SAP requirements highlighted above), and students who have exceeded the 150\% Max Time Frame standard,
are placed on Financial Aid Suspension status. A student will receive notification about their financial aid SAP status along with a link to the financial aid SAP policy.

A student on Financial Aid Suspension status is not eligible for federal, state, and institutional aid unless the student appeals for financial aid reinstatement and the appeal is approved. Students may submit a Satisfactory Academic Progress (SAP) Appeal to request reinstatement of their financial aid. If the SAP appeal is approved, financial aid students will be placed on Probation (Financial Aid Eligible) status.

At the end of their next term of enrollment, a student on Financial Aid Suspension status will have their financial aid SAP re-evaluated.

- If the student has at least a 2.0 cumulative GPA, and at least a $66.67 \%$ cumulative Pace credit completion rate then the student will be considered in Good SAP standing.
- If the student does not have at least a 2.0 cumulative GPA, and at least a $66.67 \%$ cumulative Pace credit completion rate the student's financial aid will remain in a suspended status. Students may appeal for financial aid reinstatement by completing a Satisfactory Academic Progress Appeal (SAP) form.


## Probation (Aid Eligible) Status

Students who have an approved SAP Appeal will be placed on a Probation (Aid Eligible) status and are financial aid eligible. Probation (Aid Eligible) status allows students to receive aid while working toward meeting the Good SAP Standing requirements.
At the end of their next enrolled term, a student on a Probation (Aid Eligible) status will have their financial aid SAP re-evaluated.

- If the student has at least a 2.0 cumulative GPA, and at least a $66.67 \%$ cumulative Pace credit completion rate then the student will be considered in Good SAP Standing.
- If the student does not have at least a 2.0 cumulative GPA, and at least a $66.67 \%$ cumulative Pace credit completion rate the student will return to a Financial Aid Suspended status.

Students who continue to show overall improvement toward the Good SAP Standing requirements, but need more than one term to reach Good SAP Standing, may submit another SAP appeal to request an additional Probation (Aid Eligible) term.

## Max Time Frame Financial Aid Suspension

Students who have applied for financial aid and who cannot complete their program in the maximum 150\% allotted credit time frame, or who have a prior associates degree or higher, will be placed on Financial Aid Suspension status. Students may submit a Credit Extension Appeal (CEA) for financial aid reinstatement. If approved, students must only register in courses required to complete their program and they must successfully complete all classes with a grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}$ or P in order to maintain their financial aid eligibility.

## Grade Appeal \& Grade Change Process (AP 4231)

Academic evaluation of student performance by instructors shall be based on academic performance and under no circumstances be prejudicial or capricious. At the same time, students are responsible for maintaining the standards of academic performance established by instructors for the courses in which they have enrolled.

Each instructor shall give students clearly stated written criteria for evaluation. To appeal an academic evaluation (grade) within the past year (four academic terms), a student may start the process by discussing the grade method in question with the instructor.

If a student is not satisfied with the outcome of their discussion with the instructor, they may appeal the decision to the Department Chair. If a student believes further appeal is warranted they may appeal a

Department Chair's decision to the Dean of the area where the instructor's program resides. If a student is not satisfied with the Dean's decision, an appeal may be made to the Vice President of Student Learning \& Success. Any decision made by the Vice President of Student Learning \& Success is final.

## The Grade Appeal Procedure

Provides the student with a process for appealing a final course grade when the student believes an improper evaluation has occurred. "Improper evaluation" is defined as: (1) the evaluation standards and grading criteria contained in the course syllabus were not followed by the instructor; or (2) the final grade was imposed in an arbitrary or capricious manner.

For academic evaluation (grade) appeals where a student believes a miscalculation of the final points, scores, and/or grades occurred, the student may file a Grade Change Petition form. The form may be accessed at http://web.roguecc.edu/enrollment-services/forms-students.

## Grade Change Petitions

College policy states that instructors may change grades up to one year after a course has been completed.
Petitions after one year will be considered only with documented extraordinary circumstances, such as illness, military service, or incarceration.

All change of grade requests must rest upon a miscalculation of the final points, scores, and/or grades.
The assignment of a grade is the responsibility of the instructor of record. Thus, any changes to an assigned grade can only be made by the instructor. If the instructor is not available, see G., below.

Students who believe their final grade for a course as reflected in the official college transcript to be erroneous must:

1. submit a Grade Change Petition (forms available at http://www.roguecc.edu/Enrollment/Forms to the instructor of record within one (1) calendar year of the last day of the term in which the grade was assigned,
2. include the reason(s) why the recorded grade is being challenged, and
3. provide copies of any evidence that supports the request (e.g. graded papers, graded exams, course syllabus, and graded quizzes).

Within 2 weeks of receiving the petition (and if received during the term) the instructor will inform the student in writing of their decision and, if denied, the reasons for the denial. A copy of the letter and the completed Grade Change Petition will then be submitted to Enrollment Services. The decision shall be deemed final and no further action will be taken. If petition is received during a break between terms or during summer term then a response will be given at the beginning of the next term.

If approved Enrollment Services will notify the student in writing regarding the final decision and retain a copy of the petition, documentation, final decision and grade change form, if appropriate, in the student file.

If the instructor of record is no longer employed by the College, or is otherwise unavailable, the Department Chair of the petitioned course will make every attempt to contact the instructor of record and come to a resolution. If the Department Chair is unable to contact the instructor, the Department Chair will make a decision based on the available evidence and take appropriate action as outlined above. In this case, the final decision of the Department Chair shall be deemed final and no further action will be taken.

# Student Rights, Responsibilities, and Freedoms 

www.roguecc.edu/student-rights
To request this document in an alternate format, contact Access and Disability Resources.
Contact: Access \& Disability Resources at 541-956-7337
Oregon Relay Service: 711

## Preamble

Rogue Community College (RCC or the College) provides an environment which encourages learning. The College is dedicated to the open exchange of knowledge and skills, growth in student capacity for critical thinking, and the development of ethically sensitive and responsible students. The College recognizes that all individuals and groups at RCC have dignity and worth.

Learning and teaching are inseparable aspects of academic pursuit. Standards of academic rights and freedoms for students, as outlined below, are essential. Students have responsibilities for performance and conduct. Students' enrollment (or attempted enrollment) implies their acceptance of their responsibility to comply with college policies and procedures.

Enrollment forms for Students

## Student Responsibilities, Rights, and Freedoms (AP 5990)

## I. STUDENT RESPONSIBILITIES

A. Students will be responsible for:

1. Learning the content of any course of study for which they are enrolled, participating in class activities, and knowing the rules and regulations governing the educational community.
2. Following the lawful direction of college personnel, including providing information and personal identification when requested.
3. Respecting the teaching/learning environment by interacting with civility within the classroom, including face-to-face, online, and hybrid class formats, and following safety guidelines
4. Respecting the rights of others and cooperating to ensure that such rights are protected.
5. Exercising dissent in a responsible manner and within a framework compatible with the orderly resolution of differences
6. Maintaining honesty and integrity in all work (as outlined in the Academic Integrity procedure), communication, and interactions;
7. Maintaining the standards of academic performance established by instructors for the courses in which they are enrolled.
8. Properly using college equipment, computers and facilities, including timely return of loaned equipment/materials
9. Complying with all college policies and regulations, including those posted in labs and classrooms.
10. Complying with local, state, and federal laws.
11. Utilizing established procedures to influence change or challenge RCC policies \& regulations.
II. STUDENT RIGHTS
A. Students will have the right to:
12. Be protected against improper academic evaluation. Students have protection through orderly procedure against unfair academic evaluation (See AP 4231 Grade Appeal \& Grade Change Process). Student's grades will be based solely on academic achievement, unless otherwise specified by the instructor in writing in the syllabus.
13. Confidentiality of student records. RCC will abide by federal and state regulations regarding the privacy of student records and comply with the law regarding access procedures.
14. Due process in disciplinary proceedings. Students will have the right to be notified of the charges, will be afforded the opportunity to be heard, and will have the right to be assisted without prejudice by an advisor who may be an attorney. (See BP/AP 5500, AP 5520)
15. Reasonable accommodation. RCC is committed to providing opportunities to students with disabilities in order for them to have meaningful access to college programs and services.
16. Exercise their rights of citizenship. As citizens, students have the same freedoms of speech, right to peaceful assembly, and the right to petition as other citizens. As members of the College community, students are subject to the obligations as a student which accrue to them by virtue of this membership. International and undocumented students, though holding citizenship in another country, are considered members of the college community.
Activities of students may sometimes result in violation of law. Students who violate the law may incur penalties prescribed by civil authorities. College authority is not used merely to duplicate the function of general laws. RCC's special authority may be asserted at those times when its interests are involved.

## III. STUDENT FREEDOMS

A. Students will be free to:

1. Organize and join associations to promote common interests subject to the formal requirements for recognition by the Associated Student Government of RCC, the college's Student Government, as a condition of institutional recognition. Students, student clubs, and student organizations may invite individuals as presenters for forums outside of classes and do not discriminate on the basis of protected classes as outlined by Administrative Procedure 3435.
2. State any reasoned exception to information or views offered in any course of study and to reserve judgment about matters of opinion without it affecting their grade as long as the disagreement is not disruptive to the instructional process.
3. Examine and discuss all questions of interest to them and express opinions publicly and privately. In accordance with Board Policy and Administrative Procedure 3900 Speech - Time Place and Manner, students will be free to support causes by orderly means, in ways that do not disrupt the regular and essential operation of the College or violate college policies or procedures.
4. Participate in institutional governance. The Associated Student Government of RCC (ASGRCC) serve as the student government body, and through this body, students are afforded the right to have student representation on selected RCC councils and committees. Students may participate in formulating and applying policies and procedures affecting academic and student affairs through student government as well as through the various college councils and committees. Students are free to express their views on issues of college policy and matters of general interest to the student body. Students may also make presentations to the RCC Board of Education, as citizens, by contacting the Assistant to the Board of Education at (541-956-7001) and requesting to be added to the next monthly Board meeting agenda.
5. Engage in free and responsible discussion through student clubs, organizations, publications and student press, all questions of interest to them and express opinions publicly and privately. They may support causes by orderly means, which do not disrupt college operations. in conformance with local, state and federal laws and professional codes.
It should be made clear to the academic and larger community that, in their public expression, students, student clubs, and student organizations speak for themselves and not as representatives of the College or the College Community.
6. Unlawful discrimination. In order for Rogue Community College to maintain a place of learning and work that is free of unlawful discrimination, Rogue Community College provides equal educational and employment opportunities and provides service benefits to all individuals without regard to sex, race, color, religion, national or ethnic origin, place of birth, age, sexual orientation, gender identity or expression, marital status, disability, political affiliation or belief, GED, veteran status, or/and other status or characteristic protected by applicable state or federal law and in compliance with Administrative Procedure 3410 Non-discrimination and 3430 Prohibition of Discrimination and Harassment.
7. Unlawful harassment. Rogue Community College is committed to providing a learning and working environment free of harassment; in compliance with AP 3430, 3432, and 3435.
8. Unlawful sexual harassment/sexual assault and violence. Rogue Community College is committed to providing all individuals with the opportunity to work and learn in an environment free from sexual harassment/sexual assault; in compliance with AP 3433. For physical assaults/violence, see also AP 3500 Campus Safety, AP 3510 Workplace Violence, and AP 3515 Reporting of Crimes. STUDENT PUBLICATIONS (AP 5991)

## Standards of Student Conduct (AP 5500)

For the purposes of this and associated procedures a member of the college community is defined as a student, staff, faculty member, other employee, volunteer, board member or other individual engaged in lawful activity on Rogue Community College (RCC) property or at any RCC sponsored event or function.

## 1. Prohibited Behaviors

The following conduct shall constitute good cause for discipline, including but not limited to the removal, suspension, or expulsion of a student:

1. Causing, attempting to cause, or threatening to cause physical injury to another person.
2. Possession, sale, or otherwise furnishing any firearm, knife, explosive, or other dangerous object, including but not limited to any facsimile firearm, knife, or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a Rogue Community College employee, which is concurred in by the President or designee.
3. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance, an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia. These behaviors are prohibited on campus, at any RCC sponsored activity, or using any RCC controlled technology or resources.
4. Committing or attempting to commit robbery or extortion.
5. Causing or attempting to cause damage to RCC's property or to private property on campus.
6. Stealing or attempting to steal RCC property or private property on campus, or knowingly receiving stolen RCC property or private property on campus.
7. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college.
8. Committing sexual misconduct, harassment, or discrimination as defined by law or by RCC policies and procedures. Resolution of these allegations will occur under RCC policies and procedures related to protected class discrimination and harassment.
9. Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law. Resolution of these allegations will occur under RCC policies and procedures related to protected class discrimination and harassment.
10. Engaging in intimidating conduct or bullying against a college community member through words or actions, including direct physical contact; verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyberbullying;
11. Willful misconduct which results in injury or death to a student or to employees or which results in cutting, defacing, or other injury to any real or personal property owned by RCC or on campus.
12. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
13. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.
14. Dishonesty, forgery, alteration or misuse of college documents, records or identification; or knowingly furnishing false information to RCC.
15. Unauthorized entry upon or use of RCC facilities.
16. Lewd, indecent, or obscene conduct directed towards a College Community member regardless of geographic location.
17. Engaging in expression which is obscene; libelous, or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful RCC administrative procedures, or the substantial disruption of the orderly operation of RCC.
18. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
19. Failure to follow a directive. Students are required to follow the lawful directives of RCC personnel acting in the performance of their duties.
20. Hazing. Students are not permitted to haze other students. Hazing is subjecting an individual to bodily harm, purposeful mental harm, humiliation, harassment, compelling an individual to consume controlled substances or alcohol, or requiring an individual to commit a crime as a condition or precondition of attaining membership in an organization or attaining any office or status within an organization.

## 2. Records Retention

Records of alleged student misconduct, documentation of those allegations, evidence used to determine if allegations are substantiated, and the resolution of those allegations will be maintained separate from a student's other educational records and retained in accordance with RCC policies and procedures on record retention.

## Student Discipline Procedures (AP 5520)

The purpose of this procedure is to provide a prompt and equitable means to address alleged violations of the Standards of Student Conduct This procedure guarantees to the student, or students, involved the due process rights guaranteed them by state and federal constitutional protections. This procedure will be used in a fair and equitable manner, and not for purposes of retaliation. It is not intended to substitute for criminal or civil proceedings that may be initiated by other agencies.

These administrative procedures are specifically not intended to infringe in any way on the rights of students to engage in free expression as protected by the state and federal constitutions and will not be used to punish expression that is protected.

## Definitions

Day - Working days when Rogue Community College (RCC) is open for operations including days the college is open between terms.

Direct Resolution - An attempt by any RCC employee to resolve an issue which they believe to be a violation of the standards of conduct.

Disciplinary Probation - Specific conditions or restrictions while in attendance at RCC, in addition to the Student Code of Conduct, for a specified period of time. The Compliance Coordinator will communicate the specific behavior leading to this sanction and the specific conditions or restrictions imposed for the specified period of time to the student, in writing. The student will sign the document provided by the College and agree to abide by its terms or forfeit all rights to continue attendance at RCC.

Educational Sanction - A student may be assigned academic work that reflects on the impact of their actions and/or educates them about how to avoid similar behavior in the future.

Expulsion - Termination of student status and denial of further college privileges. Conditions of readmission, if any, will be listed in the letter of expulsion given as a notice to the student by the Compliance Coordinator.

Instructor - Any academic employee of RCC in whose class a student subject to discipline is enrolled.
Suspension - Exclusion of the student by the Compliance Coordinator, or designee, for good cause from one or more classes for the remainder of the school term, or from all classes and activities of the college for one or more terms. A student can also be removed - for good cause - from a particular program of study.

RCC Employee - Anyone engaged by RCC to perform educational, service, administrative, or other functions regardless of if this individual is compensated by RCC.

Removal from class - Exclusion of the student by an instructor for the day of the removal and the next class meeting.

Restitution - compensation or reimbursement for damage to or misappropriation of property, which may take the form of appropriate service to repair or otherwise compensate for damages. Conditions of restitution will be detailed in a letter to student.

Student - Any person currently enrolled as a student at any college or in any program offered by the college or a person taking steps to enroll or reenroll.

Written or verbal reprimand - An admonition to the student to cease and desist from conduct determined to violate the Standards of Student Conduct. Written reprimands will become part of a student's permanent record at the college. A record of the fact that a verbal reprimand has been given will become part of a student's record at the college for a period of up to one year.

## Resolution Process

## 1. Direct Resolution

If any RCC Employee believes a student is engaged in conduct which violates RCC's standards of conduct listed in AP 5500 - they are encouraged to attempt to resolve this issue directly with the student. RCC encourages direct resolution but it is not required. If personal safety is at risk please contact 911 or campus security as appropriate. If direct resolution is attempted please complete an incident report regardless of the outcome.

## 2. Compliance Coordinator

If direct resolution is inappropriate or unsuccessful the college employee should complete an incident report within 3 working days of the behavior in question. Within 7 working days of receiving the report the Compliance Coordinator, or designee, will contact the student and other involved parties.

The student who is accused of violating RCC's standards of conduct will be contacted to schedule a meeting with the Compliance Coordinator or designee. The Compliance Coordinator, or designee, may use multiple
processes to help resolve the issue. The student will be informed of the behavior they are accused of and be allowed an opportunity to explain or deny the behavior.

The Compliance Coordinator, or designee, may - as necessary - conduct an investigation into the accused behavior including reviewing available evidence and speaking to witnesses. The Compliance Coordinator, or designee, will use the preponderance of the evidence standard in determining if a student's behavior violated RCC's standards of conduct.

If a student is found to have violated RCC's standards of conduct the Compliance Coordinator, or designee, may assign a sanction proportional to the student's conduct. Available sanctions are listed in this procedure under the heading Sanctions.

Students will be notified of the Compliance Coordinator, or designee's, decision and any sanction, as appropriate, in writing. When determining a sanction, the Compliance Coordinator, or designee, may take a student's disciplinary history with RCC into account.

## 3. Appeal to the Vice President of Student Services

Students receiving a written notice of disciplinary action for a violation of RCC's standards of conduct have the right to appeal in writing to the Vice President of Student Services, or designee. Any appeal must be received within 7 working days of receiving the notice of disciplinary action.

Students may appeal based on:

1. Failure to follow the process for resolving allegations of inappropriate behavior as outlined in this procedure;
2. New evidence is available that was not available during the initial investigation; or
3. The sanction imposed is disproportionate to the offense the student is found responsible for. Within 10 working days of receiving an appeal the Vice President of Student Services, or designee, will review the initial report, the investigation process, the findings, and any sanctions. As part of this process they may consult with RCC administrators to insure consistency and fairness within the process. The Vice President of Student Services, or designee, will report their findings and conclusions to the student and the Compliance Coordinator. The decision of the Vice President of Student Services, or designee, is final.

## Sanctions

If a student is found to have violated RCC's standards of conduct, they may face discipline from RCC. Disciplinary sanctions available to the Compliance Coordinator, or designee, are:

1. Verbal or written reprimand
2. Disciplinary probation
3. Educational Sanction
4. Suspension
5. Expulsion
6. Restitution
7. Other - including directives for behavior and plans of action.

## Removal from Class or Campus

Any RCC employee may order a student removed from campus for the day of the removal and the next day. This removal should be based on behavior that violates the standards of conduct, is causing a significant disruption, and is not corrected when challenged with direct resolution.

The employee shall immediately report the removal to the Compliance Coordinator using an incident report. The Compliance Coordinator, or designee, shall attempt to contact the student within 2 working days of receiving the report to set a meeting.

The purpose of this meeting will be to discuss the conduct that led to the removal from class, attempt to resolve the problem that led to the removal, and determine appropriate disciplinary action.

## Student Concern \& Complaint Procedure (AP 5530)

If students need disability accommodations to successfully complete this process, contact Access and Disability Resources by calling (541) 956-7337 or visiting the website:
roguecc.edu/accessresources

## When Not to Use this Procedure

This procedure is not the appropriate process for addressing allegations of harassment or discrimination based on a protected class such as race, color, religion, ethnicity, use of native language, national origin, marital status, veteran status, disability, age, pregnancy, or any other status protected under applicable federal, state, or local laws. For resolutions of complaints of this nature please use AP 3430 - Prohibition of Discrimination and Harassment and AP 3435 - Discrimination and Harassment Reports and Investigations.

Grade appeals shall be filed according to the applicable procedure outlined in Rogue Community College's Student Grade Appeals administrative procedure (AP 4231).

## Definitions

Concern: A report of conduct which a student feels violates their rights and/or RCC policies or procedures where resolution is being attempted under the informal process of this procedure.

Complaint: A report of conduct which a student feels violates their rights and/or RCC policies or procedures where resolution is being attempted under the formal process of this procedure.

Retaliation: Any behavior which negatively impacts the student because they reported a concern or filed a complaint.

## Preamble

This procedure is designed to ensure that students have full access to their education in accordance with Rogue Community College's commitment to the rights and dignity of our students and the College's philosophy on diversity, equity, and inclusion.

## Purpose

The purpose of this procedure is to provide an appropriate mechanism to address concerns and complaints brought forth by students while also 1) ensuring due process for students and staff; 2) resolving conflict at the lowest level possible; and 3 ) identifying areas for continuous improvement.

This procedure provides a way for students to seek resolution to decisions, conditions, and practices of Rogue Community College (RCC or the College) and its employees, which they allege are violations of their rights as students, as identified in RCC's Student Responsibilities, Rights, and Freedoms procedure (AP 5990), or other published college policies and procedures. As students pursue their educational goals, they will be treated with professionalism and respect by college employees or staff.

Students shall not be retaliated against for reporting a concern or filing a complaint in good faith or for participating in this process. Retaliation is any behavior that negatively impacts the student because they reported a concern or filed a complaint.

This procedure outlines the steps to resolve alleged violations of student rights or other published college policies and procedures. Students will attempt to resolve alleged violations with the staff member(s) directly involved.

Students may utilize an advocate at any point in the process. However, students are expected to act on their own behalf and represent themselves, with or without an advocate, throughout the entirely of the process of reporting a concern or filing a complaint. Advocates may be an RCC Counselor or any other person of the student's choosing who may provide support.

The role of an advocate in this process is to serve as a resource for the student. Advocates are a point of contact to assist the student in advocating for themselves, and may help the student identify a reasonable proposed resolution. Advocates may be present for conversations, but may not speak on behalf of the student. In the role of advocate, RCC Counselors are recommended, but not required to keep working files as part of this process.

Each College employee attempting to reach a resolution of a complaint will keep a working file containing all documents, communications, and evidence related to the complaint. If a resolution is not reached, it is the responsibility of the College employee working to achieve a resolution to provide this working file to the next person in the process. Upon resolution of a formal complaint, this working file will be provided to the office of the Vice President of Student Learning \& Success for retention. All documentation submitted or created during the resolution process shall follow this established filing procedure.

Students with a concern or complaint shall follow the procedures and timelines outlined below.

## Informal Resolution

## Step 1: Attempt Direct Resolution

The student discusses the issue with the College employee who is directly involved. The goal is to find a resolution in a timely manner, at the lowest level. The student may choose to be accompanied by an advocate such as an RCC Counselor, or other person of their choosing, during this discussion. The student is required to communicate directly with the College employee involved, but this communication does not have to be "in-person"; it can also be electronic. It is the responsibility of the College employee who is directly involved in the concern to respond to communication or requests for communication as soon as is reasonable, and generally within seven (7) working days.

If no resolution is reached, the student may move to step 2.

## Step 2: Resolution with Department Chair or Immediate Supervisor

If the issue is not resolved directly with the College employee, the student may seek resolution with the employee's Department Chair or immediate supervisor. The student may choose to be accompanied by an advocate during these discussions; however, the student is expected to be present and to speak on their own behalf. The student must clearly state the problem and a proposed resolution. It is the responsibility of the Department Chair or Immediate Supervisor to respond to communication or requests for communication as soon as is reasonable, and generally within seven (7) working days.

Appropriate written documentation will be maintained by the Department Chair or immediate supervisor.

If no resolution is reached, the student may move to Step 3. If the College employee who is the subject of the complaint is a Department Chair or Director, the student should skip this step and move directly to Step 3.

## Formal Complaint Procedure

## Step 3: Resolution with Dean or Next Level Supervisor

If the issue is not resolved at Step 2, the student may seek resolution with the supervising Dean, next level supervisor, or if necessary, a designee appointed by the corresponding supervisor's Vice President. To do this, a student has seven (7) working days from receiving notice their concern could not be satisfactorily resolved at Step 2 to complete a Student Complaint Form and provide it to the supervising Dean or next level supervisor/designee.

The student must provide a written description of the issue, the steps the student has taken to attempt to resolve that issue, and clearly state a proposed resolution.

Within a reasonable timeframe, and generally by ten (10) working days of receiving the Student Complaint Form, the supervising Dean or next level supervisor/designee will 1) contact relevant witnesses and participants involved in the specific complaint and gather appropriate information and/or documentation; and 2) contact the student to schedule a meeting to discuss a mutually satisfactory solution.

If no mutually agreeable resolution is possible, the Dean (or next level supervisor/designee) will conduct an inquiry or investigation proportionate to the nature of the complaint. In this case, the Dean (or next level supervisor/designee) shall contact the student within a reasonable timeframe, generally within five (5) working days of the prior meeting, to 1) provide an appropriate timeline to conduct the investigation, and 2) schedule the follow-up meeting with the student, to occur within a reasonable timeframe and generally within five (5) working days after scheduled completion of the investigation.

Based on the information available as a result of the investigation, the Dean or next level supervisor will determine an appropriate resolution, and will communicate that resolution to the participants, including the student complainant, as well as the individual named in the complaint

Appropriate written documentation will be maintained by the supervising Dean or next level supervisor and filing procedures will be followed with the Vice President of Student Learning \& Success, who will be provided with copies of all written documentation related to the informal and formal process thus far.

If no resolution is reached, the student has seven (7) working days to proceed to Step 4.
Complaints submitted without a clearly identified resolution will be considered as information provided to support continuous improvement for instructional and/or operational practices and the complaint will be considered resolved with regard to further student contact.

## Step 4: Appeal Process

If the student is not satisfied with the dean's or immediate supervisor's resolution, the student has the right of final appeal of the complaint to the Vice President of Student Learning \& Success. The final appeal process requires the student to prepare and deliver a written appeal request to the Vice President within seven (7) working days after they have been notified of the determined resolution in Step 3. The written appeal request must include an explanation of why the issue remains unresolved and must provide a proposed remedy to the complaint.

Within ten (10) working days of receiving the student appeal, the Vice President of Student Learning \& Success will review the complaint, the investigation process, and the proposed resolution(s). They may
consult with the administrative team and/or the College President in the review process to assure consistency within RCC.

The review may include, but not be limited to, an interview of the student complainant, College employee and/or other involved parties. The Vice President of Student Learning \& Success will report the findings and conclusions to the student complainant, the College employee(s) involved, and the Dean or immediate supervisor with a written and signed document. Established filing procedures will be followed within the Vice President of Student Learning \& Success' office, and the entire working file will be kept by the Office of the Vice President of Student Learning \& Success at the conclusion of the formal process

The determination of the Vice President of Student Learning \& Success will be final.

## Conflict of Interest and Complaints against Senior Leadership

If a supervisor of dean is named as the respondent in a complaint, or if a conflict of interest exists at Step 2 or beyond, the next-level supervisor of the individual named in the complaint or with a conflict will designate an alternate to step in and fill the role. Individuals are expected to recuse themselves if they believe that a perceived or actual conflict exists and contact their supervisor to request an appointed designee.

Complaints against a Vice President of Rogue Community College should first be attempted to be resolved directly. If no resolution is reached directly, the student shall forward their complaint to the Vice President of People, Culture, \& Safety/CHRO who will act in accordance with Step 2. The student will contact the Vice President of People, Culture, \& Safety within 7 working days if no resolution is reached directly. After meeting with the Vice President of People, Culture, \& Safety, a decision regarding resolution will be made and communicated within a reasonable timeframe, and generally within 7 working days. If no resolution is reached with the Vice President of People, Culture, \& Safety/CHRO, or the complaint is against the Vice President of People, Culture, \& Safety/CHRO, the student shall provide the Student Complaint form to the President of Rogue Community College, who will investigate and resolve the issue as appropriate.

Complaints against the College President should first be attempted to be resolved directly. If no resolution is reached directly, the student shall forward their complaint to the Vice President of People, Culture, \& Safety/CHRO, who will work with the Chairperson of the RCC Board of Education to investigate and resolve the issue as appropriate.

## Drug and Alcohol-Free Campus

For the most up-to-date information visit the "Drug and Alcohol-Free Campus" policy on the RCC website.
Rogue Community College (RCC or the College) is committed to providing an environment that fosters excellence in learning for its students and community and in the work performance of all employees. The misuse and illegal use of alcohol, marijuana, and other drugs is contrary to this effort. In keeping with state and federal statutes, the illegal use, possession, distribution, manufacture, or sale of alcohol, cannabinoids (Marijuana), and other drugs, and/or being under the influence of alcohol, marijuana and other drugs is not permitted on college-owned or college-controlled property; or while representing the College on business or in other college-sponsored activity(ies).

There shall be no consumption of alcohol at college-owned facilities unless such use is authorized by the College President. RCC complies with the Drug-Free Schools and Campuses Regulations (EDGAR Part 86) and the Drug-Free Workplace Act of 1990 by developing a drug-free campus program, including the misuse and illegal use of alcohol, marijuana and other drugs.

While Oregon voters approved a ballot measure in 2014 making Oregon the third state to allow possession and sale of marijuana for recreational use, students' and employees' welfare, as well as teaching and learning are the College's top priorities. As a public institution, RCC receives federal funding in the form of
grants and financial aid. Therefore, allowing any use of marijuana would be in violation of that law, thus jeopardizing the College's mission and the College's students' educations. Under federal law, marijuana is designated as a Schedule 1 drug.

A biennial review and report will be completed to determine the effectiveness and the consistency of sanction enforcement and to identify and implement any necessary changes.

## Use of Tobacco

For the most up-to-date information visit the "Use of Tobacco" policy on the RCC website. The College is committed to providing a safe and healthy environment for its employees, students and visitors. Smoking and other tobacco use is not permitted on campus by anyone under 21 years of age and except in designated smoking and tobacco use areas. College employees and students are encouraged to assist in informing and educating co-workers and other students about the designated areas.

# General Education Outcomes and Educational Programs Overview 

## Institutional Learning Outcomes

RCC faculty have identified five Institutional Learning Outcomes (ILOs) that students should see referenced on course syllabi. These outcomes are essentially skills that have been determined to make students successful at RCC and in whatever lies beyond their RCC experience. Students may be assessed directly for achievement of these outcomes as part of regular course assessments. They include:

- Communication: Students will engage in effective communication using active reading and listening skills and expressing ideas appropriately in oral, written, and visual work.
- Critical Thinking: Students will explore, reach, and support appropriate conclusions through the analysis, synthesis, and evaluation of information and varying opinions.
- Equity, Diversity, Inclusion and Global Consciousness: Students will recognize and identify equity, diversity, inclusion and global consciousness as it applies to people and the world today.
- Information Literacy: Students will identify an information need and locate, evaluate, and use information effectively and ethically.
- Quantitative Literacy and Reasoning: Students will reason through and solve quantitative problems by collecting and interpreting data and applying mathematical/statistical techniques.


## Associate of Arts Oregon Transfer

The Associate of Arts Oregon Transfer degree clearly defines a program of study designed for students who intend to transfer to an Oregon university. By completing degree requirements (and major prerequisites if applicable) students will qualify for junior standing for registration purposes upon admission to any university in the state system.

The Associate of Arts Oregon Transfer degree can be earned by meeting the following requirements:

- Be admitted to the program.
- Complete a minimum of 90 term credits of college-level courses (a maximum of 12 career and technical credits are allowed) with a minimum grade of "C."
- Complete any required prerequisites with a minimum grade of "C."
- Complete a minimum of 24 credits toward the degree at RCC.
- Have at least a 2.0 cumulative Grade Point Average (GPA) at the time of award.


## General Education Outcomes

The Higher Education Coordinating Commission (HECC) has approved general education outcomes for foundational and discipline courses selected to fulfill AAOT requirements. All courses listed meet those identified outcomes. Upon successful completion of the AAOT degree, students having taken these courses will be able to do the following:

## Arts \& Letters

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

## Cultural Literacy

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

## 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; and
Understand many of the economic, legal, and social issues surrounding the use of information.

## Mathematics

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

## Science/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 modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner; and Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.
Contact the Counseling/Advising Department for more specific information on programs and coursework.

## Social Science

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

## Speech/Oral Communication

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

## Writing

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

## The Associate of Science Oregon Transfer Business

The Associate of Science Oregon Transfer - Business degree defines a program of study to fulfill lower division general education requirements for a bachelor's degree at Oregon public universities. It is designed for students transferring to baccalaureate degree programs in a variety of business majors. Those completing the ASOT-Business degree are assured junior level standing and will have met the lower division general education requirements of any public institution in Oregon.

Students should contact the specific business school or program they will transfer to early in the first year of their ASOT-Business program to be advised about additional requirements and procedures for admission to that school or program.

The Associate of Science Oregon Transfer Business degree can be earned by meeting the following requirements:

- Be admitted to the program.
- Complete a minimum of 90 term credits of college-level courses (a maximum of 12 career and technical credits are allowed) with a minimum grade of "C."
- Complete any required prerequisites with a minimum grade of "C."
- Complete a minimum of 24 credits toward the degree at RCC.
- Have at least a 2.0 cumulative Grade Point Average (GPA) at the time of award.

NOTE: If students plan to complete a Bachelor of Arts (BA) degree at a four-year school, they must have a proficiency in a foreign language regardless of when they graduated from high school or equivalency program.

Students should check with the institution to which they intend to transfer, as certain majors may require additional coursework toward graduation.

## Associate of Science Oregon Transfer - Computer Science

The Associate of Science Oregon Transfer - Computer Science degree defines a program of study to fulfill lower division general education requirements for a bachelor's degree at Oregon public institutions. It is designed for students transferring to baccalaureate degree programs in computer science or software engineering. Those completing the ASOT Computer Science degree are assured junior level standing and will have met the lower division general education requirements of any public Oregon university.

Students should use the ASOT-Computer Science university-specific degree requirements guide for specific transfer requirements for individual schools. See an advisor for more information.

The Associate of Science Oregon Transfer - Computer Science degree can be earned by meeting the following requirements:

- Be admitted to the program
- Complete a minimum of 90 term credits of college-level courses (a maximum of 12 career and technical credits are allowed) with a minimum grade of "C."
- Complete any required prerequisites.
- Complete a minimum of 24 credits toward the degree at RCC.
- Have at least a 2.0 cumulative Grade Point Average (GPA) at the time of award.

Students who have graduated from high school or completed a high school equivalency program in 1997 or after must have one of the following requirements for admission to an Oregon university:

- Two years of the same high school-level language.
- Two terms of college-level language with a grade of "C" or better (may be first-year language which can be used as elective credits).

Note: If students plan to complete a Bachelor of Arts (BA) degree at a four-year school, they must have a proficiency in a foreign language regardless of when they graduated from high school or equivalency program.

Some schools require physics. It is recommended that students contact the specific school early in the first year of the program or use the ASOT-CS university-specific degree requirements guide to determine any additional science requirements and procedures for admission to a specific school or program.

## Associate of Science

The Associate of Science (AS) degree is designed for students transferring to baccalaureate degree programs in applied areas. The AS degree allows students to focus their studies in a particular discipline based upon signed articulation agreements with the universities that have agreed to accept RCC students. Students must work closely with advisers in their areas of interest to ensure electives are appropriate.

RCC currently has signed articulation agreements with Southern Oregon University for the following programs: Business, Computer Science, Digital Cinema, Early Childhood Development, Elementary Education, Emerging Media and Digital Arts, Health and Physical Education, Human Services and Outdoor Adventure Leadership.

RCC also has signed articulations with Oregon Tech for the following programs: Computer and Embedded Systems Engineering Technology, Cybersecurity, Health Informatics, Information Technology, Manufacturing/Engineering Technology, Software Engineering Technology, and pre-engineering transfer programs in Civil, Electrical, Mechanical, and Renewable Energy.

The Associate of Science degree can be earned by meeting the following requirements:

- Be admitted to the program.
- Complete a minimum of 90 term credits of college transfer and career and technical courses with a minimum grade of "C" or "pass."
- Complete any required prerequisites with a minimum grade of "C."
- Complete a minimum of 24 credits toward the degree at RCC.

Students should be aware that if they transfer before completing this degree or transfer in a major not covered by prior agreements, their courses will be evaluated individually toward the transfer requirements of the college of their choice.

Students who have graduated from high school or completed a high school equivalency program in 1997 or after must have one of the following requirements for admission to an Oregon university:

- Two years of the same high school-level foreign language.
- Two terms of college-level foreign language with a grade of " C " or better (may be first-year language, which can be used to partially meet the humanities elective required in the Associate of Science degree).

NOTE: If students plan to complete a Bachelor of Arts (BA) degree at a four-year school, they must have a proficiency in a foreign language regardless of when they graduated from high school or equivalency program. Students should inquire with their intended receiving institution for foreign language requirements.

## Associate of Applied Science

Students can earn an Associate of Applied Science degree in a two-year career and technical program by satisfying the following requirements:

- Be admitted to the program.
- Complete all required courses with a minimum grade of "C" or "pass." A complete list of requirements can be found in this catalog under the name of the specific program.
- Complete any required prerequisites with a minimum grade of "C."
- Complete a minimum of 24 credits toward the degree at RCC.
- Satisfactorily complete general education requirements required in all AAS degrees.


## Associate of Applied Science degrees are offered in these areas:

Apprenticeship (Construction Trades, Electrician, and Industrial Mechanics and Maintenance Technology)
Automotive Technology
Business Technology
Business Technology: Accounting Option
Business Technology: Management and Marketing Option
Computer Support Technician
Design and Digital Media
Diesel Technology
Early Childhood Education
Electronics Technology
Family Support Services
Fire Science
Human Services

Industrial Welding Technology
Manufacturing/Engineering Technology
Nursing
Paramedicine

## Associate of General Studies

The Associate of General Studies degree is designed to provide students the opportunity to acquire a broad education rather than pursuing a specific college major or career and technical program. The AGS degree includes, in addition to the general education courses listed below, 74-75 credits of lower division college transfer and career and technical education courses. Because of the flexibility of this degree, it may not fulfill requirements for transfer to a four-year institution at the junior level.

Candidates for the Associate of General Studies degree must earn a minimum of 90 credits and satisfy the following requirements:

- Be admitted to the program.
- Complete any required prerequisites with a minimum grade of "C."
- Satisfactorily complete required general education courses.
- Complete a minimum of 24 credits toward the degree at RCC.

Students planning to transfer to a four-year university may select courses within the requirements of the AGS degree that will apply to the following majors at OUS schools: Architecture, Art, Biology, Chemistry, Geology, Physics, and Pre-Professional Medicine (Dentistry, Medicine, Optometry, Pharmacy, Veterinary).

## Certificate Programs

Career Pathway, less than one-year, and one-year (three to four terms) certificates of completion programs prepare students to enter a variety of occupational fields. To qualify for one-and two-year certificates students must meet these requirements:

- Be admitted to the program.
- Complete all required courses with a minimum grade of " C " or "pass." (A complete list of requirements can be found in this catalog under the name of the specific program.)
- Complete any required prerequisites with a minimum grade of "C."
- Complete a minimum of 12 credits toward the certificate at RCC (certificates that are 45 or more credits).
- Complete a minimum of 25 percent of the total credits towards the certificate at RCC (certificates that are less than 44 credits).
- Satisfactorily complete general education requirements required in all certificate programs.


## The following Certificates are awarded:

Addiction Studies

Automotive Specialist

```
Basic Health Care
Business Assistant (Administrative Support, Accounting Assistant, or Assistant Manager)
Dental Assistant
Design and Digital Media
Diesel Technology: Diesel Specialist
Early Childhood Education
Electronics Technology: Electronics Technician
Emergency Medical Services
Family Support Services
High Technology Studies
Industrial Welding Technology
Manufacturing/Engineering Technology: Computer Numerical Control (CNC) Technician
Massage Therapy
Medical Assistant
Medical Assistant Bridge
Pharmacy Technician
Practical Nursing
```


## Career Pathways

To qualify for less than one-year certificates or Career Pathway Certificates, students must meet the same requirements as outlined above with these exceptions:

- General education requirements may vary from those listed above.
- Complete at least 25 percent of the total credits at RCC.


## The following Career Pathway Certificates are awarded:

Business Assistant: Business and Information Specialist<br>Business Assistant: Customer Service<br>Business Assistant: Retail Sales and Service<br>Business Assistant: Small Business Management<br>Computer Support Technician: Computer Software Specialist<br>Design and Digital Media: Adobe® Applications Technician

Design and Digital Media: Social Media Technician
Design and Digital Media: UI-UX Technician
Design and Digital Media: Video Production Technician
Early Childhood Education (Basic)
Early Childhood Education (Intermediate)
Electronics Technology: Production Assembler I
Emergency Medical Services: Emergency Medical Technician
Family Support Services
Fire Science: Firefighter
Industrial Welding Technology: GTAW Welder
Industrial Welding Technology: SMAW Welder
Industrial Welding Technology: Welder's Helper
Industrial Welding Technology: WIRE Welder
Manufacturing/Engineering Technology: Computer Aided Design and Drafting Certification
Manufacturing/Engineering Technology: Computer Numerical Control (CNC) Operator
Massage Therapy: Entry-Level Therapist
Medical Assistant: Administrative Medical Assistant

Medical Assistant: Phlebotomy
Career Pathway Certificates differ from traditional academic programs in that they are milestones on the path to degrees or certificates and are not eligible for commencement exercises. These completions will be noted on students' transcripts.

Career Pathway Certificates focus on attaining certificates and degrees that lead to high-demand occupations and higher wages. A key component of Oregon's overall education, workforce development, and economic development strategies, Career Pathway Certificates support transitions for students coming to community college to reach their goals:

- High school to post-secondary education.
- Pre-college (ABE/GED/ELA/AS) preparation.
- Industry experience, workforce skills, and degree upgrades.
- Career seekers and changers.
- Transferring from community college to university.

Career Pathways provide opportunities to earn short-term certificates (12-44 credits) that prepare students for specific career opportunities. Career Pathway Certificates can lead to completion of one-year certificates, two-year Associates degrees, Bachelor's and Master's degrees, and employment. Students determine what path to take and work at their own pace to reach their career goals. See an academic advisor for more information.

## Focus Awards

Focus awards recognize student achievement in certain lower division collegiate interest areas and provide a way for students to deepen their knowledge of a particular subject. RCC focus awards consist of at least 18 credits, contain required core courses that must be completed at RCC, and are designed to complement the Associate of Arts Oregon Transfer degree, Associate of Science degrees, and/or the Oregon Transfer Module. Credits earned may transfer to a variety of programs at four-year colleges or universities as elective credits, program requirements, and/or graduation requirements for the receiving institution. Focus awards are developed and maintained by faculty within academic departments. They do not have official sanction or approval of the state and do not appear on student transcripts. RCC currently has one approved focus award in Sustainable Community Development (see Programs of Study section).

## Cooperative Work Experience (CWE)

Allows students to earn hands-on experience in their major area of study with local businesses while earning college credit. Cooperative Work Experience may be financial-aid eligible if it is part of an aid-eligible program. A maximum of 24 Cooperative Work Experience credits can be applied toward a degree and a maximum of 12 credits toward a certificate unless otherwise noted. Cooperative Work Experience credits must be taken within an approved program of study. Check with program advisers for additional information.

## Practicum/Employment Considerations

Students in such programs as Early Childhood Education, Human Services, or Nursing who have criminal records or certain physical limitations may be excluded from or limited by employers in some practicum or clinical experiences. Students should be aware that a criminal history may be a barrier to future employment. In addition, some employers may not be able to accommodate certain physical limitations in filling positions. Students with concerns about these issues should speak directly to the department chair or program coordinator.

## Non-Credit Training Certificates

RCC currently offers two non-credit training certificates, which provide students with short-term training opportunities for jobs in high demand locally:

- Certified Production Technician
- Commercial Truck Driving

To contact the Continuing Education and Workforce Development office by phone, at www.roguecc.edu click on Directory and for Department, select Continuing Education.

## Apprenticeships

Apprenticeship programs at Rogue Community College are your path to many great careers. RCC offers programs that combine part-time classroom instruction and full-time on-the-job training. Programs are competitive and include an application process and committee approval.

## Earn as You Learn

Apprentices usually begin at half the salary of journey workers who have completed their training and have industry certification. Apprentices receive pay increases as they learn to perform more complex tasks. When they become journey workers, they increase their chances of finding a well-paying job in industry and may become supervisors or go into business for themselves.

## Construction Trades, General Apprenticeship

- HVAC
- Plumber
- Sheet Metal
- Construction Trades Apprenticeship students can also earn Certificates and AAS degrees in all three Construction Trades programs.


## Electrician Apprenticeship Technologies

- Limited Maintenance Electrician
- Inside Electrician
- Manufacturing Plant Electrician
- Sign Assembler/Maker

Electrician Apprenticeship students can also earn AAS degrees in all four Electrician programs, and Certificates in

- Inside Electrician
- Manufacturing Plant Electrician
- Sign Maker/Erector


## Industrial Mechanics and Maintenance Technology

- Airframe and Power Plant Technician
- Boiler Operator and Repairer
- Millwright

Industrial Mechanics and Maintenance Technology Apprenticeship students can also earn AAS degrees and Certificates in all three Industrial Mechanics and Maintenance Technology Apprenticeship programs.

## As an apprentice, you will:

- Learn to repair, install and maintain a variety of projects using trade-specific tools and techniques.
- Comply with current building codes.
- Comply with Occupational Safety and Health Administration (OSHA) regulations.
- Earn a Certificate of Completion and journey card from the Bureau of Labor and Industries.
- Have the opportunity to earn an Associate of Applied Science or Certificate by completing general education courses.


## Frequently Asked Questions

## Q. What is Apprenticeship?

A. Apprenticeship is not just a job, but a career opportunity! Apprenticeship is a combination of on-the-job training and classroom training. When they become journey workers earning a journey wage, they are able to give back to the industry by training other apprentices or even teaching apprenticeship classes.

## Q. How long must I serve as an apprentice?

A. Typically, apprenticeships last two to five years, depending on industry requirements.

## Q. How do I receive my on-the-job training?

A. Once you are selected as an apprentice, the employer has promised to provide you training in all of the work processes according to the apprenticeship standards. The employer and the instructor evaluate progress and make recommendations to the apprenticeship committee regarding your advancement in the program.

## Q. Can I expect steady work as an apprentice?

A. The employer makes every effort to employ the apprentice at least 40 hours a week.

## Q. How do I apply for an apprenticeship program?

A. Individual apprenticeship construction committees notify the public when accepting applications.

Apprenticeship announcements are posted at Bureau of Labor and Industries' (BOLI) offices, local schools, community colleges, Oregon Employment Department offices, and community organizations.
Announcements contain the details about the application process. For the industrial committees, employers hire and promote from within and then refer their candidates to the Apprenticeship Office.

## Q. How long must I wait for an opening?

A. The waiting period varies by industry and may last from two weeks to two years. It is a competitive process and it's not unusual for people to apply more than once. The apprenticeship coordinator reviews applications for minimum qualifications. Qualified construction applicant's applications are ranked either by an interview, or a random drawing. The applicant is placed on a qualified list called a Pool of Eligibles, in order of their ranking. Industrial applicants are sponsored by an employer and must meet the minimum qualifications listed in the appropriate apprenticeship standards.

## Q. How much pay does an apprentice receive?

A. Although it varies from industry to industry, the average starting wage of an apprentice is 40 to 50 percent of a journey workers rate of pay. Apprentices usually earn a five percent raise every six months if they meet the total work and school hour requirements, and their on-the-job training and school performance is satisfactory.

## Q. Are apprentices required to attend school?

A. Apprentices must attend related classroom training along with on-the-job-training experience. Most programs require at least 144 hours of school per year. This usually works out to one or two evenings per week during the regular school year. Like other aspects of apprenticeship, the local committee determines the related training requirements according to industry standards. Apprentices can earn credit towards an associate degree at a community college for classroom hours or for the completion of an apprenticeship program.

## Q. Are there age limits for apprentices?

A. Each industry establishes its own minimum age requirement, although the typical minimum age is 18 . Except in very limited situations, there are no upper age limits on apprentices.

## Q. What are the minimum educational requirements for apprenticeship?

A. Apprenticeship programs require applicants to have a high school diploma or GED certificate. Some occupations also require one year of high school algebra with a " C " or better or a placement process placing the applicant in Math 65 or higher or a college transcript with a "P" in Math 60, Math 63 or higher.

## Q. Who pays for the classroom training?

A. It varies among different occupations, industries, and employers. In some cases, apprentices pay the cost of related training. In other cases, industry pays training costs.

## Q. What other costs must be paid by the apprentice?

A. Costs vary by program. Apprentices must have reliable transportation to get to the job and perform workrelated errands. Many programs require the apprentice to provide a basic tool kit and/or appropriate work clothes and safety equipment, as well as books for the classes.
Q. Can I use veterans' benefits as an apprentice?
A. If eligible, an apprentice may use veterans benefits while registered in an apprenticeship program.

## Q. How do I prepare for apprenticeship?

A. Today's competitive industries require employees who are able to perform technical tasks, exercise good judgment, and possess a strong work ethic. The importance of a well-rounded high school education cannot be over emphasized. A strong background in math and science is important. Good attendance is a necessity.

For more information, contact the Apprenticeship Department at 541-956-7184.

## Transferring

## About Transferring

www.roguecc.edu/Transfer

RCC students intending to earn a four-year degree from an Oregon public or private university may complete all the lower-division general education requirements at RCC and begin work on the requirements for a specific major.

Students can prepare for transfer majors at RCC where the advantages include smaller classes, lower tuition costs, and teaching excellence. RCC also provides academic support through free tutoring services.

## Planning to Transfer

Making a transfer plan early can save time and money. Because the general education and academic major requirements differ at each Oregon university, it is important to identify which courses can be taken at RCC before transferring. Some academic majors may require an early start on mathematics. For other majors, students may need to transfer after one year at RCC in order to take essential lower-division major coursework offered only at the transfer institution.

## Core Transfer Map

Core Transfer Maps are broad descriptions of course requirements for students at any Oregon community college or public university. Students who have not yet declared a major and plan to transfer may take classes that fit these categories at any Oregon community college and expect all classes to transfer and meet at least 30 credits of general education requirements for a bachelor's degree at any Oregon public university.

## Transfer Advising

Academic and faculty advisors and counselors are available to assist students in developing educational plans that will meet the requirements of their chosen majors and transfer schools. Additionally, students who may be undecided or undeclared in a major have access to RCC counselors and courses designed to assist them in choosing appropriate majors and careers.

Rogue Community College has developed transfer agreements (articulations), and course equivalences with Oregon Tech, Pacific Northwest College of Arts, Portland State University, Southern Oregon University, University of Phoenix, and Western Governor's University. The college/university connection offers students the option of earning a two-year degree and the opportunity to enroll in university courses at the same time, easing the transitions to a four-year university.

## University Residency Requirements

Students should visit individual university websites to plan their transfer education and to determine residency requirements in place for specific institutions.

## Reverse Transfer

Students who earn an associate degree on the way to earning a bachelor's degree create a faster and more efficient track to baccalaureate achievement. Earning the degree provides an additional credential that makes them more competitive when applying for jobs and scholarships.

Students who transfer to a university or another community college before earning a degree, but after earning a minimum of 24 college-level credits at Rogue Community College, may transfer credits back to RCC. If classes earned elsewhere complete the requirements for an RCC degree, the college will grant it. To find out if you qualify, apply for graduation at Enrollment Services' Forms for Students page.

## Transfer Options

Students attending RCC have several options for transfer to an Oregon public or private university.

## Associate of Arts Oregon Transfer Degree (AAOT)

This degree is designed for students planning to complete an associate's degree before transferring into a bachelor's degree program at one of Oregon's public universities.

The AAOT is accepted as a "block transfer" enabling students to enter as juniors with all lower division general education requirements completed. Students may be required to complete additional upper-division general education courses (courses numbered 300-400) at their transfer institutions. The AAOT, however, allows students flexibility in choosing courses to not only meet general education requirements but also courses required in their chosen academic majors.

The AAOT is not always the best choice for all majors. Some students may need to transfer after only one year at RCC in order to take essential lower-division major coursework required for the major that are offered only at the transfer school. Students should consult with their academic advisers for the best option.

The AAOT is generally accepted at selected Oregon private colleges and universities. Students are strongly encouraged to contact the specific transfer school for the most current information.

## Associate of Science Oregon Transfer - Business (ASOT)

The Associate of Science Oregon Transfer (ASOT) degree in Business is designed for students transferring into business degree programs at Oregon public universities. The ASOT is accepted at all Oregon public universities as "block transfer," enabling students to enter a university with junior standing for registration purposes.

Completion of the ASOT does not guarantee admission to a specific business school or program. It is strongly recommended that students make direct contact with their business school or program for advising and admission-specific requirements prior to completing this degree.

## Associate of Science Oregon Transfer - Computer Science (ASOT)

The Associate of Science Oregon Transfer - Computer Science degree is designed for students transferring to baccalaureate degree programs in computer science or software engineering. Those completing the ASOT-Computer Science degree are assured junior level standing and will have met the lower division general education requirements of any Oregon public university.

Completion of the ASOT does not guarantee admission to a specific computer science school or program. Students should use the ASOT-Computer Science university-specific degree requirements guide for specific transfer requirements for individual schools. See an adviser for more information.

## Associate of Science Specific Program Articulations (AS Degree)

RCC offers the Associate of Science degree in the specific areas listed below. Students completing this degree will have met all lower-division general education and academic major requirements to obtain junior status in specific programs at specific schools. Students are strongly encouraged to work with faculty advisers in these articulated programs to ensure proper academic planning.

- Business (articulated with Southern Oregon University)
- Computer and Embedded Systems Engineering Technology (articulated with Oregon Tech)
- Computer Science (articulated with Southern Oregon University)
- Cybersecurity (articulated with Oregon Tech)
- Digital Cinema (articulated with Southern Oregon University)
- Early Childhood Development (articulated with Southern Oregon University)
- Education Studies (articulated with Southern Oregon University)
- Emerging Media and Digital Arts (articulated with Southern Oregon University)
- Engineering transfer to Oregon Tech: Civil, Electrical, Mechanical, or Renewable Energy (articulated with Oregon Tech)
- Health and Exercise Science (articulated with Southern Oregon University)
- Human Services (articulated with Southern Oregon University)
- Information Technology (articulated with Oregon Tech)
- Health Informatics (articulated with Oregon Tech)
- Manufacturing and Engineering Technology (articulated with Oregon Tech)
- Outdoor Adventure Leadership (articulated with Southern Oregon University)
- Software Engineering Technology (articulated with Oregon Tech)


## Associate of General Studies (AGS)

The Associate of General Studies degree (AGS) offers students a useful alternative for direct transfer. It enables students to complete an associate degree tailored to the general education and academic major requirements of the transfer school. Educational planning for the AGS degree should be done with the assistance of academic advisors or counselors.

## Major Transfer Maps - Associate of Arts Transfer, Associate of Science Transfer and Associate of Arts Oregon Transfer

A Major Transfer Map is a course plan for a 90 credit associates degree that, when completed, will allow students to receive junior standing at any Oregon Public University or Community College that offers a bachelor's degree in the student's completed degree program. Students can check with their advisors about
the availability of any new Major Transfer Maps as they are developed. Currently, Major Transfer Maps have been developed in:

- Biology
- Business
- Computer Science
- Elementary Education
- English Literature


## Oregon Transfer Module (OTM)

The Oregon Transfer Module (OTM) provides a one-year curriculum for students who want to transfer to one of Oregon's public universities prior to completing a two-year degree. Students complete one year of general education courses that will be applied to the transfer university general education and academic major requirements. By fulfilling these requirements and meeting the admission standards of the transfer college, students will qualify for sophomore standing.

Students choosing this transfer option are advised to work closely with their faculty advisors to ensure selection of appropriate courses. Upon transfer, students will be required to complete additional general education and academic major requirements specific to the transfer institution. Students should be aware that if they transfer prior to completing this module, courses will be evaluated individually toward the general education requirements of the university of their choice.

Courses in this module may also be applied to an Associate of Arts Oregon Transfer Degree (AAOT) or Associate of Science Oregon Transfer-Business degree (ASOT-Business), thus providing an additional option for students who may start on this track and decide instead to complete a two-year degree.

The Oregon Transfer Module differs from traditional certificates and degrees in that it is a milestone on the path to degree completion and is not eligible for commencement exercises. Such milestones will be noted on students' transcripts.

## Direct Transfer

The direct transfer option is for students who have selected a transfer school and academic major and who want to take specific classes for that major and/or transfer to a university. Direct transfer students will be required to meet the transfer school's freshman or transfer admission requirements. These will include a minimum transfer GPA, completion of specific courses (e.g., WR 121Z, MTH 111Z, etc.), and completion of a certain number of transferable credits. Students who do not meet the transfer student criteria must satisfy the new freshman requirements. Students are advised to visit the transfer school's website for specific admission requirements. Students who choose the direct transfer option will have RCC courses evaluated and accepted on a course-by-course basis by the transfer institution.

## Transfer Agreements

## Oregon Tech

www.oit.edu

Students may transfer to Oregon Tech at any time or complete an Associate of Science following signed agreements between RCC and Oregon Tech. To be considered for transfer admission, students must have 36 college-level credits including WR 115 or higher, MTH 95 or higher with a cumulative GPA of 2.25 . Oregon Tech works with Rogue Community College to establish meaningful transfer pathways.

Current articulation agreements can be viewed at the OIT Articulations site.
RCC Transfer to Oregon Tech Guides
Transfer Equivalency Tool
Email outreach@oit.edu for questions about transfer credit.

## Pacific Northwest College of Art

https://pnca.willamette.edu
Pacific Northwest College of Art is in the process of signing transfer agreements with community colleges throughout the region, potentially allowing their students to enter PNCA as a junior and save up to two years' worth of tuition costs.

## Southern Oregon University

## www.sou.edu

Students earning a degree in areas not covered by an Associate of Science degree have the option of completing all general education coursework at RCC or enrolling at both RCC and Southern Oregon University in their academic major courses. By working with an RCC or SOU adviser, students can design a successful transfer plan. Planning ahead will save students time and money and will provide the opportunity to make a seamless transition to the university. The SOU/RCC joint enrollment program provides many advantages. Joint enrollment means RCC students have access to most SOU facilities, receive coordinated financial aid and admissions, and enjoy eligibility for SOU student or family housing as well as basic health insurance and medical treatment though the SOU Student Health Center. To contact an RCC Advisor by phone, please go to www.roguecc.edu and click on Directory or, contact the SOU Office of Admissions, 541-552-6411, toll-free at 800-482-7672, or via email at admissions@sou.edu.

## Southern Oregon University Bachelor of Applied Science

Southern Oregon University offers a Bachelor of Applied Science (BAS) degree in Management for students who have completed an Associate of Applied Science degree in a technical field (in an area outside of business) with a minimum GPA of 2.5 who want to earn a bachelor's degree. The associate's degree needs to have at least 50 credits of professional/technical credits, not including business or accounting. Up to 124 quarter hours may be transferred to the BAS, and the remaining credits are completed at SOU. The BAS degree requires the completion of 180 quarter credits. If students intend to transfer to the BAS program, transfer courses should be chosen as program electives where possible. See an adviser for more information or visit SOU's Degree Completion page.

## University of Phoenix

Students transferring to the University of Phoenix with a completed Associate of Arts from RCC will be considered as satisfying their lower division elective and general education requirements While the chosen program pre- requisites and general education requirements will still need to be met, this otherwise makes the student "Required Course of Study" ready at University of Phoenix. Certain specialized programs are excluded. For additional information, contact Laura Beal, University of Phoenix Community Development Manager, at Laura.Beal@phoenix.edu.

## Western Governors University

www.wgu.edu
Oregon Community College graduates can apply for the Go Further with WGU Grant (a competitive scholarship). The scholarship can be used in addition to the $5 \%$ tuition discount. More information can be found at their website.

## Affiliations

## Lane Community College

www.lanecc.edu
RCC partners with Lane Community College to provide training for physical therapy assistants in Jackson and Josephine counties.

Students successfully completing the program are awarded an Associate of Applied Science degree by Lane Community College. RCC offers program prerequisites, general education, and related coursework locally, while students access PTA program-specific courses through LCC distance education delivery using Lane Online. The program prepares students to become entry-level physical therapy assistants in a variety of practice settings, and to pass the National Physical Therapy Examination (NPTE) administered by the Federation of State Boards of Physical Therapy.

Most of the program can be completed locally. Clinical placements in the second year of the program will depend on availability of sites. As such, students may have to travel outside their immediate geographic area to a location in the Pacific Northwest. Click the link for information regarding the Physical Therapy Assistant program.

## Linn-Benton Community College

www.linnbenton.edu
RCC partners with Linn-Benton Community College (LBCC) to provide training for occupational therapy assistants in Jackson and Josephine counties. LBCC's Occupational Therapy program prepares students to function as entry-level occupational therapy assistants in a variety of settings, and to pass the National Board for Certification in Occupational Therapy examination. Linn-Benton Community College awards an Occupational Therapy Assistant Associate of Applied Science (AAS) degree, with RCC offering program prerequisites, general education classes and related paperwork.

By taking a combination of RCC classes and distance-learning courses offered by LBCC, the OTA program can be completed while a student is living in the Rogue Valley. Students enrolled in the program will need to
travel to the LBCC campus in Albany approximately two to four times a term. Click the link for details on the Occupational Therapy Assistant training.

## Guided Pathways

# What's the Best Way to Get from Point A to Point $B$ ? 

A straight line.
That's what Rogue Community College is offering with Guided Pathways, a new approach to higher education that not only helps students identify a career path they're passionate about, but also walks them through the process of becoming qualified.

The pathways model has improved student success in many universities and is gaining popularity in community colleges across country. This streamlined education has shown to produce more qualified students and lead to better jobs, which improves quality of life. Each college has the flexibility to build guided programs according to their needs.

Guided Pathways create a clear sequence of courses needed in order to earn a specific degree or certification. This "road map" eliminates confusion and gives students a clear plan for which classes they should take and when, in order to earn their qualifications as fast and affordably as possible. Each student's pathway begins even prior to enrollment, when they meet with an advisor to discuss program options.

In the following pages of this catalog, all degrees and certificates of study are presented in their pathways. From health care professionals to engineers to social workers, digital media specialists, computer programmers and so much more, RCC's Guided Pathways are designed to produce graduates who are well prepared to perform their jobs well- regardless of where they started.

Many students drift through college without a solid plan because they're not sure what career they want to pursue, or which courses will make them qualified to do a job they want. This results in costing extra time and money, which leads to more frustration and the risk of dropping out of school. Guided Pathways changes all that.

The goal is for students to be are aware of what they're getting into before they choose a degree program or sign up for their first class. RCC advising case managers work very closely with each student to decide which program suits their interests. Then they provide guidance every step of the way, from enrollment to graduation, making sure students are staying on track and getting all the courses and credits they need to achieve their goals, whether that's a certificate, associate's degree, or a transfer degree to a four-year university.

The pathways philosophy and the community college mission share this philosophy: no one should be kept from earning a college degree based on their background or social status. RCC advising case managers and staff gladly provide resources for overcoming obstacles, whether that's financial assistance, work study, tutoring, and more. RCC faculty get to know the students in the classroom. They provide the one-on-one guidance and help students need.

We encourage students to explore these pathways, and also to explore careers by connecting with an RCC Career Coach. Then, work with an advising and career coach to choose the best pathway for success at RCC and in life.

## Programs by Pathway and Degree Types

## Applied Technology Pathway

# Computer Support Technician: Computer Software Specialist, Career Pathway Certificate 


#### Abstract

About the Program

The Computer Software Specialist Career Pathway Certificate is designed to give students a comprehensive knowledge of a variety of commonly used software programs. It generally can be completed in two terms. Students will learn industry standard word processing, spreadsheet and presentation programs, as well as gain a strong foundation in operating systems. Students will be prepared for careers where strong computer application skills and computer system navigation are required. This is not an aid-eligible program. The Career Pathway Certificate is the first step towards the Computer Support Technician Associate of Applied Science degree.


## Program Learning Outcome

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcome for the Computer Support Technician: Computer Software Specialist Career Pathway Certificate is:

Apply standard business productivity software to support electronic projects.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies and the Computer Science Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Students in the high school College Now credit program must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathway Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 17

Program email address: ComputerScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- MTH 63 - Applied Algebra 14 Credit(s) or MTH 60 or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 0-9

## Term 1

Check-in with Advisor

- CIS 125PT - Effective Presentations 2 Credit(s) fall term only
- CIS 125DB - Database Management Systems 3 Credit(s)
- CIS 125WW - Word Processing Applications (Microsoft Word) 3 Credit(s)


## Term Credits: 8

## Term 2

- CIS 125SS - Spreadsheet Applications 4 Credit(s)
- CIS 145 - Introduction to Hardware/Software 5 Credit(s)


## Term Credits: 9

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years

For more information, contact the Computer Science Department:

Phone: 541-956-7500
Email: ComputerScienceInfo@roguecc.edu

Web address: www.roguecc.edu/computerscience TTY: Oregon Telecom Relay Service, 711

# Electronics Technology: Production Assembler I, Career Pathway Certificate 


#### Abstract

About the Program

The Production Assembler I Career Pathway two-term certificate prepares students for entry-level production assembly work in the electronics field where the ability to assembly products with minimum documentation. Effectively deal with the public is required. Courses included in this pathway can be applied toward completion of the Electronics Technology certificate and the Associate of Applied Science in Electronics Technology degree. This program can be completed through a hybrid program of online and open-lab/remote instruction.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Electronics Technology: Production Assembly I Career Pathway Certificate are:

Identify real-world problems through the application of electronics theory and concepts.
Test analog and digital circuitry at the component and circuit level using industry standard test equipment.
Organize, interpret, and use technical information and documentation.

Demonstrate the ability to adhere to personal and industry safety standards.
Demonstrate and adhere to safety, health, and environmental rules and regulations

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Electronics Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Students must complete coursework in their major at a "C" or better level before proceeding to advanced coursework. High school College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificate. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 32

Program email address: ElectronicsInfo@roguecc.edu

## Prerequisites

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.


## Prerequisites - Credits Vary Based on Placement: 0-12

## Term 1

Check in with Advisor

- EET 100 - Orientation to Electronics Technology Fields 2 Credit(s)
- EET 125 - DC Electronics - Circuits I 5 Credit(s)
- EET 129 - Introduction to Embedded Systems 3 Credit(s)
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math.


## Term Credits: 14

## Term 2

- EET 102 - Soldering and Repair Techniques 3 Credit(s)
- EET 126-AC Electronics - Circuits II 5 Credit(s)
- EET 130 - Digital and MSI Logic - Digital I 5 Credit(s)


## Term Credits: 13

## Term 3

- EET 140 - Semiconductors and Devices I 5 Credit(s)


## Term Credits: 5

# For more information, contact the Electronics Technology Department: 

Phone: 541-956-7500
Email: ElectronicsInfo@roguecc.edu
Web address: www.roguecc.edu/electronics
TTY: Oregon Telecom Relay Service, 711


#### Abstract

About the Program

The Gas Tungsten Arc Welding Career Pathways Certificate will give students a focused career path in GTAW for a multitude of industry prospects including process piping, aluminum product manufacture and job shop positions. Students will develop skills in joining mild steel, stainless steel and aluminum, utilizing this challenging process. Welding will be completed in flat, horizontal and vertical and overhead positions using both transformer rectifier machines and programmable square wave inverter technology.

\section*{The Program Learning Outcomes}

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Industrial Welding Technology GTAW Welder Career Pathway Certificate are:

Demonstrate a commitment to a culture of safety. Produce industry-quality welds using GTAW on stainless steel and aluminum plate.


## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. High school College Now credit will be accepted in accordance with current agreement. Verified industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement


## Prerequisite Credits: 0-12

## Required Courses

- WLD 111 - Technology of Industrial Welding I 6 Credit(s)
- WLD 113 - Technology of Industrial Welding III 6 Credit(s)
- WLD 212 - Technology of Industrial Welding V 6 Credit(s) ${ }^{1}$
- WLD 250B - Selected Topics in Welding: GTAW Var. (2-6) Credit(s)
- WLD 250F - Selected Topics: Welding Capstone Project Var. (2-6) Credit(s)


## Total Program Credits 25-28

${ }^{1}$ Documentation may be required to register for WLD 212 without course prerequisites. See Welding Advisor for assistance as needed.

## For more information, contact the Industrial Welding Technology Department:

Phone: 541-956-7500
Email: WeldingInfo@roguecc.edu
Web address: www.roguecc.edu/Welding
TTY: Oregon Telecom Relay Service, 711

# Industrial Welding Technology: SMAW Welder, Career Pathway Certificate 


#### Abstract

About the Program

The SMAW Career Pathways Certificate gives students the necessary skills to an entry level position where Shielded Metal Arc Welding is the predominate welding process. Students will develop skills utilizing E 7018 and E 6010 in Flat, Horizontal, Vertical and overhead welding positions. They will train in passing the A.W.S. D1.1 welding qualification test if they so choose.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Industrial Welding Technology SMAW Welder Career Pathway Certificate are:

Demonstrate a commitment to a culture of safety.
Produce industry-quality welds on various diameters of carbon steel pipe in the 5 g and 6 g positions using SMAW electrodes E6010 and E7018.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. High school College Now credit will be accepted in accordance with current agreement. Verified industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

## Program Prerequisites:

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement

Prerequisite Credits: 0-12

## Required Courses

- WLD 111 - Technology of Industrial Welding I 6 Credit(s)
- WLD 112-Technology of Industrial Welding II 6 Credit(s)
- WLD 113 - Technology of Industrial Welding III 6 Credit(s)
- WLD 250C - Selected Topics in Welding: SMAW Var. (2-6) Credit(s)
- Approved program electives 2-6 Credit(s)

Total Program Credits: 22-28

## Approved Program Electives

- WLD 250A - Selected Topics in Welding: FCAW Var. (2-6) Credit(s)
- WLD 250B - Selected Topics in Welding: GTAW Var. (2-6) Credit(s)
- WLD 250D - Selected Topics in Welding: GMAW Var. (2-6) Credit(s)
- WLD 250F - Selected Topics: Welding Capstone Project Var. (2-6) Credit(s)


## For more information, contact the Industrial Welding Technology Department:

Phone: 541-956-7500
Email: WeldingInfo@roguecc.edu
Web address: www.roguecc.edu/Welding
TTY: Oregon Telecom Relay Service, 711

# Industrial Welding Technology: Welder's Helper, Career Pathway Certificate 


#### Abstract

About the Program The Welder's Helper Career Pathways two-term certificate program is designed to recognize students' accomplishments in welding and prepare them for entry-level work experiences in the welding industry. Students will be prepared with mathematics skills and the understanding of skills necessary to be valuable employees in the industrial welding trades. Credit from this certificate will transfer to the one-year Certificate of Completion and/or the Associate of Applied Science degree in Industrial Welding Technology.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Industrial Welding Technology Welder's Helper Career Pathway Certificate are:

Demonstrate a commitment to a culture of safety.
Processes include oxy fuel cutting, plasma arc cutting, SMAW, GMAW and FCAW.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. High school College Now credit will be accepted in accordance with current agreement. Verified industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

## Program Prerequisites:

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement


## Total Prerequisites: 0-12

## Required Courses

- MET 101 - Mechanical Drafting 3 Credit(s)
- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math
- WLD 111 - Technology of Industrial Welding 16 Credit(s)
- WLD 112 - Technology of Industrial Welding II 6 Credit(s)
- WLD 113 - Technology of Industrial Welding III 6 Credit(s)

Total Program Credits: 25

## For more information, contact the Industrial Welding Technology Department:

Phone: 541-956-7500
Email: WeldingInfo@roguecc.edu
Web address: www.roguecc.edu/Welding
TTY: Oregon Telecom Relay Service, 711

# Industrial Welding Technology: Wire Welder, Career Pathway Certificate 


#### Abstract

About the Program

Gas Metal Arc Welding and Flux Cored Arc Welding are the two most common production welding forms in the United States. The Wire Welding CPC targets these forms of welding and brings a greater understanding of the requirements to weld carbon and stainless steel with these processes. All position welding with GMAW, Self-Shielded Flux Core and Gas Shielded Flux Core will take place. Students may train for the A.W.S. D1.1 welding qualification procedure if they choose to.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for Industrial Welding Technology Wire Welder Career Pathway Certificate are:

Demonstrate a commitment to a culture of safety.
Produce industry-quality welds using GMAW and FCAW on stainless steel and aluminum plate.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. High school College Now credit will be accepted in accordance with current agreement. Verified industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

## Program Prerequisites:

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement


## Total Prerequisites: 0-12

## Required Courses

- WLD 111 - Technology of Industrial Welding I 6 Credit(s)
- WLD 113 - Technology of Industrial Welding III 6 Credit(s)
- WLD 211 - Technology of Industrial Welding IV 6 Credit(s)
- WLD 250A - Selected Topics in Welding: FCAW Var. (2-6) Credit(s) or WLD 250D

Total Program Credits: 20-24

## For more information, contact the Industrial Welding Technology Department:

Phone: 541-956-7500
Email: WeldingInfo@roguecc.edu
Web address: www.roguecc.edu/Welding
TTY: Oregon Telecom Relay Service, 711

# Manufacturing / Engineering Technology: Computer Numerical Control (CNC) Operator, Career Pathway Certificate 


#### Abstract

About the Program

This Career Pathways two-term certificate integrates conventional manufacturing techniques with Computer Numerical Control (CNC) manufacturing skills. This training is the entry point in the Manufacturing Career Pathway leading to the Computer Numerical Control (CNC) Technician program and to a valuable career in the manufacturing engineering technology field. In addition to technical training, students receive a solid foundation in mathematics and computer skills. Graduates typically enter the workforce as Computer Numerical Control (CNC) operators. With additional on-the-job experience and continued education, students can transition into CNC programming and quality control inspection.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Manufacturing/Engineering Technology Computer Numerical Control (CNC) Operator Career Pathway Certificate are:

Set up and operate manual machines to produce parts to specification.
Interpret and create mechanical blueprints to industry standards.
Follow, develop, and troubleshoot manufacturing processes and procedures.
Demonstrate the ability to adhere to personal and industry safety standards to protect personnel and equipment.

Set-up and operate CNC mills.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Manufacturing and Engineering Technology Department Chair's recommendation. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Official transcripts must be filed with the Enrollment Services Office and the Manufacturing/Engineering Technology Department.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 31-32

Program email address: ManufacturingInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement


## Prerequisite Credits: 0-14

## Term 1

Check-in with Advisor

- MET 101 - Mechanical Drafting 3 Credit(s)
- MET 105 - Blueprint Reading: Mechanical 3 Credit(s)
- MFG 116 - Metrology 2 Credit(s)
- MFG 121 - Manufacturing Processes 14 Credit(s)
- MTH 63 - Applied Algebra 14 Credit(s) or MTH 60 higher-level math
- MEC 102 - Mechanical Fabrication 3 Credit(s)

Term Credits: 19

## Term 2

- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MFG 122 - Manufacturing Processes II 4 Credit(s)
- MFG 140 - CNC Controls 2 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition


## Term Credits: 12

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information contact the Manufacturing/Engineering Technology Department:

Phone: 541-956-7500
Email: ManufacturingInfo@roguecc.edu
Web address: www.roguecc.edu/manufacturing
TTY: Oregon Telecom Relay Service, 711

# Manufacturing/ Engineering Technology: Computer Aided Design and Drafting Certification, Career Pathway Certificate 


#### Abstract

About the Program

CAD (computer-aided design) is the use of computer-based software to aid in design processes. CAD software is frequently used by different types of engineers and designers. CAD software can be used to create two-dimensional (2-D) drawings or three-dimensional (3-D) models. The purpose of CAD is to optimize and streamline the designer's workflow, increase productivity, improve the quality and level of detail in the design, improve documentation communications and often contribute toward a manufacturing design database. CAD software outputs come in the form of electronic files, which are then used accordingly for manufacturing processes. CAD is often used in tandem with digitized manufacturing processes. CAD/CAM (computer-aided design/computer-aided manufacturing) is software used to design products such as electronic circuit boards in computers and other devices.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Manufacturing/Engineering Technology Computer Aided Design and Drafting Pathway Certificate are:

Apply critical thinking skills by utilizing available resources to achieve design function and adherence to design standard.

Demonstrate technical knowledge and skills through proficient use of CAD software and equipment while adhering to drafting standards.

Interpret and create mechanical blueprints to industry standards.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Manufacturing and Engineering Technology Department Chair's recommendation. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Official transcripts must be filed with the Enrollment Services Office and the Manufacturing/Engineering Technology Department.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 26

Program email address: ManufacturingInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or MTH 60 or designated placement
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement


## Prerequisite Credits: 0-14

## Term 1

Check-in with Advisor

- MET 101 - Mechanical Drafting 3 Credit(s)
- MET 105 - Blueprint Reading: Mechanical 3 Credit(s)
- MFG 116 - Metrology 2 Credit(s)


## Term Credits: 8

## Term 2

- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 111 - Computer Aided Drafting I: Mechanical (Autodesk Inventor) 3 Credit(s)


## Term Credits: 6

## Term 3

- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MET 112 - Computer Aided Drafting II: Mechanical (Autodesk Inventor) 3 Credit(s)


## Term Credits: 6

## Term 4

- MET 123 - Computer Aided Drafting III: Mechanical (SolidWorks) 3 Credit(s)
- MET 113 - Computer Aided Drafting III: Mechanical (Autodesk Inventor) 3 Credit(s)


## Term Credits: 6

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information contact the Manufacturing/Engineering Technology Department:

Phone: 541-956-7500
Email: ManufacturingInfo@roguecc.edu
Web address: www.roguecc.edu/manufacturing

# Automotive Specialist, Certificate of Completion 


#### Abstract

About the Program

The Automotive Specialist four-term certificate program is designed for students who wish to acquire basic technical training to enter minor automotive industry positions. Students who desire more in-depth industry training as automotive technicians and/or Automotive Service Excellence (ASE) training at all levels should enroll in the Associate of Applied Science degree program.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Automotive Technology Certificate of Completion are: Diagnose, repair and document basic vehicle systems.
Effectively locate and utilize technical information required for vehicle repairs.
Work safely and responsibly within all shop standards and environmental guidelines
Apply employer expectations and ethical work practice.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Automotive Technology Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified Automotive Service Excellence (ASE) certification or industry experience may be substituted for some coursework in accordance with college policies and the department chair's approval.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note, some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 53-55

Program email address Automotivelnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-14

## Fall

Check-in with Advisor

- AM 120 - Automotive Maintenance and Practices 2 Credit(s) fall/spring terms only
- AM 120L - Automotive Maintenance and Practices Lab 4 Credit(s) fall/spring terms only
- AM 122-Gasoline Engines Rebuild 3 Credit(s) fall term only
- AM 122L - Gasoline Engines Rebuild Lab 4 Credit(s) fall term only
- BT 113 - Business English I 4 Credit(s) or WR 115 or higher-level composition course

Term credits: 17

## Winter

- AM 111 - Electricity for Automotive Technicians 2 Credit(s) winter term only
- AM 111L - Electricity for Automotive Technicians Lab 4 Credit(s) winter term only
- AM 131 - Engine Dynamics and Diagnosis 3 Credit(s) winter term only
- AM 131L - Engine Dynamics and Diagnosis Lab 4 Credit(s) winter term only

Term Credits: 13

## Spring

- AM 141 - Manual Transmissions and Transaxles 3 Credit(s) spring term only
- AM 141L - Manual Transmissions and Axles Lab 3 Credit(s) spring term only
- AM 151 - Automotive Brake Systems 2 Credit(s) spring term only
- AM 151L - Automotive Brake Systems Lab 4 Credit(s) spring term only
- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math

Term Credits: 16

## Summer

- AM 190 - Automotive Repair Lab 14 Credit(s) summer term only, or AM 270 / AM 270L
- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- HE 112 - Emergency First Aid 1 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Automotive Technology Department:

Phone: 541-956-7500
Email: Automotivelnfo@roguecc.edu
Web address: www.roguecc.edu/Automotive
TTY: Oregon Telecom Relay Service, 711

## Diesel Specialist, Certificate of Completion


#### Abstract

About the Program The Diesel Specialist four-term certificate program is designed for students seeking an entry-level career in today's diesel repair industry. The program builds rapidly from fundamentals and theory into diagnosis and repair of today's modern equipment based upon Automotive Service Excellence (ASE) and industrial standards.

The design of the program places heavy emphasis upon actual hands-on work in diesel labs. Approximately two-thirds of the time spent in the program is in a lab (shop) environment where the student applies theory to diagnosis and repair of a wide variety of equipment. As students' skill levels develop so does the difficulty of repairs performed.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Diesel Technology Certificate of Completion are: Work safely within OSHA and industry safety standards.
Diagnose, repair and maintain air and hydraulic systems.
Diagnose, repair and maintain parts of the power train.
Diagnose, repair and maintain the HVAC system.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified Automotive Service Excellence (ASE) certification or industry experience may be substituted for some coursework in accordance with college policy and the Department Chair's approval.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note, some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 61-62

## Program email address Diesellnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-12

## Fall

Check-in with Advisor

- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- DS 111 - Basic Electricity for Diesel Technicians I 6 Credit(s)
- DS 120 - Diesel Practices 5 Credit(s)

Term Credits: 17

## Winter

- DS 131 - Diesel Engine Dynamics and Diagnosis 4 Credit(s)
- WLD 101 - Welding Fundamentals I 3 Credit(s) or approved Program elective (credits vary)
- DS 141 - Heavy Equipment Power Trains 4 Credit(s)
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s) or MFG 121 or approved Program elective (credits vary)

Term Credits: 14

## Spring

- DS 113 - Diesel Engine Overhaul 6 Credit(s)
- DS 151 - Heavy Equipment Brakes 5 Credit(s)
- BT 113 - Business English I 4 Credit(s) or WR 115 or higher-level composition

Term Credits: 15

## Summer

Check-in with Advisor

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- DS 232 - Heavy Equipment Fuel Systems 3 Credit(s)
- DS 270 - Air Conditioning for Diesel Technicians 5 Credit(s)
- DS 275 - Preventative Maintenance Inspection 5 Credit(s)


## Term Credits: 16

## Approved Program Electives

Students must complete a sufficient number of electives from the list below in order to complete total program credits, 5-6 credits.

- AM 190-Automotive Repair Lab 14 Credit(s)
- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- DS 199-Special Studies: Diesel Var. (1-6) Credit(s)
- DS 280-Cooperative Work Experience/Diesel 1-3 Credit(s)
- DS 290 - Diesel Repair Lab 3 Credit(s)
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s)
- EET 112 - Computer Programming for Technology 3 Credit(s)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MTH 65 - Fundamentals of Algebra II 4 Credit(s) or higher-level math
- WLD 101 - Welding Fundamentals I 3 Credit(s)
- WLD 112 - Technology of Industrial Welding II 6 Credit(s)
- WR $122 Z$ - Composition II 4 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- Any college-level ( 100 or 200 numbered) transferable non-studio humanities, social science, or science electives (variable credits)


## For more information, contact the Diesel Technology Department:

Phone: 541-956-7500
Email: Diesellnfo@roguecc.edu
Web address: www.roguecc.edu/diesel
TTY: Oregon Telecom Relay Service, 711

# Electronics Technology: Electronics Technician, Certificate of Completion 


#### Abstract

About the Program

The Electronics Technician four-term certificate program is designed for students seeking entry-level electronics technician positions in manufacturing or service industries. The program emphasizes theory fundamentals, practical troubleshooting, and basic electronics design as well as general studies courses. Technical courses involve extensive lab work using industry standard test equipment and practices.

This program will help students gain skills for entry into one of today's most dynamic and broad-based technical fields. Typical occupations include those of field engineers in business or communications fields, or line/maintenance technicians at manufacturing sites. Electronics training also provides excellent positioning for lateral movement into areas such as technical sales or technical writing.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Electronics Technician Certificate of Completion are:

Identify and solve real-world problems through the application of electronics theory and concepts.
Calibrate, test, and repair analog and digital circuitry at the component and circuit level using industry standard test equipment.

Organize, interpret, and use technical information and documentation.
Communicate effectively across a variety of audiences: technicians, engineers, management and customers.

Function collaboratively as a member of a team to achieve specified and measurable results.
Demonstrate flexibility, adaptability, and time management skills commensurate with industry productivity needs.

Demonstrate the ability to adhere to personal and industry safety standards.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Electronics Technology Department Chair's recommendation. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Official transcripts must be filed with the Enrollment Services office and the Electronics Technology Department.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 48-54

Program email address: ElectronicsInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.


## Prerequisite Credits: 0-14

## Term 1

## Check-in with Advisor

- EET 100 - Orientation to Electronics Technology Fields 2 Credit(s)
- EET 125 - DC Electronics - Circuits I 5 Credit(s)
- EET 129 - Introduction to Embedded Systems 3 Credit(s)
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math.


## Term Credits: 14

## Term 2

- EET 126-AC Electronics - Circuits II 5 Credit(s)
- EET 130 - Digital and MSI Logic - Digital I 5 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s) or WR $121 Z$

Term Credits: 13
Term 3

- EET 131 - Sequential Logic and Interfacing - Digital II 5 Credit(s)
- EET 127 - Computing Environments for Technicians 4 Credit(s)
- EET 140-Semiconductors and Devices I 5 Credit(s)


## Term Credits: 14

## Term 4

Check-in with Advisor

- PSY 101 - Psychology of Human Relations 3 Credit(s) or BT 101
- HE 112 - Emergency First Aid 1 Credit(s)
- EET 102 - Soldering and Repair Techniques 3 Credit(s) or EET 108 or EET 215 or approved program elective (credits vary).


## Term Credits: 7

## Approved Program Electives

(3-8 credits required, not to exceed 8 elective credits.)
One to two courses from the list below - check with Advisor.

- EET 102 - Soldering and Repair Techniques 3 Credit(s)
- EET 215 - Operational Amplifiers and Linear Integrated Circuits 5 Credit(s)
- EET 220 - Semiconductors and Devices II 5 Credit(s)
- EET 225 - Electronics Troubleshooting 3 Credit(s)
- EET 230 - Radio Frequency Communications Fundamentals 5 Credit(s)
- EET 240 - Microcontrollers I 5 Credit(s)
- WR 121Z-Composition I 4 Credit(s) (if not taken as part of core)


## Additional optional electives:

- BT 121 - Digital Marketing and e-Commerce 4 Credit(s)
- CIS - Any computer applications course, CIS125 or above Credit(s) 3-4
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s)
- EET 108 - Wearable and Lighting for Electronics 1 Credit(s)
- EET 112 - Computer Programming for Technology 3 Credit(s)
- EET 132 - Introduction to Verilog 5 Credit(s)
- EET 180 - Cooperative Work Experience - Electronics Var. (1-3) Credit(s)
- EET 199 - Selected Studies: Electronics Var. (1-6) Credit(s)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- MET 101 - Mechanical Drafting 3 Credit(s)
- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MET 160 - Materials and Metallurgy 3 Credit(s)
- MFG 101 - Introduction to Manufacturing 3 Credit(s)
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MFG 230 - Statistics and Quality Control 3 Credit(s)
- MTH 65 - Fundamentals of Algebra II 4 Credit(s) or higher-level math
- WLD 101 - Welding Fundamentals I 3 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Electronics Technology Department.

Phone: 541-956-7500
Email: ElectronicsInfo@roguecc.edu
Web address: www.roguecc.edu/electronics
TTY: Oregon Telecom Relay Service, 711

# High Technology Studies, Certificate of Completion 


#### Abstract

About the Program

The High Technology Studies four-term certificate program is designed to expand technical knowledge across a range of technical career areas. Students may specialize in a number of technology areas such as welding, manufacturing, machining, computer aided drafting, electronics, and/or computer science by selecting the appropriate technical electives.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the High Technology Studies Certificate of Completion are:

Identify and solve real-world problems through the application of applied theory and concepts in varied disciplines.

Use industry standard equipment and practices in a variety of disciplines.
Organize, interpret, and use technical information and documentation.
Communicate effectively across a variety of audiences: technicians, engineers, management and customers.

Function collaboratively as a member of a team to achieve specified and measurable results.
Demonstrate flexibility, adaptability, and time management skills commensurate with industry productivity needs.

Demonstrate the ability to adhere to personal and industry safety standards.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Electronics Technology Department chair's recommendation. In order to ensure 31 that coursework is current, program courses over three years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Official transcripts must be filed with the Enrollment Services office and the Electronics Technology Department.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

## Total Program Credits: 49-51

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- CIS - Approved Computer Information Science or Computer Science course, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years $\mathbf{0 - 2} \mathbf{C r e d i t}(\mathbf{s})^{1}$
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement

Prerequisite Credits: 0-14

## General Education Courses

## Mathematics

(Additional math classes may be required as prerequisites to some technical electives.)

- MTH 63 - Applied Algebra 14 Credit(s) or MTH 60 or higher-level math


## Communication

## (one course required)

- BT 113 - Business English I 4 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s)
- WR 121Z - Composition I 4 Credit(s)


## Health/First Aid

- HE 112 - Emergency First Aid 1 Credit(s)


## Human Relations

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101

Total General Education Credits: 11-13

## Technology Area Credits

(A minimum of 38 credits required.)

- AM 120 - Automotive Maintenance and Practices 2 Credit(s)
- AM 120L - Automotive Maintenance and Practices Lab 4 Credit(s)
- CIS - Any computer applications course, CS/CIS125 or above (CIS 125 SS strongly recommended) Var. Credit(s)
- DDM 191 - Advanced Animation II 3 Credit(s)
- DDM 226 - Advanced 3D Graphics Design II (Maya) 3 Credit(s)
- DS 111 - Basic Electricity for Diesel Technicians 16 Credit(s)
- DS 120 - Diesel Practices 5 Credit(s)
- DS 260 - Hydraulic Systems for Heavy Equipment 3 Credit(s)
- EET 100 - Orientation to Electronics Technology Fields 2 Credit(s)
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s)
- EET 102 - Soldering and Repair Techniques 3 Credit(s)
- EET 108 - Wearable and Lighting for Electronics 1 Credit(s)
- EET 112 - Computer Programming for Technology 3 Credit(s)
- EET 125 - DC Electronics - Circuits I 5 Credit(s)
- EET 126 - AC Electronics - Circuits II 5 Credit(s)
- EET 127 - Computing Environments for Technicians 4 Credit(s)
- EET 129 - Introduction to Embedded Systems 3 Credit(s)
- EET 130 - Digital and MSI Logic - Digital I 5 Credit(s)
- EET 131 - Sequential Logic and Interfacing - Digital II 5 Credit(s)
- EET 132 - Introduction to Verilog 5 Credit(s)
- EET 140 - Semiconductors and Devices I 5 Credit(s)
- EET 240 - Microcontrollers 15 Credit(s)
- MET 101 - Mechanical Drafting 3 Credit(s)
- MET 104 - Applied Shop Practices 3 Credit(s)
- MET 105 - Blueprint Reading: Mechanical 3 Credit(s) or WLD 104
- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MET 123 - Computer Aided Drafting III: Mechanical (SolidWorks) 3 Credit(s)
- MET 160 - Materials and Metallurgy 3 Credit(s)
- MFG 101 - Introduction to Manufacturing 3 Credit(s)
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MFG 122 - Manufacturing Processes II 4 Credit(s)
- MFG 123 - Manufacturing Processes III 4 Credit(s)
- MFG 140 - CNC Controls 2 Credit(s)
- MFG 220 - Research and Development Prototyping 4 Credit(s)
- MFG 230 - Statistics and Quality Control 3 Credit(s)
- MFG 241 - Computer Numerical Control Programming - Mill (Haas) 4 Credit(s)
- MFG 242 - Computer Aided Manufacturing I: Mastercam 2D 4 Credit(s)
- MFG 243 - Computer Aided Manufacturing II: Mastercam 3D 4 Credit(s)
- MFG 244 - Computer Numerical Control Programming - Lathe (Haas) 3 Credit(s)
- MFG 255 - Computer Integrated Manufacturing 4 Credit(s)
- MTH 65 - Fundamentals of Algebra II 4 Credit(s)
- WLD 101 - Welding Fundamentals I 3 Credit(s)
- WLD 102 - Welding Fundamentals II 3 Credit(s)
- WLD 111 - Technology of Industrial Welding I 6 Credit(s)
- WLD 112 - Technology of Industrial Welding II 6 Credit(s)
- WLD 113 - Technology of Industrial Welding III 6 Credit(s)
- WLD 211 - Technology of Industrial Welding IV 6 Credit(s)
- WLD 212 - Technology of Industrial Welding V 6 Credit(s)
- WLD 213 - Technology of Industrial Welding VI 6 Credit(s)
- WLD 250A - Selected Topics in Welding: FCAW Var. (2-6) Credit(s)
- WLD 250B - Selected Topics in Welding: GTAW Var. (2-6) Credit(s)
- WLD 250C - Selected Topics in Welding: SMAW Var. (2-6) Credit(s)
- WLD 250D - Selected Topics in Welding: GMAW Var. (2-6) Credit(s)
- WLD 250F - Selected Topics: Welding Capstone Project Var. (2-6) Credit(s)
- WLD 250P - Selected Topics: CNC Plasma Cutting 3 Credit(s)

Total Technology Area Credits: 38
${ }^{1}$ Required for graduation.

## For more information, contact the Electronics Technology Department.

Phone: 541-956-7500
Email: ElectronicsInfo@roguecc.edu
Web address: www.roguecc.edu/electronics
TTY: Oregon Telecom Relay Service, 711

# Industrial Welding Technology, Certificate of Completion 


#### Abstract

About the Program

Upon completion of this three-term certificate program, students will be qualified to test for certification to the American Welding Society (AWS) D1.1-06 Structural Steel and the AWS D1.3-08 Sheet Steel Welding Codes. Additionally, students will have a good foundation in structural steel fitting/layout, the basics of pipefitting, and the basics of sheet metal pattern development. Students will also be prepared with mathematics and communication skills, and be knowledgeable about the human relations necessary to become valuable employees in the industrial welding trades.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Industrial Welding Technology Certificate of Completion are:

Demonstrate a commitment to a culture of safety.

Interpret and create mechanical blueprints to industry standards.
Layout and fabricate industry-quality fabrication projects.
Produce industry quality weldments on carbon steel plate in various positions and joint and groove configurations.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates Certain required courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 35-37

Program email address: WeldingInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- WR 115 - Introduction to Expository Writing 3 Credit(s) or higher-level composition, or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 or designated placement
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement, or higher-level math


## Prerequisite Credits: 0-12

## Term 1

## Check-in with Advisor

- HE 112 - Emergency First Aid 1 Credit(s)
- MET 101 - Mechanical Drafting 3 Credit(s)
- WLD 111 - Technology of Industrial Welding 16 Credit(s)
- WLD 250C - Selected Topics in Welding: SMAW Var. (2-6) Credit(s) WLD250C is a variable credit course - 2 to 4 credits of electives are required for program - or another approved program elective.


## Term Credits: 12

## Term 2

- WLD 104 - Blueprint Reading - Mechanical 3 Credit(s)
- WLD 112-Technology of Industrial Welding II 6 Credit(s)
- WLD 221 - Welding Codes, Procedures and Inspections 3 Credit(s)


## Term Credits: 12

## Term 3

- WLD 113 - Technology of Industrial Welding III 6 Credit(s)
- WLD 121 - Fabrication and Repair Practices I 5 Credit(s)
- WLD 250A - Selected Topics in Welding: FCAW Var. (2-6) Credit(s) WLD250A is a variable credit course - 2 to 4 credits of electives are required for program - or another approved program elective.

Term Credits: 13

## Approved Program Electives

## (2-4 credits required)

- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s)
- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MET 123 - Computer Aided Drafting III: Mechanical (SolidWorks) 3 Credit(s)
- MET 160 - Materials and Metallurgy 3 Credit(s)
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MFG 122 - Manufacturing Processes II 4 Credit(s)
- MFG 123 - Manufacturing Processes III 4 Credit(s)
- WLD 160 - American Welding Society Certification Seminar: Plate 1 Credit(s)
- WLD 250A - Selected Topics in Welding: FCAW Var. (2-6) Credit(s) (variable credit course: 2-4 credits only required for this program)
- WLD 250B - Selected Topics in Welding: GTAW Var. (2-6) Credit(s) (variable credit course: 2-4 credits only required for this program)
- WLD 250C - Selected Topics in Welding: SMAW Var. (2-6) Credit(s) (variable credit course: 2-4 credits only required for this program)
- WLD 250D - Selected Topics in Welding: GMAW Var. (2-6) Credit(s) (variable credit course: 2-4 credits only required for this program)
- WLD 250F - Selected Topics: Welding Capstone Project Var. (2-6) Credit(s) (variable credit course: 2-4 credits only required for this program)
- WLD 260 - American Welding Society Certification Seminar: Pipe 1 Credit(s)


## For more information, contact the Industrial Welding Technology Department:

Phone: 541-956-7500
Email: WeldingInfo@roguecc.edu
Web address: www.roguecc.edu/Welding
TTY: Oregon Telecom Relay Service, 711

# Manufacturing / Engineering Technology: Computer Numerical Control (CNC) Technician, Certificate of Completion 


#### Abstract

About the Program

This three-term certificate program integrates conventional manufacturing techniques with computer numerical control (CNC) manufacturing skills. Computer aided drafting (CAD) is used as a basic tool in the manufacturing engineering process. In addition to technical training, students receive a solid education in mathematics, along with human relations and computer skills courses. Graduates typically enter the workforce as computer numerical control (CNC) technicians or computer aided design drafters. With additional on-the-job experience, this training facilitates movement into fields such as quality control inspector and CNC programmer. This certificate completes the first-year requirements for RCC's Manufacturing and Engineering Technology AAS degree program.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Manufacturing/Engineering Technology Computer Numerical Control (CNC) Technician Certificate of Completion are:

Set up, operate, and program manual lathes to print specifications.
Interpret and create mechanical blueprints to industry standards.
Troubleshoot manufacturing processes and procedures.
Demonstrate the ability to adhere to personal and industry safety standards to protect personnel and equipment.

Operate and program CNC mills and lathes to print specifications.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Manufacturing and Engineering Technology Department Chair's recommendation. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Official transcripts must be filed with the Enrollment Services Office and the Manufacturing/Engineering Technology Department.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 54-56

Program email address: ManufacturingInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) Required for graduation ${ }^{1}$
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement

Prerequisite Credits: 0-14

## Term 1

Check-in with Advisor

- MET 101 - Mechanical Drafting 3 Credit(s)
- MET 105 - Blueprint Reading: Mechanical 3 Credit(s)
- MFG 101 - Introduction to Manufacturing 3 Credit(s)
- MFG 116 - Metrology 2 Credit(s)
- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math
- MEC 102 - Mechanical Fabrication 3 Credit(s)


## Term Credits: 18

## Term 2

- MET 104 - Applied Shop Practices 3 Credit(s) or MTH $112 Z$
- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 160 - Materials and Metallurgy 3 Credit(s) or MET 165
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MFG 140 - CNC Controls 2 Credit(s)


## Term Credits: 15

## Term 3

- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MFG 122 - Manufacturing Processes II 4 Credit(s)
- MFG 241 - Computer Numerical Control Programming - Mill (Haas) 4 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition


## Term Credits: 14

## Term 4

Check-in with Advisor

- PSY 101 - Psychology of Human Relations 3 Credit(s) or BT 101
- MFG 123 - Manufacturing Processes III 4 Credit(s)


## Term Credits: 7

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

For more information, contact the Manufacturing/Engineering Technology Department:

Phone: 541-956-7500
Email: ManufacturingInfo@roguecc.edu
Web address: www.roguecc.edu/manufacturing
TTY: Oregon Telecom Relay Service, 711

# Automotive Technology, Associate of Applied Science 


#### Abstract

About the Program The Automotive Technology two-year degree program is designed for students seeking a career in today's automotive service industry. The program builds rapidly from fundamentals and theory into diagnosis and repair of today's modern automobiles based upon Automotive Service Excellence (ASE) standards.

The design of the program places heavy emphasis upon actual hands-on work in the automotive labs. Approximately two-thirds of the time spent in the program is in a lab (shop) environment where the student applies theory to diagnosis and repair of a wide variety of domestic and import automobiles. As the level of student skill develops, so does the difficulty of the repairs performed.

If students intend to transfer to Oregon Tech's Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an adviser for more information, or visit http://www.oit.edu/academics/academic-agreements/articulations.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Automotive Technology Associate of Applied Science are:

Diagnose, repair and document advanced vehicle systems.
Effectively locate and utilize technical information required for vehicle repairs.
Work safely and responsibly within all shop standards and environmental guidelines.
Apply employer expectations and ethical work practice.
Successfully pass at least two student-level Automotive Service Excellence (ASE) technical skill assessments.

## Entry Requirements

Students are required to complete the 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 through the Placement Process. Students must also meet certain program requirements in the first and third terms, and complete any prerequisites before advancing in the program.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified Automotive Service Excellence (ASE) certification and industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note, some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 93-95

Program email address Automotivelnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement.
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.


## Prerequisite Credits: 0-14

## Fall

Check-in with Advisor

- AM 120 - Automotive Maintenance and Practices 2 Credit(s) fall/spring terms only
- AM 120L - Automotive Maintenance and Practices Lab 4 Credit(s) fall/spring terms only
- AM 122-Gasoline Engines Rebuild 3 Credit(s) fall term only
- AM 122L - Gasoline Engines Rebuild Lab 4 Credit(s) fall term only Credits / Units: 17
- BT 113 - Business English I 4 Credit(s)


## Term Credits: 17

## Winter

- AM 111 - Electricity for Automotive Technicians 2 Credit(s) winter term only
- AM 111L - Electricity for Automotive Technicians Lab 4 Credit(s) winter term only
- AM 131 - Engine Dynamics and Diagnosis 3 Credit(s) winter term only
- AM 131L - Engine Dynamics and Diagnosis Lab 4 Credit(s) winter term only

Term Credits: 13

## Spring

- AM 141 - Manual Transmissions and Transaxles 3 Credit(s) spring term only
- AM 141L - Manual Transmissions and Axles Lab 3 Credit(s) spring term only
- AM 151 - Automotive Brake Systems 2 Credit(s) spring term only
- AM 151L - Automotive Brake Systems Lab 4 Credit(s) spring term only
- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math

Term credits: 16

## Summer

Check-in with Advisor

- AM 190 - Automotive Repair Lab I 4 Credit(s) summer term only
- AM 270-Air Conditioning for Automotive Technicians 2 Credit(s) summer term only
- AM 270L - Air Conditioning for Automotive Technicians Lab 3 Credit(s) summer term only


## Term credits: 9

## Fall

- AM 160 - Auto Suspension and Steering Systems 2 Credit(s) fall term only
- AM 160L - Auto Suspension and Steering Systems Lab 4 Credit(s) fall term only
- AM 232 - Computerized Engine Management Systems 3 Credit(s) fall term only
- AM 232L - Computerized Engine Management Systems Lab 4 Credit(s) fall term only


## Term credits: 13

## Winter

- AM 233 - Advanced Automotive Computer Systems 4 Credit(s) winter term only
- AM 233L - Advanced Automotive Computer Systems Lab 3 Credit(s) winter term only
- AM 242 - Automatic Transmissions and Transaxles 3 Credit(s) winter term only
- AM 242L - Automatic Transmissions and Transaxles Lab 4 Credit(s) winter term only

Term credits: 14

## Spring

- AM 210 - Mechanical Careers Development 1 Credit(s) spring term only
- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- AM 280 - Cooperative Work Experience/Automotive 3 Credit(s) or AM 290
- COMM 100Z - Introduction to Communication 4 Credit(s)
- HE 112 - Emergency First Aid 1 Credit(s) or HE 261

Term credits: 12

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Automotive Technology Department:

Phone: 541-956-7500
Email: Automotivelnfo@roguecc.edu
Web address: www.roguecc.edu/Automotive
TTY: Oregon Telecom Relay Service, 711

# Computer Support Technician, Associate of Applied Science 


#### Abstract

About the Program The Computer Support Technician program is designed to prepare students for employment in computer support positions within an organization. It will also provide skills in computer hardware and software to meet the needs of an increasingly technical society.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Computer Support Technician Associate of Applied Science are:

Recommends appropriate equipment acquisitions, maintenance, upgrade and life-cycling in the workplace.
Applies operating system and hardware concepts and principles to problem solving in the context of computer systems.

Apply standard business productivity software to support electronic projects.
Outlines basic troubleshooting processes and procedures from initial diagnosis to final documentation and reporting.

Develops technical documentation to support organizational needs to interact and communicate effectively.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies and the Computer Science Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of this program can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive their degrees. Certain prerequisite and required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: ComputerScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) Required for graduation.
- MTH 63 - Applied Algebra 4 Credit(s) or MTH 60 or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 2-9

## Fall

Check-in with Advisor

- CIS 145 - Introduction to Hardware/Software 5 Credit(s)
- MTH 96 - Applied Algebra II 4 Credit(s) or MTH 65 or higher-level math
- WR $121 Z$ - Composition I 4 Credit(s)
- CIS 125DB - Database Management Systems 3 Credit(s)


## Term Credits: 16

## Winter

- CIS 179 - Introduction to Networks 4 Credit(s)
- BT 178 - Customer Service 3 Credit(s) winter/summer only
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or COMM 111Z or COMM 225 (2 COMM courses required for program)
- WR $227 Z$ - Technical Writing 4 Credit(s) or WR $122 Z$


## Term Credits: 15

## Spring

- CIS 125WW - Word Processing Applications (Microsoft Word) 3 Credit(s)
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s) or COMM

111Z; COMM 225 offered Spring term only (2 COMM courses required for program)

- CIS 285 - Network Security II 4 Credit(s) or approved program elective
- CIS 240 - Advanced Operating Systems 4 Credit(s)
- CIS 125V - Visio 1 Credit(s) spring term only


## Term Credits: 16

## Fall

- PSY 101 - Psychology of Human Relations 3 Credit(s)
- HE 250 - Personal Health 3 Credit(s) HE 112, HE 252, HE 261 or HPE 295
- CIS 125SS - Spreadsheet Applications 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- CIS 125PT - Effective Presentations 2 Credit(s) fall term only


## Term Credits: 16

## Winter

- CIS 225 - Computer End-User Support I 4 Credit(s) winter term only
- CS 133C\# - Programming Fundamentals Using C\# 4 Credit(s) winter term only or CS 160 (Fall/Spring term only) or CS 161U (Fall term only) or programming language course
- CIS 284 - Network Security Fundamentals 4 Credit(s)
- CIS 281 - Implementing and Supporting a Server Environment 4 Credit(s)

Term Credits: 16

## Spring

- CIS 240LX - Advanced Operating Systems - Linux 4 Credit(s)
- CIS 279 - Network Operating Systems 4 Credit(s)
- CS 275 - Data Base Development I 4 Credit(s) or SOC 237 or other program elective; CS 275 offered spring term only
- CIS 282 - Help Desk Internship 3 Credit(s) or CIS 280 (3 credits of CIS 280)


## Term Credits: 15

## Approved Program Electives

## (4-8 credits required as needed to complete program minimum required credits.)

- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- CIS 280 - Cooperative Work Experience/Computer Information Sciences Var. (1-3) Credit(s)
- CIS 285 - Network Security II 4 Credit(s)
- CS 133C\# - Programming Fundamentals Using C\# 4 Credit(s)
- CS 160 - Introduction to Computer Science 4 Credit(s)
- CS 161U - Computer Science I (C++) 4 Credit(s)
- CS 162U - Computer Science II (C++) 4 Credit(s)
- CS 275 - Data Base Development I 4 Credit(s)
- EET - Any electronics course(s) Variable Credits(s)
- MTH - Any math course(s) MTH $105 Z$ or higher Variable Credit(s)
- SOC 237 - Communication, Relationships and Technology 4 Credit(s)


## For more information, contact the Computer Science Department:

Phone: 541-956-7500
Email: ComputerSciencelnfo@roguecc.edu
Web address: www.roguecc.edu/computerscience
TTY: Oregon Telecom Relay Service, 711

## Diesel Technology, Associate of Applied Science


#### Abstract

About the Program

The Diesel Technology Associate of Applied Science degree program is designed for students seeking a career in today's diesel repair industry. The program builds rapidly from fundamentals and theory into diagnosis and repair of today's modern equipment based upon Automotive Service Excellence (ASE) and industrial standards.

The design of the program places heavy emphasis upon actual hands-on work in diesel labs. Approximately two-thirds of the time spent in the program is in a lab (shop) environment where the student applies theory to diagnosis and repair of a wide variety of equipment. As students' skill levels develop, so does the difficulty of repairs performed.

If students intend to transfer to either SOU's (www.sou.edu/degreecompletion) or Oregon Tech's (https://www.oit.edu/educational-partnerships/articulations) Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an advisor for more information, or visit www.sou.edu/degreecompletion.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Diesel Technology Associate of Applied Science are: Work safely within OSHA and industry safety standards.

Diagnose, repair and maintain air and hydraulic systems.
Diagnose, repair and maintain parts of the power train.
Diagnose, repair and maintain the HVAC system.
Diagnose, repair and maintain the steering and suspension systems components.
Diagnose electrical circuits using schematics and current industry equipment.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified Automotive Service Excellence (ASE) certification or industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their degrees.
Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note, some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-91

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-12

## Fall

Check-in with Advisor

- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or MTH $105 Z$ (MTH $105 Z$ or higher recommended for transfer)
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- DS 111 - Basic Electricity for Diesel Technicians I 6 Credit(s)
- DS 120 - Diesel Practices 5 Credit(s)


## Term Credits: 17

## Winter

- DS 141 - Heavy Equipment Power Trains 4 Credit(s)
- DS 131 - Diesel Engine Dynamics and Diagnosis 4 Credit(s)
- BT 113 - Business English I 4 Credit(s) or WR 115 or higher-level composition

Term Credits: 12
Spring

- DS 113 - Diesel Engine Overhaul 6 Credit(s)
- DS 151 - Heavy Equipment Brakes 5 Credit(s)


## Term Credits: 11

## Summer

Check-in with Advisor

- DS 270 - Air Conditioning for Diesel Technicians 5 Credit(s) summer term only
- DS 275 - Preventative Maintenance Inspection 5 Credit(s) summer term only
- BT 114 - Business English II 4 Credit(s) or WR $121 Z$ or higher-level composition


## Term Credits: 14

Fall

- DS 160 - Heavy Equipment Suspension and Steering Systems 5 Credit(s)
- WLD 111D - Technology of Industrial Welding for Diesel 6 Credit(s)
- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101 (PSY 101 recommended for transfer)


## Term Credits: 14

## Winter

- DS 233 - Computerized Vehicle Management Systems 4 Credit(s)
- DS 232 - Heavy Equipment Fuel Systems 3 Credit(s)
- DS 290 - Diesel Repair Lab 3 Credit(s) or MFG 121 or approved program elective (credits vary)


## Term Credits: 10

## Spring

- DS 260 - Hydraulic Systems for Heavy Equipment 3 Credit(s)
- DS 280 - Cooperative Work Experience/Diesel 1-3 Credit(s) or DS 290 with Program Advisor approval
- HE 112 - Emergency First Aid 1 Credit(s) or HE 261
- WLD 112 - Technology of Industrial Welding II $\mathbf{6}$ Credit(s) or MFG 121 or approved program elective (credits vary)


## Term Credits: 13

## Approved Program Electives

Complete a sufficient number of electives from the list below [9 credits maximum] in order to complete a minimum total of 90 program credits.

- AM 190 - Automotive Repair Lab 14 Credit(s)
- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- DS 199 - Special Studies: Diesel Var. (1-6) Credit(s)
- DS 280 - Cooperative Work Experience/Diesel 1-3 Credit(s)
- DS 290 - Diesel Repair Lab 3 Credit(s)
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s)
- EET 112 - Computer Programming for Technology 3 Credit(s)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MTH 65 - Fundamentals of Algebra II 4 Credit(s) or higher-level math
- WLD 101 - Welding Fundamentals I 3 Credit(s)
- WLD 112 - Technology of Industrial Welding II 6 Credit(s)
- WR $122 Z$ - Composition II 4 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- Any college-level (100 or 200 numbered) transferable non-studio humanities, social science, or science electives

For more information, contact the Diesel Technology Department:

Phone: 541-956-7500
Email: Diesellnfo@roguecc.edu
Web address: www.roguecc.edu/diesel
TTY: Oregon Telecom Relay Service, 711

# Electronics Technology, Associate of Applied Science 


#### Abstract

About the Program

The Electronics Technology Associate of Applied Science degree provides students the necessary skills for entry into one of today's most dynamic and broad-based technical fields. The program emphasizes electronic theory fundamentals, troubleshooting and design, and involves both highly technical and general studies courses. Advanced courses include radio frequency and microwave communications, PC hardware, and microcontrollers and interfacing. Typical occupations include those of electronics test technicians at manufacturing sites or field engineers in the communications industry.

The technical courses involve extensive lab work using industry standard test equipment and practices. As a capstone, students design and build an electronics project to demonstrate their proficiencies of program outcomes. The AAS degree can be used for technical block transfers to four-year institutions' basic engineering programs, although continuing students will be advised to take additional transfer courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Electronics Technology Associate of Applied Science are:

Identify and solve real-world problems through the application of electronics theory and concepts.
Calibrate, test, and repair analog and digital circuitry at component, circuit, and systems level using industry standard test equipment.

Organize, interpret, and use technical information and documentation.
Communicate effectively across a variety of audiences: technicians, engineers, management and customers.

Function collaboratively as a member of a team to achieve specified and measurable results.
Demonstrate flexibility, adaptability, and time management skills commensurate with industry productivity needs.

Demonstrate the ability to adhere to personal and industry safety standards.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and with the Electronics Technology Department Chair's recommendation. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Official transcripts must be filed with the RCC Enrollment Services office.

## Graduation Requirements

Students are required to complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-95

Program email address ElectronicsInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement.
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.


## Prerequisite Credits: 0-14

## Term 1

Check-in with Advisor

- EET 100 - Orientation to Electronics Technology Fields 2 Credit(s)
- EET 125 - DC Electronics - Circuits I 5 Credit(s)
- EET 129 - Introduction to Embedded Systems 3 Credit(s)
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math.


## Term Credits: 14

## Term 2

- EET 126-AC Electronics - Circuits II 5 Credit(s)
- EET 130 - Digital and MSI Logic - Digital I 5 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s) ${ }^{2}$
or COMM 100Z, COMM 111 Z or COMM $218 Z$ (credits vary by course) If students test out of WR 115 , they may take WR $121 Z$

Term Credits: 13

## Term 3

- EET 127 - Computing Environments for Technicians 4 Credit(s)
- EET 131 - Sequential Logic and Interfacing - Digital II 5 Credit(s)
- EET 140 - Semiconductors and Devices I 5 Credit(s)


## Term Credits: 14

## Term 4

- PSY 101 - Psychology of Human Relations 3 Credit(s) or BT 101
- HE 112 - Emergency First Aid 1 Credit(s)
- WR 121Z - Composition I 4 Credit(s) ${ }^{2}$
- OPTIONAL ELECTIVE - Optional approved program elective for specific interests, $\mathbf{0}$ to $\mathbf{4}$ Credit(s) (course credits vary)


## Term Credits: 8

## Term 5 (Year 2)

## Check-in with Advisor

- EET 102 - Soldering and Repair Techniques 3 Credit(s)
- EET 215 - Operational Amplifiers and Linear Integrated Circuits 5 Credit(s) fall term only
- EET 220 - Semiconductors and Devices II 5 Credit(s) fall term only


## Term Credits: 13

## Term 6 (Year 2)

- EET 225 - Electronics Troubleshooting 3 Credit(s) winter term only
- EET 230 - Radio Frequency Communications Fundamentals 5 Credit(s) winter term only
- EET 240 - Microcontrollers I 5 Credit(s) winter term only


## Term Credits: 13

## Term 7 (Year 2)

- EET 205 - International Society of Certified Electronic Technicians (ISCET) Certification/Preparation 1 Credit(s) spring term only
- EET 235 - Microwave Applications 5 Credit(s) spring term only
- EET 241 - Microcontrollers II 5 Credit(s) spring term only
- EET 250 - Prototype Development and Documentation 4 Credit(s) spring term only or EET 280

Term Credits: 15

## Optional Approved Program Electives (0-4 Credits Required)

- BA 101 - Introduction to Business 4 Credit(s)
- BT 121 - Digital Marketing and e-Commerce 4 Credit(s)
- CIS - Any computer applications course, CIS125 or above 3-4 Credit(s)
- COMM 111Z - Public Speaking 4 Credit(s) (if not taken as part of core)
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s)
- EET 108 - Wearable and Lighting for Electronics 1 Credit(s)
- EET 112 - Computer Programming for Technology 3 Credit(s)
- EET 113 - Exploration of Alternative Energies 3 Credit(s)
- EET 132 - Introduction to Verilog 5 Credit(s)
- EET 180 - Cooperative Work Experience - Electronics Var. (1-3) Credit(s)
- EET 199 - Selected Studies: Electronics Var. (1-6) Credit(s)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- MET 101 - Mechanical Drafting 3 Credit(s)
- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MET 160 - Materials and Metallurgy 3 Credit(s)
- MFG 101 - Introduction to Manufacturing 3 Credit(s)
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MFG 220 - Research and Development Prototyping 4 Credit(s)
- MFG 230 - Statistics and Quality Control 3 Credit(s)
- MFG 241 - Computer Numerical Control Programming - Mill (Haas) 4 Credit(s)
- MFG 242 - Computer Aided Manufacturing I: Mastercam 2D 4 Credit(s)
- MFG 243 - Computer Aided Manufacturing II: Mastercam 3D 4 Credit(s)
- MFG 244 - Computer Numerical Control Programming - Lathe (Haas) 3 Credit(s)
- MTH 60R - Fundamentals of Algebra I Recitation 1 Credit(s)
- MTH 65 - Fundamentals of Algebra II 4 Credit(s) or higher-level math
- MTH 65R - Fundamentals of Algebra II Recitation 1 Credit(s)
- WLD 101 - Welding Fundamentals I 3 Credit(s)
- WR $122 Z$ - Composition II 4 Credit(s)


## Notes: <br> ${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years. <br> ${ }^{2}$ If students test out of WR 115, they may take WR $122 Z$ instead of Communication upon completion of WR $121 Z$. <br> For more information, contact the Electronics Technology Department:

Phone: 541-956-7500
Email: ElectronicsInfo@roguecc.edu
Web address: www.roguecc.edu/electronics
TTY: Oregon Telecom Relay Service, 711

# Industrial Welding Technology, Associate of Applied Science 


#### Abstract

About the Program The Associate of Applied Science degree in Industrial Welding Technology is designed for students whose goals are to enter the job market as entry-level welders/fabricators. Upon completing the program, students will be qualified to test for certification to the American Welding Society (AWS) D1.1-06 Structural Steel Welding Codes and the AWS D1.3-08 Sheet Steel Welding Code. Students would also be able to test to certify as pipe welders to the American Society of Mechanical Engineers (ASME) Section IX Welding Code, and as Level I Entry Level and Level II Advanced Level Welder by the AWS EG2.0 and 3.0 welder training programs.

Additionally, students will have a good foundation in structural steel layout, pipefitting, and sheet metal pattern development. Students will also be prepared with mathematics and communication skills and be knowledgeable of the human relations skills necessary to become valuable employees in the industrial welding field.

If students intend to transfer to SOU's Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an advisor for more information or visit www.sou.edu/degreecompletion.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Industrial Welding Technology Associate of Applied Science are:

Demonstrate a commitment to a culture of safety.
Interpret and create mechanical blueprints to industry standards.
Layout and fabricate industry-quality fabrication projects.
Produce industry quality cuts and weldments on carbon steel plate and pipe in various positions and joint and groove configurations.

Produce industry-quality welds using various welding processes on stainless steel and aluminum plate.
Develop a sequence of steps to foresee, troubleshoot, and resolve mechanical and process issues that arise in the workplace.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90

Program email address: WeldingInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) Required for graduation. ${ }^{1}$
- MTH 20 - Pre-algebra 4 Credit(s) or higher-level math, or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement


## Prerequisite Credits: 0-14

## Fall

## Check-in with Advisor

- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math course
- BT 113 - Business English I 4 Credit(s) ${ }^{2}$ or WR 115 or higher-level composition
- MET 101 - Mechanical Drafting 3 Credit(s)
- WLD 111 - Technology of Industrial Welding I 6 Credit(s)


## Term Credits: 17

- BT 114 - Business English II 4 Credit(s) winter/summer term only or WR $121 Z$
- WLD 104 - Blueprint Reading - Mechanical 3 Credit(s)
- WLD 112 - Technology of Industrial Welding II 6 Credit(s)
- WLD 121 - Fabrication and Repair Practices I 5 Credit(s) winter term only


## Term Credits: 18

## Spring

- HE 112 - Emergency First Aid 1 Credit(s)
- WLD 113 - Technology of Industrial Welding III 6 Credit(s)
- WLD 122 - Fabrication and Repair Practices II 5 Credit(s) spring term only


## Term Credits: 12

## Fall

Check-in with Advisor

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- WLD 211 - Technology of Industrial Welding IV 6 Credit(s)
- WLD 220 - Machine Tool Maintenance and Repair 3 Credit(s) fall term only
- WLD 221 - Welding Codes, Procedures and Inspections 3 Credit(s) fall term only


## Term Credits: 15

## Winter

- WLD 250A - Selected Topics in Welding: FCAW Var. (2-6) Credit(s) or approved program elective (credits vary)
- WLD 250C - Selected Topics in Welding: SMAW Var. (2-6) Credit(s) or approved program elective (credits vary)
- WLD 212 - Technology of Industrial Welding V 6 Credit(s)
- MFG 121 - Manufacturing Processes I 4 Credit(s)


## Term Credits: 16

## Spring

- WLD 213 - Technology of Industrial Welding VI 6 Credit(s)
- WLD 280 - Cooperative Work Experience/Welding Var. (1-3) Credit(s) or WLD 250F
- WLD 250F - Selected Topics: Welding Capstone Project Var. (2-6) Credit(s) or approved program elective (credits vary)

Term Credits: 12

## Approved Program Electives

## (9-10 credits as needed to meet program minimum credit requirements)

- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- DS 260 - Hydraulic Systems for Heavy Equipment 3 Credit(s)
- EET 101 - Electronics Fundamentals for Non-Majors 3 Credit(s)
- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MET 123 - Computer Aided Drafting III: Mechanical (SolidWorks) 3 Credit(s)
- MET 160 - Materials and Metallurgy 3 Credit(s)
- MET 165 - Materials Engineering and Metallurgy 3 Credit(s)
- MFG 122 - Manufacturing Processes II 4 Credit(s)
- MFG 123 - Manufacturing Processes III 4 Credit(s)
- MFG 291 - Laser Cutting and Engraving Fundamentals 3 Credit(s)
- WLD 111D - Technology of Industrial Welding for Diesel 6 Credit(s)
- WLD 111M - Technology of Industrial Welding for Manufacturing 6 Credit(s)
- WLD 160 - American Welding Society Certification Seminar: Plate 1 Credit(s)
- WLD 250A - Selected Topics in Welding: FCAW Var. (2-6) Credit(s)
- WLD 250B - Selected Topics in Welding: GTAW Var. (2-6) Credit(s)
- WLD 250C - Selected Topics in Welding: SMAW Var. (2-6) Credit(s)
- WLD 250D - Selected Topics in Welding: GMAW Var. (2-6) Credit(s)
- WLD 250F - Selected Topics: Welding Capstone Project Var. (2-6) Credit(s)
- WLD 250P - Selected Topics: CNC Plasma Cutting 3 Credit(s)
- WLD 260 - American Welding Society Certification Seminar: Pipe 1 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years
${ }^{2}$ Students must complete either BT 113 and BT 114 or WR 115 and WR $121 Z$ (or higher-level composition courses.) Three credits of speech may be substituted for $3-4$ credits of writing. Students who have successfully completed the 3 -credit versions of BT 113 and BT 114 will have met this requirement.

For more information, contact the Industrial Welding Technology Department:

Phone: 541-956-7500
Email: WeldingInfo@roguecc.edu
Web address: www.roguecc.edu/Welding
TTY: Oregon Telecom Relay Service, 711

# Manufacturing / Engineering Technology, Associate of Applied Science 


#### Abstract

About the Program

This two-year program integrates conventional manufacturing techniques with computer integrated manufacturing skills. Computer aided drafting (CAD) and computer aided manufacturing (CAM) are used as basic tools in the manufacturing engineering process. In addition to technical training, students receive a solid education in mathematics and physical science, along with human relations and computer skills courses.

Graduates typically enter the workforce as computer aided design drafters, entry-level machinists, or computer numerical control (CNC) machine operators or engineering assistants. With additional on-the-job experience, this training facilitates movement into fields such as tool and die maker, quality control inspector, computer aided manufacturing (CAM) programmer, or lower-level supervisory positions. For transfer to a four-year institution in engineering, additional or alternate transfer courses will be recommended.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Manufacturing Engineering Technology Associate of Applied Science program are:

Set up, operate, and program manual lathes to print specifications.
Interpret and develop machine tool paths using Mastercam software to create mechanical parts to industry standards.

Troubleshoot manufacturing processes and procedures.
Demonstrate the ability to adhere to personal and industry safety standards to protect personnel and equipment.

Operate and program CNC mills and lathes to print specifications.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and with the Manufacturing/Engineering Technology Department Chair's recommendation. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Students must complete coursework in their major at a "C-" or better level before proceeding
to advanced coursework. Each College Now credit student must meet with the program coordinator to determine placement.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students are required to complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

## Total Program Credits: 90-94

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please meet with an advisor for any questions about alternate courses in a given term

Program email address: ManufacturingInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I $2 \operatorname{Credit(s)}{ }^{1}$ Required for graduation
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement


## Prerequisite Credits: 0-14

## Term 1

Check-in with Advisor

- MET 101 - Mechanical Drafting 3 Credit(s)
- MET 105 - Blueprint Reading: Mechanical 3 Credit(s)
- MFG 101 - Introduction to Manufacturing 3 Credit(s)
- MFG 116 - Metrology 2 Credit(s)
- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math


## Term Credits: 15

## Term 2

- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113
- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s) or MET 111
- MET 160 - Materials and Metallurgy 3 Credit(s) or MET 165
- MFG 121 - Manufacturing Processes I 4 Credit(s) can take MFG 116 concurrently
- MFG 140 - CNC Controls 2 Credit(s)


## Term Credits: 15

## Term 3

- MET 112 - Computer Aided Drafting II: Mechanical (Autodesk Inventor) 3 Credit(s)
- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s) or BT 101
- MFG 122 - Manufacturing Processes II 4 Credit(s)
- MFG 241 - Computer Numerical Control Programming - Mill (Haas) 4 Credit(s)


## Term Credits: 17

## Term 4

Check-in with Advisor

- MFG 242 - Computer Aided Manufacturing I: Mastercam 2D 4 Credit(s)
- MFG 123 - Manufacturing Processes III 4 Credit(s)
- WLD 101 - Welding Fundamentals I 3 Credit(s) or WLD 111M (WLD 111M fulfills WLD 101, WLD 102)
- MET 104 - Applied Shop Practices 3 Credit(s) or MTH $112 Z$


## Term Credits: 14

## Term 5

- MFG 220 - Research and Development Prototyping 4 Credit(s)
- MFG 243 - Computer Aided Manufacturing II: Mastercam 3D 4 Credit(s)
- WLD 102 - Welding Fundamentals II 3 Credit(s) or WLD 111M (WLD 111M fulfills WLD 101, WLD 102)
- WR 121 - Composition I 4 Credit(s) or BT 114
- MFG 240 - Robotics and Computer Programming 3 Credit(s) or approved elective

Term Credits: 18

## Term 6

- HE 112 - Emergency First Aid 1 Credit(s)
- MFG 255 - Computer Integrated Manufacturing 4 Credit(s) or MFG 280
- MFG 262 - Lean Manufacturing 3 Credit(s)
- MFG 291 - Laser Cutting and Engraving Fundamentals 3 Credit(s) or approved elective


## Term Credits: 11

## Approved Program Electives

6-8 credits - Complete a sufficient number of electives to meet the total degree requirements.

- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L AND CHEM 104R
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- CHEM 221 - General Chemistry I 3 Credit(s) AND CHEM 221L AND CHEM 221R
- CHEM 222 - General Chemistry II 3 Credit(s) AND CHEM 222L AND CHEM 222R
- CHEM 223 - General Chemistry III 3 Credit(s) AND CHEM 223L AND CHEM 223R
- CIS - Any CIS applications course (CIS 125SS highly recommended) variable Credit(s)
- CIS 145 - Introduction to Hardware/Software 5 Credit(s)
- CIS 179 - Introduction to Networks 4 Credit(s)
- CIS 240 - Advanced Operating Systems 4 Credit(s)
- CS 161J - Computer Science I (Java) 4 Credit(s)
- CS 161U - Computer Science I (C++) 4 Credit(s)
- CS 162J - Computer Science II (Java) 4 Credit(s)
- CS 162U - Computer Science II (C++) 4 Credit(s)
- EET 104 - Fundamentals of Manufacturing Electronics 4 Credit(s)
- EET 129 - Introduction to Embedded Systems 3 Credit(s)
- EET 225 - Electronics Troubleshooting 3 Credit(s)
- ENGR 101 - Engineering Orientation I: Careers, Skills and Computer Tools 2 Credit(s)
- ENGR 102 - Engineering Orientation II: Careers, Skills and Computer Tools 2 Credit(s)
- ENGR 103 - Engineering Orientation III: Careers, Skills and Computer Tools 2 Credit(s)
- ENGR 201 - Electrical Fundamentals I 2 Credit(s) AND ENGR 201L
- ENGR 202 - Electrical Fundamentals II 2 Credit(s) AND ENGR 202L
- ENGR 211 - Statics 3 Credit(s)
- ENGR 212 - Dynamics 3 Credit(s)
- ENGR 213 - Strength of Materials 3 Credit(s)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- MET 112 - Computer Aided Drafting II: Mechanical (Autodesk Inventor) 3 Credit(s)
- MET 113 - Computer Aided Drafting III: Mechanical (Autodesk Inventor) 3 Credit(s)
- MET 123-Computer Aided Drafting III: Mechanical (SolidWorks) 3 Credit(s)
- MFG 199 - Special Studies: Manufacturing Var. (1-3) Credit(s)
- MFG 210 - AC/DC Electrical Systems for Manufacturing 3 Credit(s)
- MFG 215 - Electrical Control Systems and Sensors for Manufacturing 3 Credit(s)
- MFG 240 - Robotics and Computer Programming 3 Credit(s)
- MFG 244 - Computer Numerical Control Programming - Lathe (Haas) 3 Credit(s)
- MFG 280 - Cooperative Work Experience / Manufacturing 3 Credit(s) (if not taken as a core requirement)
- MFG 291 - Laser Cutting and Engraving Fundamentals 3 Credit(s)
- PH 201 - General Physics I 3 Credit(s) AND PH 201L AND PH 201R
- PH 202 - General Physics II 3 Credit(s) AND PH 202L AND PH 202R
- PH 203 - General Physics III 3 Credit(s) AND PH 203L AND PH 203R
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) AND PH 211L AND PH 211R
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) AND PH 212L AND PH 212R
- PH 213 - General Physics (Calculus Based) III 3 Credit(s) AND PH 213L AND PH 213R
- WLD 102 - Welding Fundamentals II 3 Credit(s) (if not taken as a core requirement)
- WLD 111 - Technology of Industrial Welding I 6 Credit(s) (if not taken as a core requirement)
- WLD 111M - Technology of Industrial Welding for Manufacturing 6 Credit(s) (if not taken as a core requirement)
- WLD 112-Technology of Industrial Welding II 6 Credit(s)
- WLD 113 - Technology of Industrial Welding III 6 Credit(s)
- WLD 121 - Fabrication and Repair Practices I 5 Credit(s)
- WLD 122 - Fabrication and Repair Practices II 5 Credit(s)
- WLD 250P - Selected Topics: CNC Plasma Cutting 3 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Manufacturing/Engineering Technology Department:

Phone: 541-956-7500
Email: ManufacturingInfo@roguecc.edu
Web address: www.roguecc.edu/manufacturing
TTY: Oregon Telecom Relay Service, 711

# Manufacturing / Engineering Technology Transfer to Oregon Tech, Associate of Science 


#### Abstract

About the Program

Based on a signed articulation agreement, Rogue Community College and Oregon Tech offer an Associate of Science degree for students who want to pursue a bachelor's degree in manufacturing. This degree was developed as a cooperative venture between Oregon Tech and RCC and offers knowledge and application components drawn from curriculum at both institutions.

The Associate of Science degree transfers directly into the bachelor's degree program at Oregon Tech in Manufacturing/Engineering Technology.

Students must work closely with their advisors to ensure transferability of this program. If students transfer before completing this degree or transfer in a major not covered by prior agreements, their courses will be evaluated individually toward the transfer requirements of the college of their choice. Students are advised to obtain written approval from Oregon Tech to guarantee their catalog of transfer for three years.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Manufacturing/Engineering Technology transfer to Oregon Tech are:

Set up, operate, and program manual lathes to print specifications.
Interpret and develop machine tool paths using Mastercam software to create mechanical parts to industry standards.

Troubleshoot manufacturing processes and procedures.
Demonstrate the ability to adhere to personal and industry safety standards to protect personnel and equipment.

Operate and program CNC mills and lathes to print specifications.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-94

Program email address: ManufacturingInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- MTH 111Z - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 0-13

## Fall

Check-in with Advisor

- MFG 101 - Introduction to Manufacturing 3 Credit(s)
- MFG 121 - Manufacturing Processes I 4 Credit(s)
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall term only
- WR 121Z - Composition I 4 Credit(s)


## Term Credits: 16

## Winter

- MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks) 3 Credit(s)
- MET 160 - Materials and Metallurgy 3 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- COMM 111Z - Public Speaking 4 Credit(s)

Term Credits: 14

## Spring

- MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks) 3 Credit(s)
- MFG 241 - Computer Numerical Control Programming - Mill (Haas) 4 Credit(s)
- MFG 230 - Statistics and Quality Control 3 Credit(s)
- CIS 125SS - Spreadsheet Applications 4 Credit(s) or BA 285


## Term Credits: 14

## Fall

## Check-in with Advisor

- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) or PH 201, fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) or PH 201L, fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) or PH 201R, fall term only
- ART 237 - Illustration (Black and White Media) 3 Credit(s) or ART 131 or approved Humanities transfer course (credits vary)


## Term Credits: 13

## Winter

- MFG 242 - Computer Aided Manufacturing I: Mastercam 2D 4 Credit(s)
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter term only
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) or PH 202, winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) or PH 202L, winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) or PH 202R, winter term only
- ENGR 211 - Statics 3 Credit(s) winter term only


## Term Credits: 17

## Spring

- MFG 243 - Computer Aided Manufacturing II: Mastercam 3D 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s) or approved Social Science transfer course (credits vary)
- PSY 101 - Psychology of Human Relations 3 Credit(s) or approved Social Science transfer course (credits vary)
- WLD 101 - Welding Fundamentals I 3 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s) or approved Humanities transfer course (credits vary)

Term Credits: 17

## Humanities Electives

Choose two courses from the approved list below for a total of 6-8 credits.
Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114-Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Social Science Electives

Choose two courses from the approved list below for a total of 6-8 credits.

## Oregon Tech Social Science Electives

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 221 - Juvenile Delinquency 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information contact the Manufacturing/Engineering Technology Department:

Phone: 541-956-7500
Email: ManufacturingInfo@roguecc.edu
Web address: www.roguecc.edu/manufacturing
TTY: Oregon Telecom Relay Service, 711

# Arts, Humanities, Communication Pathway 

# Design and Digital Media: Adobe® Applications Technician, Career Pathway Certificate 


#### Abstract

About the Program The Adobe® Applications Technician Career Pathway Certificate prepares students for work in entry-level positions in the graphic design industry where a working knowledge of Adobe® Creative Cloud applications is required. Courses can be applied to the one-year Design and Digital Media certificate and the Associate of Applied Science (AAS) degree in Design and Digital Media. The AAS is designed to prepare students for employment in various design-related industries and fields, including Web design, graphic design, publishing, advertising, media/printing/editing, or to begin careers as freelance designers.


## Program Learning Outcomes

Students who are interested in becoming an Adobe Certified Expert (ACE) can begin by earning the Adobe® Applications Technician Certificate.

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Students completing the Design and Digital Media: Adobe Applications Technician Career Pathway Certificate will be able to:

Utilize correct digital media tools to develop a portfolio.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies and the Visual Art and Design Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive a Career Pathways certificate in Adobe ${ }^{\circledR}$ Applications Technician. Certain prerequisite and required courses are
graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

## Prerequisites

- CIS - Approved Computer Information Science or Computer Science course, 0-2 Credit(s) CIS 120 / CS120 or above, or documented computer proficiency within the past ten years


## Total Prerequisite Credits: 0-2

## Required Courses

- DDM 140 - Electronic Publishing I (In Design) 3 Credit(s)
- DDM 150-Computer Illustration (Illustrator) 3 Credit(s)
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)
- DDM 185 - Introduction to Digital Video (Premiere) 3 Credit(s)
- DDM 190 - Introduction to Animation (Adobe ® Animate) 3 Credit(s) ${ }^{1}$ or DDM $170^{2}$

Total Program Credits: 15
${ }^{1}$ Winter term only offering.
${ }^{2}$ Spring term only offering; prerequisites DDM 150, DDM 160.

## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Design and Digital Media: Social Media Technician, Career Pathway Certificate 


#### Abstract

About the Program

The Social Media Technician Career Pathway Certificate prepares students for work in entry-level positions in the social media industry where a working knowledge of Social Media Design applications and skills is required. Courses can be applied to the one-year Design and Digital Media certificate and the Associate of Applied Science (AAS) degree in Design and Digital Media. The AAS is designed to prepare students for employment in various design-related industries and fields, including Web design, graphic design, publishing, advertising, media/printing/editing, or begin careers as freelance designers.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Students completing their Design and Digital Media Social Media Technician Career Pathway Certificate will be able to:

Create varied visual concepts in response to communication problems.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies and the Visual Arts and Design Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive a Career Pathways certificate in Social Media Technician. Certain prerequisite and required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

- CIS - Approved Computer Information Science or ComputerScience course, 0-2 Credit(s) CIS 120 / CS120 or above, or documented computer proficiency within the past ten years
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Total Prerequisite Credits: 0-10

## Required Courses

- BA 243 - Social Media Marketing 3 Credit(s) ${ }^{1}$
- DDM 120 - Digital Graphic Design I 3 Credit(s) ${ }^{2}$
- DDM 130 - Introduction to Adobe Web Tools 3 Credit(s)
- DDM 231 - Content Management Systems (Word Press) 3 Credit(s) ${ }^{3}$
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)

Total Program Credits: 15
${ }^{1}$ Prerequisite WR 121Z/ WR121
${ }^{2}$ Fall and winter terms only.
${ }^{3}$ Fall term only.

## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Design and Digital Media: UI-UX Technician, Career Pathway Certificate 


#### Abstract

About the Program

The UI-UX Technician Career Pathway Certificate prepares students for work in entry-level positions in the interactive design industry where a working knowledge of Web Development applications and skills is required. Courses can be applied to the two-year Associate of Applied Science (AAS) degree in Design and Digital Media. The degrees are designed to prepare students for employment in various design-related industries and fields, including Web design, graphic design, publishing, advertising, media/printing/editing, or begin careers as freelance designers.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Students completing the Design and Digital Media UI-UX Technician Career Pathway Certificate will be able to:

Apply the necessary skills to assist with the design process.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies and the Visual Arts and Design Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive a Career Pathways certificate in UI-UX Technician. Certain prerequisite and required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

## Prerequisites

- CIS - Approved Computer Information Science or Computer Science course, 0-2 Credit(s) CIS 120 / CS120 or above, or documented computer proficiency within the past ten years
- MTH 60 - Fundamentals of Algebra 14 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Total Prerequisite Credits: 0-13

## Required Courses

- CIS 195 - Web Authoring I 4 Credit(s) ${ }^{1}$
- DDM 120 - Digital Graphic Design I 3 Credit(s) ${ }^{2}$
- DDM 130 - Introduction to Adobe Web Tools 3 Credit(s)
- DDM 231 - Content Management Systems (Word Press) 3 Credit(s) ${ }^{3}$
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)

Total Program Credits: 16
${ }^{1}$ WR 121 Z is a co-requisite for CIS 195.
${ }^{2}$ Fall and winter terms offering only.
${ }^{3}$ Fall term only.

## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Design and Digital Media: Video Production Technician, Career Pathway Certificate 


#### Abstract

About the Program

The Video Production Technician Career Pathway Certificate prepares students for work in entry-level positions in the film industry where a working knowledge of Video Production applications and skills is required. Courses can be applied to the Associate of Applied Science (AAS) degree in Design and Digital Media. The AAS is designed to prepare students for employment in various related industries and fields, including interactive design, film, publishing, advertising, media/printing/editing, or to begin careers as freelance editors.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Students completing their Design and Digital Media Video Production Technician Career Pathway Certificate will be able to:

Organize video projects and work productively in teams.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies and the Visual Arts and Design Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students completing the required credits in this program with a grade of " C -" or better will receive a Career Pathways certificate in Video Production Technician. Certain prerequisite and required courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

- CIS - Approved Computer Information Science or Computer Science course, 0-2 Credit(s) CIS 120 / CS120 or above, or documented computer proficiency within the past ten years


## Total Prerequisite Credits: 0-2

## Required Courses

- DDM 125 - Digital Photography 3 Credit(s)
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)
- DDM 170 - Motion Graphics (After Effects) 3 Credit(s) ${ }^{1}$
- DDM 185 - Introduction to Digital Video (Premiere) 3 Credit(s)
- DDM 186 - Advanced Digital Video 3 Credit(s) ${ }^{2}$

Total Program Credits: 15
${ }^{1}$ Spring term only; prerequisites DDM 150, DDM 160.
${ }^{2}$ Spring term only.

## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Design and Digital Media, Certificate of Completion 


#### Abstract

About the Program The Design and Digital Media three-term certificate program is designed to give students a solid foundation in layout/design concepts and computer graphics applications for print and web. These include desktop publishing, graphic illustration, digital imaging, and web page design. Students will also receive instruction in computer fundamentals including terminology, software use, hardware configuration, and operating systems.

All courses in the program have high academic standards and serve dual purposes: They prepare students for careers or serve as a vehicle for those wishing to learn specific skills. Courses can be applied to the twoyear Associate of Applied Science (AAS) degree in Design and Digital Media as well as the Associate of Science (AS) degree in Emerging Media and Digital Arts transfer to SOU.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Students completing the one-year certificate in Design and Digital Media Certificate of Completion will be able to:

Apply the necessary skills to assist with the design process.
Create varied visual concepts in response to communication problems.
Utilize correct digital media tools to develop a portfolio.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Visual Art and Design Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students completing the credits in the program with a grade of "C-" or better will receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Credits earned in this program can be applied to the Associate of Applied Science degree.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some pre-requisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 47

Program email address: VisualArtsandDesignInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 0-9

## Fall

Check in with Advisor

- ART 115 - Basic Design (Composition) 3 Credit(s)
- DDM 120 - Digital Graphic Design I 3 Credit(s) fall/winter terms only
- DDM 140 - Electronic Publishing I (In Design) 3 Credit(s)
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)
- MTH 63 - Applied Algebra 14 Credit(s) or MTH 60 or higher-level math


## Term Credits: 16

## Winter

- ART 116 - Basic Design (Color Theory) 3 Credit(s)
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) or ART 222
- DDM 141 - Electronic Publishing II (In Design) 3 Credit(s) winter term only
- DDM 150 - Computer Illustration (Illustrator) 3 Credit(s)
- WR 121Z - Composition I 4 Credit(s)

Term Credits: 16

## Spring

- ART 234 - Figure Drawing I 3 Credit(s) or ART 222
- DDM 130 - Introduction to Adobe Web Tools 3 Credit(s) spring term only
- DDM 220 - Digital Graphic Design II 3 Credit(s) spring term only
- DDM 221 - Production Graphics 3 Credit(s) spring term only
- PSY 101 - Psychology of Human Relations 3 Credit(s) or BT 101

Term Credits: 15

## Notes: <br> ${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years. <br> For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

## Design and Digital Media, Associate of Applied Science


#### Abstract

About the Program This program is for students interested in visual communication and digital arts and prepares them for entrylevel employment in graphic design, web design and advertising design positions within organizations. Courses cover principles of design, creative problem solving, art/design history, drawing, typography, and portfolio building. With core instruction based in aesthetic concepts and computer graphics applications, students learn to develop and integrate strong design technique with computer skill sets. These include instruction in digital imaging, graphic illustration, publication design, and web authoring, as well as opportunities for instruction in video production, social media, 3D modeling, digital animation and digital photography.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Students completing the Design and Digital Media Associate of Applied Science will be able to:

Apply the principles of art to assist with the design process.
Create varied visual concepts in response to communication problems.
Create a professionally designed portfolio using appropriate digital media tools.
Organize, implement, and evaluate design projects.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Visual Arts and Design Department Chair's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

If students intend to transfer to SOU's Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an advisor for more information or visit www.sou.edu/degreecompletion.

## Graduation Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive their degrees. Certain prerequisite and required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some pre-requisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: VisualArtsandDesignInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or designated placement

Prerequisite Credits: 0-9

## Fall

Check in with Advisor

- ART 115 - Basic Design (Composition) 3 Credit(s)
- MTH 63 - Applied Algebra 14 Credit(s) or MTH 60 or higher-level math
- DDM 120 - Digital Graphic Design I 3 Credit(s) fall/winter terms only
- DDM 150 - Computer Illustration (Illustrator) 3 Credit(s)
- HE 250 - Personal Health 3 Credit(s) or HE 112, HE 252, HE 261, HPE 295 (credits vary by course)


## Term Credits: 16

## Winter

- ART 116 - Basic Design (Color Theory) 3 Credit(s)
- DDM 140 - Electronic Publishing I (In Design) 3 Credit(s)
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)
- WR 1212 - Composition I 4 Credit(s)


## Term Credits: 13

## Spring

- DDM 130 - Introduction to Adobe Web Tools 3 Credit(s)
- DDM 220 - Digital Graphic Design II 3 Credit(s) spring term only
- DDM 221 - Production Graphics 3 Credit(s) spring term only
- DDM 125 - Digital Photography 3 Credit(s) or approved program elective (credits vary)
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) or approved program elective (credits vary)


## Term Credits: 15

## Fall

Check in with Advisor

- ART 222 - Graphic Design (Typography) 3 Credit(s)
- DDM 231 - Content Management Systems (Word Press) 3 Credit(s) fall term only
- DDM 200 - Survey of Design and Film History 3 Credit(s) fall term only
- DDM 223 - Digital Graphic Design III 3 Credit(s) fall term only
- DDM 185 - Introduction to Digital Video (Premiere) 3 Credit(s) or approved program elective (credits vary)


## Term Credits: 15

## Winter

- CIS 195 - Web Authoring I 4 Credit(s)
- DDM 141 - Electronic Publishing II (In Design) 3 Credit(s) winter term only
- DDM 224 - Digital Graphic Design IV 3 Credit(s) winter term only
- DDM 190 - Introduction to Animation (Adobe ® Animate) 3 Credit(s) DDM 190 winter only, or approved program elective (credits vary)
- PSY 101 - Psychology of Human Relations 3 Credit(s) or BT 101

Term Credits: 16

## Spring

- BA 243 - Social Media Marketing 3 Credit(s) or BT 106
- DDM 229 - Portfolio and Professional Practices 3 Credit(s) spring term only
- DDM 230 - Studio Capstone 3 Credit(s) or DDM 280; spring term only
- DDM 170 - Motion Graphics (After Effects) 3 Credit(s) DDM 170 spring term only, or approved program elective (credits vary)
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $218 Z$


## Term Credits: 16

## Approved Program Electives

(15-16 credits - Complete a sufficient number of electives to meet the total degree requirements.)

- ART 120 - Introduction to Digital Art 3 Credit(s)
- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 132 - Introduction to Drawing (Line) 3 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s)
- ART 237 - Illustration (Black and White Media) 3 Credit(s)
- ART 238 - Illustration (Color Media) 3 Credit(s)
- ART 239 - Illustration (Perspective) 3 Credit(s)
- ART 281 - Painting I 3 Credit(s)
- ART 294 - Watercolor I 3 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s) or BT 250
- BT 121 - Digital Marketing and e-Commerce 4 Credit(s)
- DDM 125 - Digital Photography 3 Credit(s)
- DDM 161 - Advanced Digital Imaging (Photoshop for Web) 4 Credit(s)
- DDM 170 - Motion Graphics (After Effects) 3 Credit(s)
- DDM 185 - Introduction to Digital Video (Premiere) 3 Credit(s)
- DDM 186 - Advanced Digital Video 3 Credit(s)
- DDM 190 - Introduction to Animation (Adobe ® Animate) 3 Credit(s)
- DDM 225-3D Graphics Design (Blender) 3 Credit(s)
- DDM 235 - Website Design 4 Credit(s)
- DDM 280 - Cooperative Work Experience/Design and Digital Media Var. (1-6) Credit(s) (if not taken as part of core)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Associate of General Studies, Art Interest 


#### Abstract

About the Program The Associate of General Studies degree is a two-year program designed to provide students the opportunity to acquire a broad education rather than pursuing a specific college major or program. The general studies degree may, in addition to general education coursework, include lower-division college transfer and career and technical education courses. Because of the flexibility of this degree, it may not fulfill requirements for transfer to a four-year institution.

If planning on a specific interest within the Associate of General Studies, see an academic advisor. https://web.roguecc.edu/advising


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to apply toward degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Individual courses may be challenged based on the student's life experience or knowledge. Arrangements may be made on an individual basis with the instructor teaching the course to determine specific challenge procedures. College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

The Associate of General Studies degree will be awarded to students who complete a minimum of 90 credit hours of college transfer and career and technical courses from the curriculum listed. Students must receive a grade of "C-" or better in all coursework. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned a "C-" or better grade.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AGS framework. See the AGS program map for full degree requirements. This course of study is designed to provide a foundation for students planning to transfer to private art schools, and for students wanting to develop their portfolios and depth of expertise within different mediums. Requirements at different schools vary, so students should consult their programs of interest for more specific guidance.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some pre-requisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90

Program email address: VisualArtsandDesignInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Term 1

Check in with Advisor

- ART 115 - Basic Design (Composition) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s)
- PE 185ZUM - Zumba ® 1 Credit(s) or any Fitness/ Health/PE course
- COMM 111Z - Public Speaking 4 Credit(s) or any COMM course
- ART 131 - Introduction to Drawing (Value) 3 Credit(s)


## Term Credits: 15

## Term 2

- ART 116 - Basic Design (Color Theory) 3 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)
- PE 185YOG - Yoga 1 Credit(s)

Term Credits: 12
Term 3

- ART 120 - Introduction to Digital Art 3 Credit(s)
- ART 132 - Introduction to Drawing (Line) 3 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) or any Social Science course
- PE 185CAC - Core and Cardio 1 Credit(s) or any Fitness/Health/PE course

Term Credits: 15
Term 4

Check in with Advisor

- ART 281 - Painting I 3 Credit(s)
- ART 253 - Ceramics I 3 Credit(s)
- G 101 - Introduction to Geology I 3 Credit(s) or any Lab Science course
- G 101L - Introduction to Geology I Lab 1 Credit(s) or any Lab Science course
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- ART 294 - Watercolor I 3 Credit(s)


## Term Credits: 16

## Term 5

- ART 276 - Sculpture I 3 Credit(s)
- ART 282 - Painting II 3 Credit(s) or Advanced Studio course
- MTH $105 Z$ - Math in Society 4 Credit(s) or higher-level math
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- ART 257 - Jewelry and Metalsmithing I 3 Credit(s)
- ART 198 - Independent Study: Art (Portfolio) Var. (1-3) Credit(s) ${ }^{2}$


## Term Credits: 16

## Term 6

- ART 237 - Illustration (Black and White Media) 3 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s)
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)
- ART 254 - Ceramics II 3 Credit(s) or Advanced studio course
- ART 283 - Painting III 3 Credit(s) or Advanced studio course
- PE 185BPA - Backpacking Adventure 1 Credit(s) or any Fitness/Health/PE course

Term Credits: 16
Approved Advanced Studio Courses (Complete 9-12 Credits)

- ART 235 - Figure Drawing II 3 Credit(s)
- ART 236 - Figure Drawing III 3 Credit(s)
- ART 238 - Illustration (Color Media) 3 Credit(s)
- ART 239 - Illustration (Perspective) 3 Credit(s)
- ART 240 - Advanced Figure Drawing 3 Credit(s)
- ART 254 - Ceramics II 3 Credit(s)
- ART 255 - Ceramics III 3 Credit(s)
- ART 256 - Ceramics IV 3 Credit(s)
- ART 258 - Jewelry and Metalsmithing II 3 Credit(s)
- ART 259 - Jewelry and Metalsmithing III 3 Credit(s)
- ART 260 - Jewelry and Metalsmithing IV 3 Credit(s)
- ART 277 - Sculpture II 3 Credit(s)
- ART 278 - Sculpture III 3 Credit(s)
- ART 282 - Painting II 3 Credit(s)
- ART 283 - Painting III 3 Credit(s)
- ART 284 - Painting IV 3 Credit(s)
- ART 295 - Watercolor II 3 Credit(s)
- ART 296 - Watercolor III 3 Credit(s)
- ART 297 - Watercolor IV 3 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2}$ WR 122 Z / WR122 is a prerequisite for ART 198.
For approved Humanities, Social Science and Science, see Associate of General Studies for Approved Electives.

## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Digital Cinema Transfer to Southern Oregon University, Associate of Science 


#### Abstract

About the Program

This Associate of Science (AS) degree is based on a signed articulation agreement with Southern Oregon University (SOU). The program is designed for students transferring to its baccalaureate degree program in Digital Cinema. Students completing this degree will meet the requirements for the foundation courses within the Digital Cinema degree requirements. Students must work closely with advisors in their areas of interest to ensure electives are appropriate.

By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to SOU. Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Digital Cinema Transfer to Southern Oregon University degree are:

Utilize the correct tools and technology to create visual messages.
Apply cultural and human factors to editorial decisions.
Demonstrate basic business practices and trade ethics related to film.

Organize video projects and work productively in teams.

## Entry Requirements

Students are required to take a placement test 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 levels as determined by placement.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete a minimum of 90 credits in this program with a grade of "C-" or better. Certain required courses are also graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)
This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some pre-requisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-94

Program email address: VisualArtsandDesignInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or MTH 96 or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Fall

## Check in with Advisor

- CIS 120 - Concepts in Computing I 2 Credit(s)
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s) or COMM $111 Z$ or COMM $218 Z$
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)
- WR 121Z - Composition I 4 Credit(s)
- ART 204 - History of Art I 4 Credit(s) or ART 205; Required course and fulfills Humanities requirement.


## Term Credits: 17

## Winter

- DDM 125 - Digital Photography 3 Credit(s)
- DDM 190 - Introduction to Animation (Adobe ${ }^{\circledR}$ Animate) 3 Credit(s) winter term only
- WR $122 Z$ - Composition II 4 Credit(s)
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) Required course and fulfills Humanities requirement
- HE 250 - Personal Health 3 Credit(s) or approved Social Science transfer course (credits vary)


## Term Credits: 16

## Spring

- DDM 130 - Introduction to Adobe Web Tools 3 Credit(s)
- DDM 170 - Motion Graphics (After Effects) 3 Credit(s) spring term only
- MTH $105 Z$ - Math in Society 4 Credit(s) ${ }^{1}$ course options vary
- MUS 208 - Film Music 3 Credit(s) Required course and fulfills Humanities requirement


## Term Credits: 13

## Fall

Check in with Advisor

- DDM 185 - Introduction to Digital Video (Premiere) 3 Credit(s)
- DDM 200 - Survey of Design and Film History 3 Credit(s) fall term only
- WR 241 - Imaginative Writing I 4 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) or approved Social Science transfer course (credits vary)


## Term Credits: 14

## Winter

- CIS 195 - Web Authoring I 4 Credit(s)
- DDM 186 - Advanced Digital Video 3 Credit(s) winter term only
- G 101 - Introduction to Geology I 3 Credit(s) or approved Lab Science transfer course (credits vary)
- G 101L - Introduction to Geology I Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)
- ART 205 - History of Art II 4 Credit(s) or ART 206


## Term Credits: 15

## Spring

- DDM 229 - Portfolio and Professional Practices 3 Credit(s) spring term only
- DDM 230 - Studio Capstone 3 Credit(s) spring term only
- BI 101 - Introduction to Biology I 3 Credit(s) or approved Lab Science transfer course (credits vary)
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)
- BA 218 - Personal Finance 3 Credit(s) or approved Social Science transfer course (credits vary)
- GEOG 110 - Introduction to Human Geography 4 Credit(s) or approved Social Science transfer course (credits vary)


## Term Credits: 17

## Approved Science Electives

Complete at least two lab courses from the following list, 8-10 credits. Note that one course can be a regional field studies course.

- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L AND CHEM 104R
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- CHEM 221 - General Chemistry I 3 Credit(s) AND CHEM 221L AND CHEM 221R
- CHEM 222 - General Chemistry II 3 Credit(s) AND CHEM 222L AND CHEM 222R
- CHEM 223 - General Chemistry III 3 Credit(s) AND CHEM 223L AND CHEM 223R
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GS 170 - Regional Field Studies 3 Credit(s) AND GS 170L
- PH 201 - General Physics I 3 Credit(s) AND PH 201L AND PH 201R
- PH 202 - General Physics II 3 Credit(s) AND PH 202L AND PH 202R
- PH 203 - General Physics III 3 Credit(s) AND PH 203L AND PH 203R
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) AND PH 211L AND PH 211R
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) AND PH 212L AND PH 212R
- PH 213 - General Physics (Calculus Based) III 3 Credit(s) AND PH 213L AND PH 213R


## Approved Social Science Electives

Complete 12-14 credits from the following list.

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- COMM 237 - Communication and Gender 4 Credit(s)
- ECON 115 - Introduction to Economics 3 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- HPE 295 - Health and Fitness for Life 3 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- IS 110 - Introduction to International Studies I 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 215 - Lifespan Human Development 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) or HST 259

Notes:
${ }^{1}$ Students may also take MTH 111Z, MTH 112Z, MTH 211 and MTH 212, STAT $243 Z$ or MTH 251. The Bachelor of Science degree requires two courses (7 or more credits) of math, designated programming, statistics or logic courses. The second course may be completed at RCC or SOU. See an advisor for details.

## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Emerging Media and Digital Arts Transfer to Southern Oregon University, Associate of Science 


#### Abstract

About the Program

This Associate of Science (AS) degree is based on a signed articulation agreement with Southern Oregon University (SOU). The program is designed for students transferring to its baccalaureate degree program in Emerging Media and Digital Arts (EMDA). Students completing this degree will meet the requirements for the foundation courses within the EMDA degree requirements. Students must work closely with advisors in their areas of interest to ensure electives are appropriate.

By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to SOU. Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Emerging Media and Digital Arts Transfer to Southern Oregon University degree are:

Utilize the correct tools and technology to create visual messages.
Create, re-produce, and distribute design projects.
Create a professionally designed portfolio using appropriate digital media tools.
Apply design history, theory, and criticism from a variety of perspectives.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete a minimum of 90 credits in this program with a grade of "C-" or better. Certain required courses are also graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a " $\mathrm{C}-$ " or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some pre-requisites may be required for graduation. Please consult an advisor with any program completion questions.

Total Program Credits: 90

Program email address: VisualArtsandDesignInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- MTH 95 - Intermediate Algebra 4 Credit(s) or MTH 96 or designated placement.
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-9

## Fall

## Check in with Advisor

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- DDM 120 - Digital Graphic Design I 3 Credit(s) fall/winter only
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s) or COMM

111Z, COMM 100Z, COMM $218 Z$

- DDM 150 - Computer Illustration (Illustrator) 3 Credit(s)
- HE 250 - Personal Health 3 Credit(s) or approved Social Science transfer course (credits vary)

Term Credits: 16

## Winter

- MTH $105 Z$ - Math in Society 4 Credit(s) or higher-level math ${ }^{2}$
- DDM 140 - Electronic Publishing I (In Design) 3 Credit(s)
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)


## Term Credits: 14

## Spring

- DDM 130 - Introduction to Adobe Web Tools 3 Credit(s)
- DDM 220 - Digital Graphic Design II 3 Credit(s) spring term only
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) or approved Social Science transfer course (credits vary)
- DDM 125 - Digital Photography 3 Credit(s)


## Term Credits: 13

## Fall

Check in with Advisor

- MUS 105 - Music Appreciation 3 Credit(s) or approved Humanities transfer course (credits vary)
- DDM 185 - Introduction to Digital Video (Premiere) 3 Credit(s)
- DDM 200 - Survey of Design and Film History 3 Credit(s) fall term only
- DDM 223 - Digital Graphic Design III 3 Credit(s) fall term only
- WR 122Z - Composition II 4 Credit(s)


## Term Credits: 16

## Winter

- DDM 141 - Electronic Publishing II (In Design) 3 Credit(s) winter term only
- DDM 224 - Digital Graphic Design IV 3 Credit(s) winter term only
- BI 101 - Introduction to Biology I 3 Credit(s) or approved Lab Science transfer course (credits vary)
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)
- DDM 190 - Introduction to Animation (Adobe ® Animate) 3 Credit(s)
- ART 237 - Illustration (Black and White Media) 3 Credit(s) Program elective, as needed to meet program requirements (credits vary)

Term Credits: 16

## Spring

- CIS 195 - Web Authoring I 4 Credit(s)
- DDM 170 - Motion Graphics (After Effects) 3 Credit(s)
- DDM 229 - Portfolio and Professional Practices 3 Credit(s) spring term only
- DDM 230 - Studio Capstone 3 Credit(s) (spring term only), or approved elective or DDM 280
- BI 102 - Introduction to Biology II 3 Credit(s) or approved Lab Science transfer course (credits vary)
- BI 102L - Introduction to Biology II Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)

Term Credits: 17

## Approved Humanities Electives

Complete one course from the following list, 3-4 credits.

- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- IS 110 - Introduction to International Studies I 4 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Approved Science Electives

Complete at least two lab courses from the following list, 8-10 credits. Note that one course can be a regional field studies course.

- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L AND CHEM 104R
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- CHEM 221 - General Chemistry I 3 Credit(s) AND CHEM 221L AND CHEM 221R
- CHEM 222 - General Chemistry II 3 Credit(s) AND CHEM 222L AND CHEM 222R
- CHEM 223 - General Chemistry III 3 Credit(s) AND CHEM 223L AND CHEM 223R
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L
- GS 170 - Regional Field Studies 3 Credit(s) AND GS 170L
- PH 201 - General Physics I 3 Credit(s) AND PH 201L AND PH 201R
- PH 202 - General Physics II 3 Credit(s) AND PH 202L AND PH 202R
- PH 203 - General Physics III 3 Credit(s) AND PH 203L AND PH 203R
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) AND PH 211L AND PH 211R
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) AND PH 212L AND PH 212R
- PH 213 - General Physics (Calculus Based) III 3 Credit(s) AND PH 213L AND PH 213R


## Approved Social Science Electives

Complete at least two courses from the following list, 6-8 credits.

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- COMM 237 - Communication and Gender 4 Credit(s)
- ECON 115 - Introduction to Economics 3 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- HPE 295 - Health and Fitness for Life 3 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 215 - Lifespan Human Development 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)


## Approved Design and Digital Media Electives

## Complete 3-8 credits or a sufficient number of electives to meet the total degree requirements of at

 least 90 credits.- ART 115 - Basic Design (Composition) 3 Credit(s)
- ART 116 - Basic Design (Color Theory) 3 Credit(s)
- ART 120 - Introduction to Digital Art 3 Credit(s)
- ART 222 - Graphic Design (Typography) 3 Credit(s)
- ART 237 - Illustration (Black and White Media) 3 Credit(s)
- DDM 161 - Advanced Digital Imaging (Photoshop for Web) 4 Credit(s)
- DDM 170 - Motion Graphics (After Effects) 3 Credit(s)
- DDM 186 - Advanced Digital Video 3 Credit(s)
- DDM 221 - Production Graphics 3 Credit(s)
- DDM 225-3D Graphics Design (Blender) 3 Credit(s)
- DDM 230 - Studio Capstone 3 Credit(s) or DDM 280
- DDM 231 - Content Management Systems (Word Press) 3 Credit(s)
- DDM 235 - Website Design 4 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2}$ Students may also take MTH 111Z, MTH 112Z, MTH 211 and MTH 212, STAT $243 Z$ or MTH 251. The Bachelor of Science degree requires two courses (7 or more credits) of math, designated programming, statistics or logic courses. The second course may be completed at RCC or SOU. See an advisor for details.

For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Associate of Arts Oregon Transfer, Art Interest 


#### Abstract

About the Program The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is recommended that students also consult with the transfer college of choice regarding specific prerequisites since requirements for an art major vary at each university.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor for any questions in preparing to complete your transfer degree.

Program email address: VisualArtsandDesignInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Term 1

## Check in with Advisor

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s) or approved AAOT Humanities transfer course
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $115^{1}$ or COMM $218 Z$
- MTH $105 Z$ - Math in Society 4 Credit(s) or higher-level math


## Term Credits: 15

## Term 2

- ART 115 - Basic Design (Composition) 3 Credit(s)
- ART 205 - History of Art II 4 Credit(s) ${ }^{1}$ or approved AAOT Humanities transfer course
- PE 185CAC - Core and Cardio 1 Credit(s) or approved Fitness/Health/Physical Education course
- WR $121 Z$ - Composition I 4 Credit(s)
- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) ${ }^{1}$ or approved AAOT Social Science course


## Term Credits: 16

## Term 3

- ART 281 - Painting I 3 Credit(s)
- ART 206 - History of Art III 4 Credit(s) ${ }^{1}$ or approved AAOT Humanities transfer course
- WR 122Z - Composition II 4 Credit(s) or WR $227 Z$
- PE 185BPA - Backpacking Adventure 1 Credit(s) or approved AAOT Fitness/Health/PE course
- NFM 225 - Nutrition 4 Credit(s) or approved AAOT Math/Science/Computer Science transfer course


## Term Credits: 16

## Term 4

## Check-in with Advisor

- BI 101 - Introduction to Biology I 3 Credit(s) or approved AAOT Lab Science course
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved AAOT Lab Science course
- ANTH 150 - Introduction to Archaeology 4 Credit(s) or approved AAOT Social Science course
- SPAN 101 - First Year Spanish I 4 Credit(s) or SPAN $201{ }^{1}$
- MUS 206 - Introduction to Rock Music 3 Credit(s) ${ }^{1}$ or MUS $108^{1 / M U S ~} 201^{1}$ or approved AAOT Humanities transfer course


## Term Credits: 15

## Term 5

- BI 102 - Introduction to Biology II 3 Credit(s) or approved AAOT Lab Science transfer course
- BI 102L - Introduction to Biology II Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- SPAN 102 - First Year Spanish II 4 Credit(s) or SPAN $202^{1}$
- PE 185ZUM - Zumba ® 1 Credit(s) or approved Fitness/Health/PE course
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s) ${ }^{1}$ or approved AAOT Social Science transfer course


## Term Credits: 13

## Term 6

- ART 253 - Ceramics I 3 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s) ${ }^{1}$ or approved AAOT Social Science transfer course
- SPAN 103 - First Year Spanish III 4 Credit(s) SPAN $203{ }^{1}$
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) BI 103 or approved AAOT Lab Science transfer course
- G 103L - Introduction to Geology III (Historical) Lab 1 Credit(s) BI 103L or approved AAOT Lab Science transfer course


## Term Credits: 15

## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).
Note:

- Three courses required in the Humanities category from at least two disciplines (at least 2 prefixes).
- Four courses required in Social Science category, from at least two disciplines (at least 2 prefixes).
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR 121, WR 122, and either WR 123 or WR 227. Students taking classes of 4 credits each must take WR $121 Z$ and either WR 122 or WR $227 Z$.
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.


## For more information, contact the Visual Arts and Design Department:

Phone: 541-956-7500
Email: VisualArtsandDesignInfo@roguecc.edu
Web address: www.roguecc.edu/vad
TTY: Oregon Telecom Relay Service, 711

# Associate of Arts Oregon Transfer, Communication Interest 


#### Abstract

About the Program

The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is recommended that a student also consult with the transfer college of choice regarding specific prerequisites since requirements for a communication major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given
term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)
This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

## Total Program Credits: 90

Program email address: HumanitiesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or MTH 96 designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Term 1

## Check in with Advisor

- WR $121 Z$ - Composition I 4 Credit(s)
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s) or MTH $105 Z$
- CG 100 - College Success and Survival 2 Credit(s) or approved College-level general elective
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $115^{1}$ or COMM $218 Z$
- PE 185YOG - Yoga 1 Credit(s) or approved College-level general elective


## Term Credits: 15

## Term 2

- WR 122Z - Composition II 4 Credit(s) or WR $227 Z$
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s) ${ }^{1}$ or approved AAOT non-COMM Humanities transfer course
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or COMM 111 Z or COMM $115^{1}$ or other COMM course
- GS 104 - Physical Science: Physics 3 Credit(s) or BI 101 or BI 102 or approved AAOT Lab Science transfer course
- GS 104L - Physical Science: Physics Lab 1 Credit(s) or BI 101L or BI 102L or approved AAOT Lab Science transfer course


## Term Credits: 16

## Term 3

- COMM 115 - Introduction to Intercultural Communication 4 Credit(s) ${ }^{1}$ or COMM 1112 or COMM 218 Z or other COMM course
- GS 107 - Physical Science: Astronomy 3 Credit(s) or BI 101 or BI 103 or approved AAOT Lab Science transfer course
- GS 107L - Physical Science: Astronomy Lab 1 Credit(s) or BI 101L or BI 103L or approved AAOT Lab Science transfer course
- PSY 201 - General Psychology I 4 Credit(s) or HST $201{ }^{1}$ or SOC $204{ }^{1}$ or approved AAOT Social Science course

Term Credits: 12

## Term 4

## Check in with Advisor

- GS 108 - Physical Science: Oceanography 3 Credit(s) or BI 101 or approved AAOT Lab Science transfer course
- GS 108L - Physical Science: Oceanography Lab 1 Credit(s) or BI 101L or approved AAOT Lab Science transfer course
- SOC 204 - Introduction to Sociology 4 Credit(s) ${ }^{1}$ or HST $201{ }^{1}$ or PSY 201 or approved AAOT Social Science transfer course
- PHL 101 - Philosophical Problems 4 Credit(s) or approved College-level course
- SPAN 101 - First Year Spanish I 4 Credit(s) or ASL 101 or approved College-level course


## Term Credits: 16

## Term 5

- NFM 225 - Nutrition 4 Credit(s) or CS 160 or ENV 111 or approved AAOT Science/Math/Computer Science transfer course
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s) or COMM 201 other COMM course
- SPAN 102 - First Year Spanish II 4 Credit(s) orASL 102 or approved College-level general elective
- SOC 218 - Sociology of Gender 4 Credit(s) ${ }^{1}$ or approved AAOT Social Science transfer course

Term Credits: 16

## Term 6

- COMM 201 - Media and Society 4 Credit(s) or other COMM course
- PSY 202 - General Psychology II 4 Credit(s) or HST $202{ }^{1}$ or SOC $213{ }^{1}$ or approved AAOT Social Science transfer course
- HE 250 - Personal Health 3 Credit(s) or approved AAOT Fitness/Health/PE course
- SPAN 103 - First Year Spanish III 4 Credit(s) or ASL 103 or approved College-level course


## Term Credits: 15

## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).
Note:

- Three courses required in the Humanities category from at least two disciplines (at least 2 prefixes).
- Four courses required in Social Science category, from at least two disciplines (at least 2 prefixes).
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR 121, WR 122, and either WR 123 or WR 227. Students taking classes of 4 credits each must take WR $121 Z$ and either WR $122 Z$ or WR $227 Z$.
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.


## For more information, contact the Humanities Department:

Phone: 541-956-7500
Email: HumanitiesInfo@roguecc.edu
Web address: www.roguecc.edu/humanities
TTY: Oregon Telecom Relay Service, 711

# Associate of Arts Oregon Transfer, Music Interest 


#### Abstract

About the Program The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is strongly recommended that a student also consult with the transfer college of choice regarding specific prerequisites since requirements for a music major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

## Total Program Credits: 90

Program email address: HumanitiesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or MTH 96 or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement
- MUS 101 - Music Fundamentals 3 Credit(s) or Instructor approval


## Prerequisite Credits: 0-10

## Term 1

## Check-in with Advisor

- WR $121 Z$ - Composition I 4 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s) ${ }^{1}$ MUS $201{ }^{1}$, MUS $205{ }^{1}$, MUS $206{ }^{1}$, MUS 261, MUS 262, MUS 263, MUS 264, MUS 265, MUS 266
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s) or MTH $105 Z$ or College-level approved MTH course
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)


## Term Credits: 16

## Term 2

- WR $122 Z$ - Composition II 4 Credit(s) or WR 227Z, COMM $115^{1}$, COMM $218 Z$
- COMM $111 Z$ - Public Speaking 4 Credit(s)
- MUS 131 - Class Piano I 2 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)


## Term Credits: 14

## Term 3

- PSY 201 - General Psychology I 4 Credit(s) or approved AAOT Social Science transfer course
- GS 104 - Physical Science: Physics 3 Credit(s) or BI 102 / G 102 or approved AAOT Lab Science transfer course
- GS 104L - Physical Science: Physics Lab 1 Credit(s) or BI 102L / G 102L or approved AAOT Lab Science transfer course
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s) ${ }^{1}$ or MUS $108{ }^{1}$, MUS $205{ }^{1}$, MUS $206{ }^{1}$, MUS 261, MUS 262, MUS 263, MUS 264, MUS 265, MUS 266


## Term Credits: 16

## Term 4

## Check-in with Advisor

- GS 107 - Physical Science: Astronomy 3 Credit(s) or BI 102 / G 102 or approved AAOT Lab Science transfer course
- GS 107L - Physical Science: Astronomy Lab 1 Credit(s) or BI 102L / G 102L or approved AAOT Lab Science transfer course (credits vary)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s) ${ }^{1}$ or ENG 204, ENG 206, ENG 253, ENG 254, ENG 255
- PSY 202 - General Psychology II 4 Credit(s) or approved AAOT Social Science course
- MUS 211 - Music Theory IV 3 Credit(s) or approved elective ${ }^{2}$
- MUS 224 - Aural Skills IV 1 Credit(s) or approved elective ${ }^{2}$


## Term Credits: 16

## Term 5

- GS 108 - Physical Science: Oceanography 3 Credit(s) or approved AAOT Lab Science course
- GS 108L - Physical Science: Oceanography Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- SOC 204 - Introduction to Sociology 4 Credit(s) ${ }^{1}$ or approved AAOT Social Science transfer course
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s) ${ }^{1}$ or approved AAOT Social Science transfer course
- MUS 212 - Music Theory V 3 Credit(s) or approved elective ${ }^{2}$
- MUS 225 - Aural Skills V 1 Credit(s) or approved elective ${ }^{2}$

Term Credits: 16

## Term 6

- NFM 225 - Nutrition 4 Credit(s) or CS 160 / ENV 111 or approved AAOT Science/Math/Computer Science course
- HE 250 - Personal Health 3 Credit(s) or HE 252, HE 253, HE 259, HE 295 or approved Fitness/Health/PE course(s)
- MUS 213 - Music Theory VI 3 Credit(s) or approved elective ${ }^{2}$
- MUS 226 - Aural Skills VI 1 Credit(s) or approved elective ${ }^{2}$
- MUS 158 - Chamber Music Ensemble 1 Credit(s) or approved elective

Term Credits: 12

## Cultural Literacy

${ }^{1}$ Meets cultural literacy criteria (one course required).

## Approved Electives

${ }^{2}$ (For students interested in a four-year degree in Music Industry and Production Studies - check with Music Coordinator for advising.)

- MUS 108 - Music in World Cultures 4 Credit(s) ${ }^{1}$
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s) ${ }^{1}$
- MUS 205 - History of Jazz 3 Credit(s) ${ }^{1}$
- MUS 206 - Introduction to Rock Music 3 Credit(s) ${ }^{1}$
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)


## Notes:

- Three courses required in the Humanities category from at least two disciplines (at least 2 prefixes).
- Four courses required in Social Science category, from at least two disciplines (at least 2 prefixes).
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR121, WR122 and either WR123 or WR227 Students taking classes of 4 credits each must take WR 121 Z and either WR $122 Z$ or WR 227 Z .
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.

Phone: 541-956-7500
Email: HumanitiesInfo@roguecc.edu
Web address: www.roguecc.edu/humanities
TTY: Oregon Telecom Relay Service, 711

## Business Pathway

# Business Assistant: Business and Information Specialist, Career Pathway Certificate 


#### Abstract

About the Program

The Business and Information Specialist Career Pathway three-term certificate prepares students for entrylevel office positions requiring "soft skills" in dealing with clients, customers, vendors and the public, as well as filing, records management, computer applications, and basic written communication duties. Courses included in this pathway can be applied toward completion of the one-year Business Assistant certificate and the Associate of Applied Science in Business Technology degree. This program can be completed entirely through online delivery.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Assistant Business and Information Specialist Career Pathway Certificate are:

## Business Communication

Develop professional communications methods appropriate to business situations.
Technology
Use technology to assist with business operations.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Students must complete coursework in their major at a "C" or better level before proceeding to advanced coursework. High school College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificate. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 31

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-12

## Fall

Check in with Advisor

- BA 131 - Introduction to Business Computing 4 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BT 101 - Human Relations in Organizations 3 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 15

## Winter

- BT 178 - Customer Service 3 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- CIS 125WW - Word Processing Applications (Microsoft Word) 3 Credit(s)

Term Credits: 10

## Spring

- BA 285 - Advanced Business Applications: Excel 4 Credit(s) ${ }^{1}$
- BT 111 - Conflict Management 2 Credit(s)


## Term Credits: 6

## Notes:

${ }^{1}$ Students who have successfully completed the 3-credit version of CIS 125 SS will have met the requirement, but will need at least 31 applicable business credits to receive this certificate.

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business Assistant: Customer Service, Career Pathway Certificate 


#### Abstract

About the Program

The Customer Service Career Pathway two-term certificate prepares students for entry-level customer service positions in a variety of fields where the ability to effectively deal with the public is required. Courses included in this pathway can be applied toward completion of the one-year Business Assistant certificate and the Associate of Applied Science in Business Technology degree. This program can be completed entirely through online delivery.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Assistant Customer Service Career Pathway Certificate are:

## Employability Skills

Develop the interpersonal skills necessary to preserve effective working relationships.

## Technology

Use technology to assist with business operations.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Students must complete coursework in their major at a "C" or better level before proceeding to advanced coursework. High school College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificate. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 29

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-12

## Term 1

Check in with Advisor

- BA 131 - Introduction to Business Computing 4 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BT 101 - Human Relations in Organizations 3 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 15

## Term 2

- BA 101 - Introduction to Business 4 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- BT 178 - Customer Service 3 Credit(s)
- BT 105 - Business Ethics 3 Credit(s)

Term Credits: 14

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business Assistant: Retail Sales and Service, Career Pathway Certificate 


#### Abstract

About the Program

The Retail Sales and Service Career Pathway two- to three-term certificate prepares students for entry-level positions in the field of retailing, sales, and merchandising. Courses included in this pathway can be applied toward completion of the one-year Business Assistant certificate and the Associate of Applied Science in Business Technology degree. This program can be completed entirely through online delivery.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Assistant Retail Sales and Service Career Pathway Certificate are:

## Business Communication

Develop professional communication methods that are appropriate to business situations.

## Technology

Use technology to assist with business operations.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Students must complete coursework in their major at a "C" or better level before proceeding to advanced coursework. High school College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificate. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 33

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-12

## Fall

Check in with Advisor

- BA 131 - Introduction to Business Computing 4 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BT 101 - Human Relations in Organizations 3 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 15

## Winter

- BT 114 - Business English II 4 Credit(s)
- BT 121 - Digital Marketing and e-Commerce 4 Credit(s)
- BT 178 - Customer Service 3 Credit(s)


## Term Credits: 11

## Spring

- BA 101 - Introduction to Business 4 Credit(s)
- BT 204 - Project Management 3 Credit(s)

Term Credits: 7

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business Assistant: Small Business Management, Career Pathway Certificate 


#### Abstract

About the Program

The Small Business Management Career Pathway three-term certificate is designed for those individuals who are considering owning and operating their own business. This includes, but not limited to, business majors, students who want to build on skills already learned in the workplace, community members, and students enrolled in other technical programs. Courses included in this pathway can be applied toward completion of the one-year Business Assistant certificate and the Associate of Applied Science in Business Technology degree. This program can be completed entirely through online delivery.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Assistant: Small Business Management Career Pathway Certificate are:

## Analytical Skills

Develop critical thinking by applying problem-solving skills to various areas of business.

## Technology

Use technology to assist with business operations.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies, and the Business Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Students must complete coursework in their major at a "C" or better level before proceeding to advanced coursework. High school College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their pathways certificate. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 40

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-12

## Fall

Check in with Advisor

- BA 131 - Introduction to Business Computing 4 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 16

## Winter

- BA 211 - Financial Accounting I 4 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- BT 101 - Human Relations in Organizations 3 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s)

Term Credits: 14

## Spring

- BT 102 - Introduction to Supervision 3 Credit(s) or BA 206 (only offered in winter term)
- BA 226 - Business Law 4 Credit(s)
- BT 250 - Entrepreneurship 3 Credit(s) spring term only


## Term Credits: 10

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

## Business Assistant Certificate, Certificate of Completion


#### Abstract

About the Program

The Business Assistant four-term certificate program is designed to prepare students for entry-level positions in bookkeeping and small business fields (Accounting Assistant Specialty), administrative fields (Administrative Support Specialty), or supervisory management fields (Assistant Manager Specialty). This program can be completed entirely through online delivery.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Assistant Certificate of Completion are:

## Analytical Skills

Develop critical thinking by applying problem-solving skills techniques to various areas of business.

## Technology

Use technology to assist with business operations.

## Business Ethics

Demonstrate knowledge of ethical and legal behaviors in business.

## Business Communication

Develop professional communication methods appropriate to business situations.

## Employability Skills

Develop the interpersonal skills necessary to preserve effective working relationships.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Students must complete coursework in their major at a "C" or better level before proceeding to advanced coursework. College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of this program can be applied to other certificates and degrees in the career pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students completing all courses in this program with a grade of "C-" or better will earn a Business Assistant certificate. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 53-57

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 susbtitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 susbtitutes for both RD 90 and WR 90), or designated placement.

Prerequisite Credits: 0-12

## Fall

- BT 101 - Human Relations in Organizations 3 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BA 131 - Introduction to Business Computing 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)


## Term Credits: 15

## Winter

- BT 178 - Customer Service 3 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 11

## Spring

- BA 218 - Personal Finance 3 Credit(s)
- BA 211 - Financial Accounting I 4 Credit(s) ${ }^{1}$
- CIS 125WW - Word Processing Applications (Microsoft Word) 3 Credit(s)
- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)


## Term Credits: 12

## Pick a Specialty Track

(6 elective credits required for each track)

## Accounting Assistant

- BA 285 - Advanced Business Applications: Excel 4 Credit(s)
- BA 213 - Managerial Accounting 4 Credit(s)
- BA 177 - Payroll and Tax Procedures 3 Credit(s) fall term only
- BA 228 - Computer Accounting Applications 2 Credit(s) spring term only
- BT 105 - Business Ethics 3 Credit(s) or approved program elective
- BT 102 - Introduction to Supervision 3 Credit(s) or approved program elective

Specialty Track Credits: 19

## Administrative Support

- BA 214 - Business Communications 4 Credit(s)
- BT 105 - Business Ethics 3 Credit(s)
- BT 111 - Conflict Management 2 Credit(s)
- BA 224 - Human Resource Management 3 Credit(s) winter term only or approved program elective
- BA 243 - Social Media Marketing 3 Credit(s) or approved program elective

Specialty Track Credits: 15

## Assistant Manager

- BA 206 - Management Fundamentals 3 Credit(s) winter term only
- BA 226 - Business Law 4 Credit(s)
- BT 102 - Introduction to Supervision 3 Credit(s)
- BA 224 - Human Resource Management 3 Credit(s) winter term only or approved program elective
- BT 204 - Project Management 3 Credit(s) spring term only or approved program elective

Specialty Track Credits: 16

## Approved Program Electives

(not taken as part of core requirement, 6 elective credits per specialty track required)

- BA 199 - Special Studies: Business Var. (1-3) Credit(s)
- BA 206 - Management Fundamentals 3 Credit(s)
- BA 213 - Managerial Accounting 4 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s)
- BA 224 - Human Resource Management 3 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- BA 228 - Computer Accounting Applications 2 Credit(s)
- BA 238 - The Art of Selling 3 Credit(s)
- BA 243 - Social Media Marketing 3 Credit(s)
- BA 249 - Retail Management 3 Credit(s)
- BA 285 - Advanced Business Applications: Excel 4 Credit(s)
- BT 102 - Introduction to Supervision 3 Credit(s)
- BT 105 - Business Ethics 3 Credit(s)
- BT 106 - Advertising 3 Credit(s)
- BT 111 - Conflict Management 2 Credit(s)
- BT 121 - Digital Marketing and e-Commerce 4 Credit(s)
- BT 204 - Project Management 3 Credit(s)
- BT 250 - Entrepreneurship 3 Credit(s)
- Any CIS125 application class not taken to fulfill core or specialtyrequirements 1-4 Credit(s)
- ECON 115 - Introduction to Economics 3 Credit(s)
- WR 110 - Understanding English Grammar 2 Credit(s)
- Any world language 4 Credit(s)


## Notes:

${ }^{1}$ Students who completed BA 211 between summer 2017 and winter 2021 but not BA 212, will require BA 212 to meet the new BA 211 requirement. Please speak with your academic advisor.

For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business Technology, Associate of Applied Science 


#### Abstract

About the Program

The Business Technology two-year degree provides an opportunity for students to learn about the business enterprises in society as well as prepare for various careers. This degree provides for flexibility in selecting elective classes while allowing students to investigate a wide range of areas within the business field. Students who want a general business foundation will be well served by the Business Technology AAS degree. There are also two program options should students want to pursue a specialized focus area. This program can be completed entirely through online delivery.

For students who desire employment as bookkeepers, accounting assistants and billing clerks, the Accounting Option provides advanced study in practical accounting using both manual and computerized accounting systems.

Students who plan to supervise other workers, start their own business enterprises, or work in the sales, advertising or e-commerce sectors, will find the Management and Marketing Option well suited to those career goals.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Technology Associate of Applied Science are:

## Analytical Skills

Utilize critical thinking by applying problem-solving techniques to various areas of business.

## Technology

Use technology to assist with business operations.

## Business Ethics

Apply established legal and ethical behaviors in business.

## Business Communication

Use professional communication methods appropriate to business situations.
Employability Skills
Use the interpersonal skills necessary to preserve effective working relationships.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department head
before being accepted toward core requirements. College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of this program can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

To graduate, students must complete all courses in this program with a grade of "C-" or better. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: BusinesssInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement.
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-12

## Fall

Check in with Advisor

- BA 101 - Introduction to Business 4 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BA 131 - Introduction to Business Computing 4 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 16

## Winter

- BT 101 - Human Relations in Organizations 3 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s)
- CIS 125WW - Word Processing Applications (Microsoft Word) 3 Credit(s)


## Term Credits: 13

## Spring

- BT 204 - Project Management 3 Credit(s)
- BT 111 - Conflict Management 2 Credit(s)
- BA 218 - Personal Finance 3 Credit(s)
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $218 Z$
- BA 243 - Social Media Marketing 3 Credit(s)


## Term Credits: 15

## Fall

## Check in with Advisor

- BA 211 - Financial Accounting I 4 Credit(s) ${ }^{1}$
- BT 105 - Business Ethics 3 Credit(s)
- ECON 115 - Introduction to Economics 3 Credit(s)
- BT 106 - Advertising 3 Credit(s) BT 106 fall term only or approved program elective - 15 elective credits required
- HE 112 - Emergency First Aid 1 Credit(s) or HE 250, or HPE 295, or HE 252, or HE 261


## Term Credits: 14

## Winter

- BT 121 - Digital Marketing and e-Commerce 4 Credit(s) BT 121 winter term only or approved program elective - 15 elective credits required
- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- BT 178 - Customer Service 3 Credit(s)
- BA 224 - Human Resource Management 3 Credit(s) BA 224 winter term only or approved program elective - 15 elective credits required
- BA 214 - Business Communications 4 Credit(s)


## Term Credits: 16

## Spring

- BA 228 - Computer Accounting Applications 2 Credit(s) BA 228 spring term only or approved program elective 15 elective credits required
- BA 280 - Cooperative Work Experience/Business Var. (1-3) Credit(s) or BT 265
- BA 285 - Advanced Business Applications: Excel 4 Credit(s)
- BT 250 - Entrepreneurship 3 Credit(s) BT 250 spring term only or approved program elective - 15 elective credits required
- BA 226 - Business Law 4 Credit(s)


## Term Credits: 16

## Approved Program Electives

Select 15 credits from courses not otherwise required within the base program or option area.
Optimal electives have been built into the program map above. See your program advisor.

- BA 177 - Payroll and Tax Procedures 3 Credit(s)
- BA 199 - Special Studies: Business Var. (1-3) Credit(s)
- BA 206 - Management Fundamentals 3 Credit(s)
- BA 213 - Managerial Accounting 4 Credit(s)
- BA 224 - Human Resource Management 3 Credit(s)
- BA 228 - Computer Accounting Applications 2 Credit(s)
- BA 238 - The Art of Selling 3 Credit(s)
- BA 249 - Retail Management 3 Credit(s)
- BA 280 - Cooperative Work Experience/Business Var. (1-3) Credit(s)
- BT 102 - Introduction to Supervision 3 Credit(s)
- BT 106 - Advertising 3 Credit(s)
- BT 121 - Digital Marketing and e-Commerce 4 Credit(s)
- BT 250 - Entrepreneurship 3 Credit(s)
- Any CIS 125 applications course (except those taken to fulfill core requirements 1-6 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- WR 110 - Understanding English Grammar 2 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- Any world language 4-12 Credit(s)


## Notes:

${ }^{1}$ Students who completed BA 211 between summer 2017 and winter 2021 but not BA 212, will require BA 212 to meet the new BA 211 requirement. Please speak with your academic advisor.

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business Technology- Accounting Option, Associate of Applied Science 


#### Abstract

About the Program

The Business Technology two-year degree provides an opportunity for students to learn about the business enterprises in society as well as prepare for various careers. This degree provides for flexibility in selecting elective classes while allowing students to investigate a wide range of areas within the business field. Students who want a general business foundation will be well served by the Business Technology AAS degree. There are also two program options should students want to pursue a specialized focus area. This program can be completed entirely through online delivery.

For students who desire employment as bookkeepers, accounting assistants and billing clerks, the Accounting Option provides advanced study in practical accounting using both manual and computerized accounting systems.

Students who plan to supervise other workers, start their own business enterprises, or work in the sales, advertising or e-commerce sectors, will find the Management and Marketing Option well suited to those career goals.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Technology Associate of Applied Science -
Accounting Option are:

## Analytical Skills

Utilize critical thinking by applying problem-solving techniques to various areas of business.

## Technology

Use technology to assist with business operations.

## Business Ethics

Apply established legal and ethical behaviors in business.

## Business Communication

Use professional communication methods appropriate to business situations.

## Employability Skills

Use the interpersonal skills necessary to preserve effective working relationships.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

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

Credits earned in the successful completion of this program can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

To graduate, students must complete all courses in this program with a grade of "C-" or better. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Prerequisite Credits: 0-12

## Fall

Check in with Advisor

- BA 101 - Introduction to Business 4 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BA 131 - Introduction to Business Computing 4 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 16

## Winter

- BT 101 - Human Relations in Organizations 3 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- CIS 125WW - Word Processing Applications (Microsoft Word) 3 Credit(s)


## Term Credits: 14

## Spring

- BA 211 - Financial Accounting I 4 Credit(s) ${ }^{1}$
- BT 105 - Business Ethics 3 Credit(s)
- BA 285 - Advanced Business Applications: Excel 4 Credit(s)
- BT 204 - Project Management 3 Credit(s)
- BA 243 - Social Media Marketing 3 Credit(s)


## Term Credits: 17

## Fall

Check-in with Advisor

- BA 213 - Managerial Accounting 4 Credit(s)
- BT 102 - Introduction to Supervision 3 Credit(s) or BT 106 or approved program elective ( 6 credits required)
- ECON 115 - Introduction to Economics 3 Credit(s)
- BA 177 - Payroll and Tax Procedures 3 Credit(s) fall term only
- HE 112 - Emergency First Aid 1 Credit(s) or HE 250, or HE 252, or HPE 295, or HE 261


## Term Credits: 14

## Winter

- BA 224 - Human Resource Management 3 Credit(s) or BA 206; BA 224 winter term only or approved program elective ( 6 credits required)
- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s)
- BT 178 - Customer Service 3 Credit(s)
- BA 214 - Business Communications 4 Credit(s)


## Term Credits: 15

## Spring

- BA 228 - Computer Accounting Applications 2 Credit(s) spring term only
- BA 280 - Cooperative Work Experience/Business Var. (1-3) Credit(s) or BT 265
- BT 111 - Conflict Management 2 Credit(s)
- COMM $111 Z$ - Public Speaking 4 Credit(s) or COMM $218 Z$
- BA 218 - Personal Finance 3 Credit(s)


## Term Credits: 14

## Approved Program Electives

## Select 6 credits from courses listed below.

Optimal electives have been built into the program map above. See your program advisor.

- BA 199 - Special Studies: Business Var. (1-3) Credit(s)
- BA 206 - Management Fundamentals 3 Credit(s)
- BA 224 - Human Resource Management 3 Credit(s)
- BA 238 - The Art of Selling 3 Credit(s)
- BA 249 - Retail Management 3 Credit(s)
- BA 280 - Cooperative Work Experience/Business Var. (1-3) Credit(s)
- BT 102 - Introduction to Supervision 3 Credit(s)
- BT 106 - Advertising 3 Credit(s)
- BT 121 - Digital Marketing and e-Commerce 4 Credit(s)
- BT 250 - Entrepreneurship 3 Credit(s)
- Any CIS 125 applications course (except those taken to fulfill core requirements) 1-6 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- WR 110 - Understanding English Grammar 2 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- Any world language 4 Credit(s)


## Notes:

${ }^{1}$ Students who completed BA 211 between summer 2017 and winter 2021 but not BA 212, will require BA 212 to meet the new BA 211 requirement. Please speak with your academic advisor.

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business Technology- Management / Marketing Option, Associate of Applied Science 


#### Abstract

About the Program

The Business Technology two-year degree provides an opportunity for students to learn about the business enterprises in society as well as prepare for various careers. This degree provides for flexibility in selecting elective classes while allowing students to investigate a wide range of areas within the business field. Students who want a general business foundation will be well served by the Business Technology AAS degree. There are also two program options should students want to pursue a specialized focus area. This program can be completed entirely through online delivery.

For students who desire employment as bookkeepers, accounting assistants and billing clerks, the Accounting Option provides advanced study in practical accounting using both manual and computerized accounting systems.

Students who plan to supervise other workers, start their own business enterprises, or work in the sales, advertising or e-commerce sectors, will find the Management and Marketing Option well suited to those career goals.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Business Technology Associate of Applied Science Management/Marketing Option program are:

## Analytical Skills

Utilize critical thinking by applying problem-solving techniques to various areas of business.

## Technology

Use technology to assist with business operations.

## Business Ethics

Apply established legal and ethical behaviors in business.

## Business Communication

Use professional communication methods appropriate to business situations.

## Employability Skills

Use the interpersonal skills necessary to preserve effective working relationships.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Business Technology Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department head before being accepted toward core requirements. College Now credit will be accepted in accordance with the current articulation agreement.

Credits earned in the successful completion of this program can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

To graduate, students must complete all courses in this program with a grade of "C-" or better. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-93

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Prerequisite Credits: 0-12

## Fall

Check in with Advisor

- BA 101 - Introduction to Business 4 Credit(s)
- BT 113 - Business English I 4 Credit(s)
- BA 131 - Introduction to Business Computing 4 Credit(s)
- BT 160 - Business Math 4 Credit(s)


## Term Credits: 16

## Winter

- BT 101 - Human Relations in Organizations 3 Credit(s)
- BT 114 - Business English II 4 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s)
- CIS 125WW - Word Processing Applications (Microsoft Word) 3 Credit(s)


## Term Credits: 13

## Spring

- BT 105 - Business Ethics 3 Credit(s)
- BT 111 - Conflict Management 2 Credit(s)
- BT 204 - Project Management 3 Credit(s)
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $218 Z$
- BA 218 - Personal Finance 3 Credit(s)


## Term Credits: 15

## Fall

Check in with Advisor

- BT 106 - Advertising 3 Credit(s) fall term only
- BA 211 - Financial Accounting I 4 Credit(s) ${ }^{1}$
- ECON 115 - Introduction to Economics 3 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)


## Term Credits: 16

## Winter

- BA 214 - Business Communications 4 Credit(s)
- BT 121 - Digital Marketing and e-Commerce 4 Credit(s) winter term only
- BT 178 - Customer Service 3 Credit(s)
- BA 206 - Management Fundamentals 3 Credit(s) winter term only
- BA 224 - Human Resource Management 3 Credit(s) or approved program elective - 2-3 electives required


## Term Credits: 17

## Spring

- HE 112 - Emergency First Aid 1 Credit(s) or HE 250, HE 252, HPE 295, HE 261
- BA 280 - Cooperative Work Experience/Business Var. (1-3) Credit(s) or BT 265
- BA 285 - Advanced Business Applications: Excel 4 Credit(s)
- BA 243 - Social Media Marketing 3 Credit(s)
- BT 102 - Introduction to Supervision 3 Credit(s)


## Term Credits: 14

## Approved Program Electives

Select 2-3 credits from courses not otherwise required within the base program or option area.
Optimal electives have been built into the program map above. See your program advisor.

- BA 177 - Payroll and Tax Procedures 3 Credit(s)
- BA 199 - Special Studies: Business Var. (1-3) Credit(s)
- BA 213 - Managerial Accounting 4 Credit(s)
- BA 224 - Human Resource Management 3 Credit(s)
- BA 228 - Computer Accounting Applications 2 Credit(s)
- BA 238 - The Art of Selling 3 Credit(s)
- BA 249 - Retail Management 3 Credit(s)
- BA 280 - Cooperative Work Experience/Business Var. (1-3) Credit(s)
- BT 250 - Entrepreneurship 3 Credit(s)
- Any CIS 125 applications course (except those taken to fulfill core requirements) 1-3 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- WR 110 - Understanding English Grammar 2 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- Any world language 4-12 Credit(s)


## Notes:

${ }^{1}$ Students who completed BA 211 between summer 2017 and winter 2021 but not BA 212, will require BA 212 to meet the new BA 211 requirement. Please speak with your academic advisor.

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business - Associate of Science Oregon Transfer Degree 


#### Abstract

About the Program

The statewide Associate of Science Oregon Transfer degree in Business is designed for students transferring to baccalaureate degree programs as business majors. Those completing the ASOT-Business degree are assured junior level standing for registration purposes and will have met the lower division general education requirements of any Oregon public university. Grade point average requirements for entry into the university's major are not necessarily satisfied by the ASOT - Business degree. Students should be aware that if they transfer before completing this degree, courses will be evaluated individually toward the general education requirements of the college of their choice. This program can be completed entirely through online delivery.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Associate of Science Oregon Transfer - Business are:

## Analytical Skills

Develop critical thinking by applying problem-solving techniques to various areas of business.

## Technology

Use technology to assist with business operations.

## Fundamentals of Accounting

Develop a comprehensive understanding of fundamental accounting concepts.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

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

## Graduation Requirements

Students must complete a minimum of 90 term credits of lower division collegiate courses with a minimum grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the ASOTBusiness is awarded.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given
term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)
This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement. If taken, this will count as an elective.


## Prerequisite Credits: 0-7

## Fall

## Check in with Advisor

- WR 121Z - Composition I 4 Credit(s) ${ }^{2}$
- STAT $243 Z$ - Elementary Statistics 14 Credit(s)
- BA 131 - Introduction to Business Computing 4 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s) ${ }^{1}$ or approved Social Science transfer course.


## Term Credits: 16

## Winter

- WR $227 Z$ - Technical Writing 4 Credit(s) ${ }^{2}$ or WR $122 Z$
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $218 Z$
- MTH 111Z - Precalculus I: Functions 4 Credit(s) Math course dependent on transferring institution; Speak with an advisor
- BA 101 - Introduction to Business 4 Credit(s) ${ }^{3}$


## Term Credits: 16

## Spring

- BA 211 - Financial Accounting I 4 Credit(s) ${ }^{4}$
- BA 226 - Business Law 4 Credit(s)
- ART 204 - History of Art I 4 Credit(s) ${ }^{1}$ or approved Humanities transfer course
- GS 104 - Physical Science: Physics 3 Credit(s) or approved Lab Science transfer course
- GS 104L - Physical Science: Physics Lab 1 Credit(s) or approved Lab Science transfer course

Term Credits: 16

## Fall

Check in with Advisor

- BA 213 - Managerial Accounting 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s) ${ }^{1}$ or approved Humanities transfer course
- BI 101 - Introduction to Biology I 3 Credit(s) or approved Lab Science transfer course
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved Lab Science transfer course


## Term Credits: 16

## Winter

- MTH 244 - Inferential Statistics 4 Credit(s) or MTH $112 Z$ - math course dependent on transferring institution - speak with an advisor. MTH 244 has a prerequisite of BA 285
- BI 102 - Introduction to Biology II 3 Credit(s) or approved Lab Science transfer course
- BI 102L - Introduction to Biology II Lab 1 Credit(s) or approved Lab Science transfer course
- PHL 102 - Ethics 4 Credit(s) or approved Humanities transfer course


## Term Credits: 12

## Spring

- G 100 - Fundamentals of Geology 3 Credit(s) or any approved Science transfer course
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) ${ }^{1}$ or approved Social Science transfer course
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) Elective class - check in with advisor to see if this is needed and appropriate for path. Up to 8 elective credits, if needed.


## Term Credits: 14

## Mathematics

Three courses required. Students should consult university-specific information to determine any additional mathematics requirements.

- STAT $243 Z$ - Elementary Statistics I 4 Credit(s)


## Plus, Two Additional Math Courses From the Following List:

- MTH $111 Z$ - Precalculus I: Functions 4 Credit(s)
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s)
- MTH 211 - Fundamentals of Elementary Math I 4 Credit(s)
- MTH 212 - Fundamentals of Elementary Math II 4 Credit(s)
- MTH 213 - Fundamentals of Elementary Math III 4 Credit(s)
- MTH 244 - Inferential Statistics 4 Credit(s)
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s)
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s)
- MTH 253 - Calculus III (Infinite Series) 5 Credit(s)
- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s)
- MTH 256 - Differential Equations 5 Credit(s)
- MTH 261 - Linear Algebra 5 Credit(s)


## Distribution Requirements

Must include one course from any discipline that meets the statewide criteria for cultural literacy. ${ }^{1}$

## Humanities (9-12 Credits)

Choose three courses from at least two disciplines/prefixes. Courses must be at least 3 credits each and exclude first-year world language courses; second-year world language is acceptable.

- ART 115 - Basic Design (Composition) 3 Credit(s)
- ART 116 - Basic Design (Color Theory) 3 Credit(s)
- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 132 - Introduction to Drawing (Line) 3 Credit(s)
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s) ${ }^{1}$
- ART 205 - History of Art II 4 Credit(s) ${ }^{1}$
- ART 206 - History of Art III 4 Credit(s) ${ }^{1}$
- COMM 100Z - Introduction to Communication 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s) ${ }^{1}$
- COMM 201 - Media and Society 4 Credit(s)
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s)
- COMM 237 - Communication and Gender 4 Credit(s) ${ }^{1}$
- COMM 270 - Argumentation and Debate 3 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s) ${ }^{1}$
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s) ${ }^{1}$
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s) ${ }^{1}$
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s) ${ }^{1}$
- ENG 260 - Introduction to Women Writers 4 Credit(s) ${ }^{1}$
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s) ${ }^{1}$
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s) ${ }^{1}$
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s) ${ }^{1}$
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s) ${ }^{1}$
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s) ${ }^{1}$
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s) ${ }^{1}$
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s) ${ }^{1}$
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s) ${ }^{1}$
- IS 110 - Introduction to International Studies I 4 Credit(s) ${ }^{1}$
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s) ${ }^{1}$
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s) ${ }^{1}$
- MUS 205 - History of Jazz 3 Credit(s) ${ }^{1}$
- MUS 206 - Introduction to Rock Music 3 Credit(s) ${ }^{1}$
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s) ${ }^{1}$
- REL 243 - Nature, Religion and Ecology 4 Credit(s) ${ }^{1}$
- SPAN 201 - Second Year Spanish 14 Credit(s) ${ }^{1}$
- SPAN 202 - Second Year Spanish II 4 Credit(s) ${ }^{1}$
- SPAN 203 - Second Year Spanish III 4 Credit(s) ${ }^{1}$
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- TA 142 - Fundamentals of Acting II 4 Credit(s)
- TA 143 - Fundamentals of Acting III 4 Credit(s)
- TA 144 - Improvisational Theater I 4 Credit(s)
- TA 145 - Improvisational Theater II 4 Credit(s)
- TA 146 - Improvisational Theater III 4 Credit(s)
- TA 153 - Theater Rehearsal and Performance 4 Credit(s)


## Social Science (6-8 Credits)

Approved social science elective courses from the list below - 6-8 credits.

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) ${ }^{1}$
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s) ${ }^{1}$
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s) ${ }^{1}$
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s) ${ }^{1}$
- HST 201 - U.S. History through Reconstruction 4 Credit(s) ${ }^{1}$
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s) ${ }^{1}$
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 215 - Lifespan Human Development 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 228 - Introduction to Positive Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s) ${ }^{1}$
- SOC 205 - American Society 4 Credit(s) ${ }^{1}$
- $\quad$ SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) ${ }^{1}$
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 221 - Juvenile Delinquency 4 Credit(s) or CJ 201
- SOC 225 - Social Problems and Solutions 4 Credit(s) ${ }^{1}$
- SOC 228 - Environment and Society 4 Credit(s) ${ }^{1}$
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) ${ }^{1}$ or HST $259{ }^{1}$
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s) or CJ 243
- SOC 244 - Introduction to Criminology 4 Credit(s) or CJ 200


## Science (15-17 Credits)

Complete four courses from at least two disciplines/prefixes from the following list, three of which must be lab courses.

- BI 100SB - Biology of Human Body Systems 3 Credit(s) (non-lab course)
- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 121L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L and Recitation
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- G 100 - Fundamentals of Geology 3 Credit(s) (non-lab course)
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L


## Electives

Complete a sufficient number of transfer-level elective (numbered 100 and above) courses to meet the total degree requirements of at least $\mathbf{9 0}$ credits.

## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).
${ }^{2}$ Students who took writing classes of 3 credits each must have WR 121Z, WR $122 Z$ and either WR123 or WR 227Z. Students taking classes of 4 credits each must take WR $121 Z$ and either WR $122 Z$ or WR $227 Z$.
${ }^{3}$ Students who have completed BA 101 as a 3-credit course have met this requirement.
${ }^{4}$ Students who completed BA 211 between summer 2017 and winter 2021 but not BA 212, will require BA 212 to meet the new BA 211 requirement. Please speak with your academic advisor.

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Business Transfer to Southern Oregon University, Associate of Science 


#### Abstract

About the Program

The Associate of Science degree (Business) has been developed with the cooperation and support of Southern Oregon University (SOU). The degree is articulated with SOU's Business program. The program offers an excellent balance of business and general education courses that support advanced study in the field of business. This program can be completed entirely through online delivery.

Students should contact the SOU School of Business early in the first year of the 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, courses will be evaluated individually toward the general education requirements in effect at SOU.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Associate of Science Business Transfer to Southern Oregon University are:

## Analytical Skills

Develop critical thinking skills by applying problem-solving techniques to various areas of business.

## Technology

Use technology to assist with business operations.

## Accounting Fundamentals

Develop a comprehensive understanding of fundamental accounting concepts.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

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

## Graduation Requirements

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

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor for any questions in preparing to complete your transfer degree.

## Total Program Credits: 90

Program email address: BusinessInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or MTH 96
- WR 115 - Introduction to Expository Writing 3 Credit(s) If taken, will count as an elective


## Prerequisite Credits: 0-7

## Fall

## Check-in with Advisor

- BA 101 - Introduction to Business 4 Credit(s)
- WR 121Z - Composition I 4 Credit(s)
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s)
- BA 131 - Introduction to Business Computing 4 Credit(s)


## Term Credits: 16

## Winter

- WR 227Z - Technical Writing 4 Credit(s) or WR $122 Z$
- PHL 102 - Ethics 4 Credit(s) or approved Humanities transfer course (credits vary)
- BA 285 - Advanced Business Applications: Excel 4 Credit(s) Elective toward total 15-22, speak to advisor about appropriate course; This class is a prerequisite for BA 282
- BA 218 - Personal Finance 3 Credit(s) Elective toward total 15-22, speak to advisor about appropriate course


## Term Credits: 15

## Spring

- ECON 201 - Principles of Microeconomics 4 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- ART 204 - History of Art I 4 Credit(s) or approved Humanities transfer course (credits vary)
- G 100 - Fundamentals of Geology 3 Credit(s) or approved Science transfer course (credits vary)


## Term Credits: 15

## Fall

## Check-in with Advisor

- BA 211 - Financial Accounting I 4 Credit(s) ${ }^{1}$
- SPAN 101 - First Year Spanish I 4 Credit(s) or SPAN 201; Elective toward total 15-22, speak to advisor about appropriate course
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $218 Z$ or COMM 225
- BI 101 - Introduction to Biology I 3 Credit(s) or approved Lab Science transfer course (credits vary)
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)


## Term Credits: 16

## Winter

- SPAN 102 - First Year Spanish II 4 Credit(s) or SPAN 202; Elective toward total $15-22$ speak to advisor about appropriate course
- BA 282 - Applied Business Statistics 4 Credit(s)
- BI 102 - Introduction to Biology II 3 Credit(s) or approved Lab Science transfer course (credits vary)
- BI 102L - Introduction to Biology II Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)
- BA 213 - Managerial Accounting 4 Credit(s)


## Term Credits: 16

## Spring

- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s) or approved Humanities transfer course (credits vary)
- SPAN 103 - First Year Spanish III 4 Credit(s) or SPAN 203; Elective toward total 15-22, speak to advisor about appropriate course

Term Credits: 12

## Humanities

## Complete at least three courses from the following list, 9-12 credits.

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Science

Select three courses from the following list - at least two courses must have labs. Note that only one course can be a regional field studies course indicated by asterisk.)

- BI 100SB - Biology of Human Body Systems 3 Credit(s) (non-lab course)
- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L and Recitation
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- CIS 195 - Web Authoring I 4 Credit(s) (non-lab course)
- ENV 111 - Introduction to Environmental Science 3 Credit(s) (non-lab course)
- G 100 - Fundamentals of Geology 3 Credit(s) (non-lab course)
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GEOG 100 - Introduction to Physical Geography 3 Credit(s) (non-lab course)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L
- GS 170 - Regional Field Studies 3 Credit(s) AND GS 170L *
- PH 201 - General Physics I 3 Credit(s) AND PH 201L and Recitation
- PH 202 - General Physics II 3 Credit(s) AND PH 202L and Recitation
- PH 203 - General Physics III 3 Credit(s) AND PH 203L and Recitation
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) AND PH 211L and Recitation
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) AND PH 212L and Recitation
- PH 213 - General Physics (Calculus Based) III 3 Credit(s) AND PH 213L and Recitation


## Electives

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

## Notes:

${ }^{1}$ Students who completed BA 211 between summer 2017 and winter 2021 but not BA 212, will require BA 212 to meet the new BA 211 requirement. Please speak with your academic advisor.

## For more information, contact the Business Department:

Phone: 541-956-7500
Email: BusinessInfo@roguecc.edu
Web address: www.roguecc.edu/business
TTY: Oregon Telecom Relay Service, 711

# Health Professions, Public Safety Pathway 

## Emergency Medical Services: EMT, Career Pathway Certificate


#### Abstract

About the Program The Emergency Medical Technician (EMT) two-term pathway certificate offers career training for entry-level personnel in EMT. Successful completion of the EMT course leads to eligibility to sit for the state and National Registry EMT exams. Successful completion of the curriculum leads to a two-term RCC pathway certificate and the ability to apply for positions as an EMT in hospital emergency departments and ambulance services. It is also the minimum requirement for some firefighter positions.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Emergency Medical Services EMT Career Pathway Certificate are:

Perform an adequate patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies.

Demonstrate effective communication, cultural competency, and conflict management and intervention skills for people in crisis.

Implement self-care strategies and techniques to address the impact of stress and emotional trauma on emergency providers.

Demonstrate workplace expectations regarding attendance, safety, conduct, and professionalism.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

This program requires an application and satisfaction of certain course admission criteria prior to enrolling in the EMT courses (ES 131, ES 132). Information is available on the Emergency Medical Services (EMS) Department website (https://www.roguecc.edu/dept/emergencyServices/ems.asp) or at the Emergency Services (ES) Department office located at the RCC Table Rock Campus. Students are strongly encouraged to meet with an ES Department advisor prior to beginning any coursework.

Students must be at least 17 years old to apply to the EMT course. Students must be a high school graduate or have a GED or equivalent to be eligible to sit for the state and National Registry EMT exams. In addition, students will be required to complete all screening requirements outlined in OAR 409-030-0190 and additional RCC requirements.

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Emergency Services (ES) Department Chair's recommendation. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the ES Department chair before being accepted toward core requirements.

## Graduation Requirements

Students completing all credits outlined in this program with a grade of "C-" or better will earn an EMT pathway certificate. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 25-32

Program Email Address: EmergencyServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement.
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) designated placement.


## Prerequisite Credits: 0-12

## Term 1

Check-in with Advisor

- ES 105 - Introduction to Emergency Services 4 Credit(s)
- ES 131 - Emergency Medical Technician - Part I 6 Credit(s)
- ES 295 - Health and Fitness for Emergency Service Workers 3 Credit(s) or HPE 295


## Term Credits: 13

## Term 2

- ES 132 - Emergency Medical Technician - Part II 6 Credit(s) ES 131 must be taken in prior term.
- ES 268 - Emergency Service Rescue 3 Credit(s)
- ES 171 - Emergency Vehicle Operations 2 Credit(s)
- Approved program elective (see list below.) Check with advisor.


## Term Credits: 12

## Approved Electives (1-8 Credits Allowed)

- Any college-level (100 or 200 numbered) transferrable non-studio humanities, social science, or science electives (variable credits), and/or
- Any ES, FRP or EMS 100 or higher course (variable credits), and/or
- COMM 100Z - Introduction to Communication 4 Credit(s) or higher-level COMM course, and/or
- ES 205 - Crisis Intervention and Management for Emergency Services Workers 3 Credit(s) , and/or
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math, and/or
- WR 115 - Introduction to Expository Writing 3 Credit(s)

For more information, contact the Emergency Services Department:

Phone: 541-956-7500
Email: EmergencyServicesInfo@roguecc.edu
Web address: www.roguecc.edu/emergencyservices
TTY: Oregon Telecom Relay Service, 711

# Fire Science: Firefighter, Career Pathway Certificate 


#### Abstract

About the Program The fire service is a highly dynamic profession that offers a variety of daily challenges to the professionals who work within it. The primary mission of the RCC Fire Science program is to prepare students for careers as firefighters. Students who complete this three-term program will have met the requirements set by regional fire departments in Southern Oregon for the entry-level position of firefighter. The program delivers the highest education available by following standards set by the National Fire Protection Association (NFPA) and the Fire Emergency Services Higher Education (FESHE) program. Fire Science program coursework is accredited by the Oregon Department of Public Safety Standards and Training.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Fire Science Firefighter Career Pathway Certificate are:

Perform safe and effective fire suppression techniques and hazard mitigation utilizing tools and appliances under high levels of stress.

Perform an adequate patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies.

Demonstrate leadership, teamwork and decision-making in the management of multiple personnel on emergency scenes.

Describe and use defensive and safe driving techniques and the operation of emergency vehicles and fire pumps.

## Entry Requirements

Students are required to complete the 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 through the Placement Process. The Fire Science program advisor will work with each student to design an individualized sequence of instruction.

Students must be at least 17 years old to apply to the ES 131 course. Students must be a high school graduate or have a GED or equivalent for certification. In addition, students will be required to complete all screening requirements outlined in OAR 409-030-0190 and additional RCC requirements.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Fire Science Program Coordinator's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificate. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 38

Program Email Address: EmergencyServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement

Prerequisite Credits: 0-8

## Term 1

Check-in with Advisor

- FRP 251 - Firefighter Essentials I 8 Credit(s) ${ }^{1}$
- FRP 256 - Fire Behavior and Combustion 3 Credit(s)
- FRP 261 - Hazardous Materials Awareness and Operations 2 Credit(s)


## Term Credits: 12

## Term 2

- ES 131 - Emergency Medical Technician - Part I 6 Credit(s)
- FRP 233 - Firefighter Safety and Survival 3 Credit(s)
- FRP 252 - Firefighter Essentials II 4 Credit(s)


## Term Credits: 13

## Term 3

- ES 105 - Introduction to Emergency Services 4 Credit(s)
- ES 132 - Emergency Medical Technician - Part II 6 Credit(s)
- ES 295 - Health and Fitness for Emergency Service Workers 3 Credit(s)


## Term Credits: 13

## Notes:

${ }^{1}$ FRP 251 taken previously for 8 credits but with a separate lab is also acceptable.

## For more information, contact the Fire Science Department:

Phone: 541-956-7500
Email: EmergencyServicesInfo@roguecc.edu
Web address: www.roguecc.edu/emergencyservices
TTY: Oregon Telecom Relay Service, 711

# Massage Therapy: Entry-level Therapist, Career Pathway Certificate 

## Fall 2024 Program Admission


#### Abstract

About the Program

The Entry-level Massage Therapist three-term career pathways certificate meets the requirements for licensure application to the Oregon Board of Massage Therapists and the Federation of State Massage Therapy Board's Licensing Examination and National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) certification. Oregon law, however, sets the qualifications for certification of applicants. Grounds for denial of state licensure include physical or mental conditions that would make an applicant unable to safely conduct a massage, or conviction of a crime that bears a demonstrable relationship to the practice of massage. See Oregon Law 687.081.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Massage Therapy Career Pathway Certificate are:

Demonstrate professional communications, regulations, laws and ethics.
Classify, describe and apply treatments.
Locate, identify and describe the function of the body systems.
Recognize pathologic conditions and determine appropriate treatment.
Assess, create, implement and document individualized treatment plans.
Develop and implement a personalized career plan.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Massage Therapy is a limited-entry program. Interested applicants must attend a mandatory massage therapy information meeting and complete a short quiz
(https://www.roguecc.edu/dept/massage/infoSessions.asp). The timeline for submitting program application materials for fall 2024 admission is April 1 to June 24, 2024. Applicants will be accepted on a first-come, first-served basis once prerequisites are completed. It is recommended that students receive influenza, varicella-zoster, rubella, Hepatitis A, and Hepatitis B series immunizations prior to entering the program. A tuberculin test, drug test, criminal background check and COVID vaccination may be required for some Cooperative Work Experience activities. Students must attend a mandatory orientation prior to the beginning of fall term.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Massage Therapy Department Chair's approval. Sealed official transcripts and a transfer credit evaluation request must be submitted to RCC's Enrollment Services Office by May 1 to be considered in the application process. The transfer credit evaluation request may only be submitted online.

## Completion Requirements

Students completing all credits in this program with a grade of "C-" or better will receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Credits earned in this program can be applied to the Associate of General Studies degree.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 44

Program email address: MassageTherapyInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- View massage therapy information video at https://www.roguecc.edu/dept/massage/infoSessions.asp and complete the quiz.
- CG 100-College Success and Survival 2 Credit(s) or transcript showing at least 30 college credits within any academic year and at least a 2.0 cumulative GPA
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement.
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.
- AH 100 - Medical Terminology: Introduction 3 Credit(s) Recommended Preparatory Course


## Prerequisite Credits: 0-17

**Apply to the Massage Program at https://go.roguecc.edu/department/massage-therapy/massage-therapy/application-process
between April 1 and June 24 for Fall entry.

## Fall

Check-in with Advisor

- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) summer/fall terms only
- BI 121L - Elementary Anatomy and Physiology I Lab 1 Credit(s) summer/fall terms only
- MT 100 - Massage I - Basic Swedish 2 Credit(s) fall term only
- MT 100L - Massage I - Basic Swedish Lab 1 Credit(s) fall term only
- MT 101-Asian Bodywork I 1 Credit(s) fall term only
- MT 101L - Asian Bodywork I Lab 1 Credit(s) fall term only
- MT 108 - Kinesiology for Massage Therapists 3 Credit(s) fall term only
- MT 108L - Kinesiology for Massage Therapists Lab 1 Credit(s) fall term only
- MT 115-Trigger Point Therapy 1 Credit(s) or MT 114. Only 2 program elective credits allowed. Electives for fall-MT 115 / MT 115L and MT 114.
- MT 115L - Trigger Point Therapy Lab 1 Credit(s) or MT 114. Only 2 program elective credits allowed. Electives for fall - MT 115 / MT 115L and MT 114.


## Term Credits: 15

## Winter

- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) BI 122/BI 122L is offered fall/winter term only
- BI 122L - Elementary Anatomy and Physiology II Lab 1 Credit(s) fall/winter term only
- MT 102 - Massage II - Swedish 2 Credit(s) winter term only
- MT 102L - Massage II-Swedish Lab 1 Credit(s) winter term only
- MT 105 - Massage Therapeutics: Hydrotherapy and Oncology Massage 1 Credit(s) winter term only
- MT 105L - Massage Therapeutics: Hydrotherapy and Oncology Massage Lab 1 Credit(s) winter term only
- MT 106 - Integrated Studies in Massage I - Upper Body 1 Credit(s) winter term only
- MT 106L - Integrated Studies in Massage I - Upper Body Lab 1 Credit(s) winter term only
- MT 109 - Pathology for Massage Therapists 4 Credit(s) winter term only
- MT 121 - Asian Bodywork II 1 Credit(s) winter/spring term only
- MT 121L - Asian Bodywork II Lab 1 Credit(s) winter/spring term only
- Only 2 program elective credits allowed. Option for winter MT 111/MT 111L

Term Credits: 17

## Spring

- MT 103 - Massage III-Swedish 1 Credit(s) spring term only
- MT 103L - Massage III-Swedish Lab 1 Credit(s) spring term only
- MT 107 - Integrated Studies in Massage II - Lower Body 1 Credit(s) spring term only
- MT 107L - Integrated Studies in Massage II - Lower Body Lab 1 Credit(s) spring term only
- MT 116 - Massage Exam Review 2 Credit(s) spring term only
- MT 120A - Business for Massage Therapists - Part A 1 Credit(s) spring term only
- MT 120B - Business Practices for Massage Therapists - Part B 2 Credit(s) spring term only
- MT 180 - Cooperative Work Experience / Massage Therapy 3 Credit(s) additional credits are elective
- MT 180S - Cooperative Work Experience / Massage Seminar 1 Credit(s) must be taken with MT 180
- HE 261 - CPR/Basic Life Support Provider 1 Credit(s)
- Only 2 program elective credits allowed. Options for spring - MT 112/MT 112L, MT 113/MT 113L, MT 118/MT 118L


## Term Credits: 12

## Approved Program Electives (2 Credits Required)

- MT 111 - Sports Massage 1 Credit(s)
- MT 111L - Sport Massage Lab 1 Credit(s)
- MT 112 - Massage for Pregnancy and the Infant/Child 1 Credit(s)
- MT 112L - Massage for Pregnancy and the Infant/Child Lab 1 Credit(s)
- MT 113 - Myofascial Release 1 Credit(s)
- MT 113L - Myofascial Release Lab 1 Credit(s)
- MT 114 - Massage Therapy Study Skills Lab 1 Credit(s)
- MT 115 - Trigger Point Therapy 1 Credit(s)
- MT 115L - Trigger Point Therapy Lab 1 Credit(s)
- MT 117 - Body Maintenance for Massage Therapists 1 Credit(s)
- MT 117L - Body Maintenance for Massage Therapists Lab 1 Credit(s)
- MT 118 - Deep Tissue Massage 1 Credit(s)
- MT 118L - Deep Tissue Massage Lab 1 Credit(s)
- MT 119 - Introduction to Craniosacral Therapy 1 Credit(s)
- MT 119L - Introduction to Craniosacral Therapy Lab 1 Credit(s)
- MT 180 - Cooperative Work Experience / Massage Therapy 3 Credit(s)
- MT 199 - Special Studies: Massage Therapy Var. (1-3) Credit(s)

For more information, contact the Massage Therapy Department:

Phone: 541-956-7500
Email: MassageTherapyInfo@roguecc.edu
Website: www.roguecc.edu/massage
TTY: Oregon Telecom Relay Service, 711

# Medical Assistant: Administrative Medical Assistant, Career Pathway Certificate 


#### Abstract

About the Program

The Administrative Medical Assistant program will prepare students for entry-level employment in a healthcare setting. Administrative Medical Assistants have specialized knowledge about healthcare and are an essential part of the healthcare team. Effective communication with both clients and medical staff, medical terminology, scheduling, basic insurance and billing cycles, legal and ethical considerations and general office procedures are included in this program. Students completing this program will be prepared to take the national Certified Medical Administrative Assistant (CMAA) exam through the National Healthcareer Association (NHA), although certification is not an employment requirement at this time.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Administrative Medical Assistant Career Pathway Certificate are:

Perform and document routine administrative procedures according to current office protocol.
Recognize and describe current legal and ethical standards and confidentiality for client privacy.
Effectively apply verbal, nonverbal, and written communication principles and skills.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Students wishing to enter the program cohort must declare their interest by attending a mandatory Allied Health Information Session and apply online through the Allied Health website: Allied Health Occupations.

Students will complete an intent to enroll form prior to core course completion.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the program coordinator's recommendation. In order to ensure coursework is current, program courses over seven years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. College Now credit earned in conjunction with local high schools will be accepted in accordance with the current agreement.

## Graduation Requirements

These requirements apply only to students admitted to the program during the current academic year. Students contemplating admission in a later year may have different requirements and must obtain the program map or catalog for that year. Students must complete all courses on this program map with a grade
of "C-" or better to continue in and complete the program and receive their certificates. If certain required courses are graded only on a pass/no pass basis, a grade of "P" for these courses indicate a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Please consult an advisor with any program completion questions.

## Total Program Credits: 13-21

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.


## Prerequisite Credits: 0-8

## Required Core Courses

- CIS 120 - Concepts in Computing I 2 Credit(s) or above, or documented computer proficiency within the past ten years.
- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- AH 101 - Medical Assistant I: Administrative 3 Credit(s)
- AH 105 - Communication and Professional Behavior 3 Credit(s)
- AH 123 - Legal and Ethical Issues for Medical Personnel 2 Credit(s)
- AH 202 - Infection Control for the Healthcare Professional 2 Credit(s)
- Approved program elective(s) 0-6 Credit(s)

Total Credits: 13-21

## Approved Program Electives

## ( $0-6$ credits allowed)

- AH 108 - Introduction to Pharmacology for Medical Assistants 3 Credit(s)
- AH 110 - Medical Terminology: Clinical 3 Credit(s)
- BI 100SB - Biology of Human Body Systems 3 Credit(s)
- HE 252 - First Aid/CPR 3 Credit(s)

For more information, contact the Allied Health Occupations office:

Phone: 541-956-7500
Email: AlliedHealthInfo@roguecc.edu

Web address: www.roguecc.edu/alliedhealth
TTY: Oregon Telecom Relay Service, 711

# Medical Assistant: Phlebotomy, Career Pathway Certificate 


#### Abstract

About the Program

The phlebotomy program is a one-term program that prepares students to become certified phlebotomists. Phlebotomists use proper prioritization procedures and coordinate collection of all phlebotomy specimens with other lab personnel. They must consistently provide phlebotomy services appropriate to the age and condition of patients to minimize re-draws (i.e., proper amounts, correct samples) and must strictly adhere to patient identification protocols as specified by regulatory requirements. This includes demonstrating knowledge of all patient safety precautions such as isolations and safety devices. In this role, it is important to use independent judgment in following established venipuncture procedures along with the ability to inspire confidence in, and communicate effectively with, unit secretaries, therapists, medical staff and visitors. This means demonstrating composure and organizational skills in handling crisis situations and effectively handling multiple tasks simultaneously in times of heavy workload.

Successful completion of the program prepares students to sit for the National Healthcareer Association (NHA) phlebotomy certification exam (CPT.) Students do not automatically become certified through this program but may take the appropriate tests through NHA after completing the program. The curriculum was written using the standards and guidelines for the NHA phlebotomy certifications and can be reviewed at https://www.nhanow.com/certifications/phlebotomy-technician.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Phlebotomy Career Pathway Certificate are:

Perform phlebotomy procedures.
Maintain industry standards of quality control, infection control, and safety principles.
Uphold legal and ethical standards and confidentiality for patient privacy.
Demonstrate professionalism through acceptable attitude, organization, and time management skills.
Effectively apply verbal and nonverbal communication principles and skills.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Students attend core phlebotomy classes as part of a structured cohort. Students who plan on entering the Phlebotomy program should meet with their faculty advisor and financial aid advisor to develop a plan prior to taking program courses. Cohort students must meet certain minimum academic requirements. Students can apply for program entry prior to prerequisite completion; however, all listed program prerequisites must be satisfactorily complete with a "C-" or better prior to program start. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

Students will complete specific health and immunization requirements and a criminal background check prior to starting the program. Students will also complete a drug screen prior to placement into a practicum. This screening process has an associated fee. Contact the Allied Health Department for more information.

Students wishing to enter the program cohort must declare their interest by attending a mandatory Allied Health Information Session and apply online through the Allied Health website.

## Selection Process

Applications must be received by the application deadline. Applications received after the application deadline may be reviewed based on cohort capacity and at the discretion of the department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the program coordinator's recommendation. In order to ensure coursework is current, program courses over seven years old must be reviewed and approved by the appropriate coordinator before being accepted toward core requirements. College Now credit earned in conjunction with local high schools will be accepted in accordance with the current agreement.

## Graduation Requirements

These requirements apply only to phlebotomy students admitted to the program during the current academic year. The program of study, graduation requirements, and courses are under constant review and are subject to revision. Students contemplating admission in a later year may have different requirements and must obtain the program map or catalog for that year. Students must complete all courses on this program map with a grade of "C-" or better to continue in and complete the program and receive their certificates. If certain required courses are graded only on a pass/no pass basis, a grade of "P" for these courses indicate a student earned the equivalent of a "C-" or better grade.

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- 9.438 P - Basic Life Support (BLS) CPR Provider 0 Credit(s) ${ }^{1}$
- CIS 120 - Concepts in Computing I 2 Credit(s) Approved Computer Information Science or Computer Science course, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.


## Prerequisite Credits: 0-10

## Required Core Courses

## First Term

- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- AH 104 - Phlebotomy 3 Credit(s)
- AH 105 - Communication and Professional Behavior 3 Credit(s)
- AH 170PHL - Phlebotomy Practicum 2 Credit(s)
- AH 202 - Infection Control for the Healthcare Professional 2 Credit(s)


## Total Program Credits: 13

## Notes:

${ }^{1}$ Course can be taken within program. See program advisor if you have American Heart Association (AHA) BLS Provider certification. AHA must remain current for the duration of the program.

## For more information, contact the Allied Health Occupations office:

Phone: 541-956-7500
Email: AlliedHealthInfo@roguecc.edu
Web address: www.roguecc.edu/phlebotomy
TTY: Oregon Telecom Relay Service, 711

# Basic Health Care, Certificate of Completion 


#### Abstract

About the Program

The Basic Health Care Certificate prepares students for work in entry-level positions in the health care industry. Students will gain knowledge and skills required to meet workforce requirements while fulfilling prerequisites to limited entry specialty programs within Allied Health which are in high demand in our region. This program is targeted for high school students and returning adult learners who are considering a career in health care to help guide interests and learn basic skills such as medical terminology and introduction to human body systems.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Basic Health Care Certificate of Completion are:

Describe medical terminology used in various health care environments.
Identify basic human body function.
Match natural abilities and interests with attributes and requirements for success in health care careers in order to identify and pursue potential career pathways.

## Entry Requirements

Students are required to complete the 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 through the Placement Process. It is important that students work closely with an advisor to select courses appropriate to their career goal(s). Students who are enrolled in the Basic Health Care certificate are not given advanced placement into limited-entry programs.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies and the program director's approval. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the program director before being accepted toward core requirements. Each College Now credit student must meet with the director to determine placement.

## Graduation Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive their certificates. Certain prerequisite and required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS - Approved Computer Information Science or ComputerScience course, CIS 120 / CS120 or above, or documented computerproficiency within the past ten years 0-2 Credit(s)
- MTH 20 - Pre-algebra 4 Credit(s) or higher-level math or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-14

## Required Courses

- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition
- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- BI 100SB - Biology of Human Body Systems 3 Credit(s) ${ }^{1}$
- CG 155 - Exploring Careers in Health Care 3 Credit(s)
- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- HE 252 - First Aid/CPR 3 Credit(s) or HE 112 AND HE 261


## Electives (6-10 Credits Required)

Any combination of 6-10 credits from the courses listed below will meet program requirements. Additional coursework is required beyond Basic Health Care certificate courses to complete expanded certificate or degree programs.

- AH 22 - Healthcare Calculations 3 Credit(s)
- AH 105 - Communication and Professional Behavior 3 Credit(s)
- AH 110 - Medical Terminology: Clinical 3 Credit(s)
- AH 123 - Legal and Ethical Issues for Medical Personnel 2 Credit(s)
- AH 202 - Infection Control for the Healthcare Professional 2 Credit(s)
- EMS 160 - Electrocardiogram (ECG) Interpretation 2 Credit(s)
- HC 100 - Community Health Worker 6 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s) or CJ 243

Total Program Credits: 23-29

## Notes:

${ }^{1}$ Students who have completed either BI 121 and BI 122 or BI 231 , BI 232 and BI 233 (the entire sequence of either series) with an equivalent "C-" or better grade do not need to take BI 100SB.

For more information, contact the Allied Health Occupations office:

Phone: 541-956-7500
Email: AlliedHealthInfo@roguecc.edu

Web address: www.roguecc.edu/alliedhealth
TTY: Oregon Telecom Relay Service, 711

## Dental Assistant, Certificate of Completion


#### Abstract

About the Program

This four-term certificate program prepares students to meet the requirements to become dental assistants with expanded functions (EFDA). Successful completion of the program prepares the student for job entry with State and National certification in dental radiology, basic dental assisting and expanded function dental assisting. The curriculum is based in general dentistry; students are trained in four-handed chair-side assisting techniques to work with general dentists during all phases of patient examination and treatment.

Program students attend classes as part of a structured cohort that begins each year in summer term. Students should apply early as the required mandatory information session is scheduled several months prior to the summer start. Note: Students may still be working on prerequisites to cohort acceptance classes when applying.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Dental Assistant Certificate of Completion are:

Demonstrate patient education and administrative office skills.
Demonstrate occupational safety skills.
Demonstrate general chair-side and laboratory sciences skills.
Develop fluency and competency dealing with legal and ethical issues.
Evaluate radiographic proficiencies.
Effectively apply verbal, nonverbal, and written communication principles and skills.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Students attend classes as part of a structured cohort that begins each summer term. The program is designed to be four full-time terms; however, it is possible to take courses prior to entering the cohort in order to reduce credits during program. Students who plan on entering the Dental Assistant program should meet with their faculty advisor to develop an academic plan.

Cohort students must meet certain minimum academic requirements before the program application due date. Students can apply for program entry prior to prerequisite completion; however, all listed program prerequisites must be complete with a " $\mathrm{C}-$ " or better prior to program start. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

Students wishing to enter the program cohort must declare their interest by attending a mandatory Allied Health Information Session and apply online through the Allied Health Occupations website: Allied Health Occupations Information Sessions | RCC (roguecc.edu)

## Selection Process

After application submission, students will complete specific health and immunization requirements and a criminal background check prior to starting the program. This screening process has an associated fee. Applications received after the application deadline may be reviewed based on cohort capacity and at the discretion of the department*. The Allied Health Occupations department strives to accept all students into programs if academic and screening requirements are met, however in the event that cohort capacity is exceeded students may be asked to participate in an interview process. Students entering a cohort are required to attend a mandatory program orientation.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Program Coordinator's recommendation. In order to ensure coursework is current, program courses over five years old must be reviewed and approved by the appropriate department coordinator before being accepted toward core requirements. College Now credit will be accepted in accordance with the current agreement.

## Graduation Requirements

Students completing all courses in this program with a grade of "C-" or better will receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Credits earned in this program can be applied to the Associate of General Studies degree.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 51-57

Program email address: Dentallnfo@roguecc.edu

## Program Prerequisites to Cohort Acceptance:

## Prerequisites to Application

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101; Required for graduation
- BT 113 - Business English I 4 Credit(s) ${ }^{1}$ or WR 115 or higher-level composition; Required for graduation
- CIS 120 - Concepts in Computing $12 \operatorname{Credit}(\mathbf{s})^{2}$ Required for graduation
- MTH 63 - Applied Algebra 14 Credit(s) or MTH 60 or BT 160 or higher-level math; Required for graduation


## Prerequisite Credits: 10-13

Appy at: https://go.roguecc.edu/department/dental-assistant between November 1 and March 15 for Summer entry.

## Summer

Check-in with Advisor

- AH 100 - Medical Terminology: Introduction 3 Credit(s) can be taken outside of cohort
- AH 105 - Communication and Professional Behavior 3 Credit(s)
- DA 101 - Dental Assisting I 4 Credit(s)
- DA 202 - Infection Control for the Dental Professional 2 Credit(s)
- HE 252 - First Aid/CPR 3 Credit(s) or HE 112 and HE 261; can be taken outside of cohort

Term Credits: 15

## Fall

- DA 102 - Dental Assisting II 4 Credit(s)
- DA 102L - Dental Assisting II Lab 2 Credit(s)
- DA 103 - Dental Materials 2 Credit(s)
- DA 104 - Dental Administration 2 Credit(s)
- DA 150 - Introduction to Practicum and Seminar 2 Credit(s)
- DA 201 - Dental Radiology 4 Credit(s)


## Term Credits: 16

## Winter

- DA 123 - Legal and Ethical Issues in Dentistry 2 Credit(s)
- DA 106 - Dental and Medical Emergency Management 2 Credit(s)
- DA 152 - Practicum and Seminar in Dental Assisting 14 Credit(s)
- DA 201L - Radiology Lab 2 Credit(s)
- DA 203 - Chairside Assisting 2 Credit(s)
- DA 206 - Dental Specialties 2 Credit(s)


## Term Credits: 14

## Spring

Check-in with Advisor

- DA 153 - Practicum and Seminar in Dental Assisting II 4 Credit(s)
- DA 204 - Expanded Functions Dental Assistant 2 Credit(s)
- DA 204L - Expanded Functions of Dental Assistant Lab 1 Credit(s)
- WR 121 Z - Composition I 4 Credit(s) or COMM 218Z, if not taken as a prerequisite or approved elective.


## Term Credits: 11

## Approved Program Electives (0-5 Credits Allowed)

See footnote 3.

- AH 110 - Medical Terminology: Clinical 3 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- BT 102 - Introduction to Supervision 3 Credit(s)
- CG 100 - College Success and Survival 2 Credit(s)
- CG 105 - Finding the Money: Scholarship Essay Writing 1 Credit(s)
- COMM 100Z - Introduction to Communication 4 Credit(s)
- COMM $111 Z$ - Public Speaking 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s)
- HS 152 - Stress Management 1 Credit(s)
- MTH - Any math course numbered MTH 60 or above (if not taken to fulfill math requirement) 4-5 Credit(s)
- SPAN 101 - First Year Spanish I 4 Credit(s)
- SPAN 102 - First Year Spanish II 4 Credit(s)
- SPAN 103 - First Year Spanish III 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- SRV 101 - Service Learning Var. (1-6) Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s) (if not taken to fulfill writing requirement)
- WR 122Z - Composition II 4 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- Any science course numbered 100 and above 3-5 Credit(s)
- Any health or physical education course variable Credit(s)


## Notes:

Apply to the Dental Assistant Program at https://go.roguecc.edu/department/dental-assistant between November 1 and March 15 for Summer entry
${ }^{1}$ Students who have successfully completed the 3 -credit version of BT 113 will have met the composition requirement.
${ }^{2}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{3}$ Approved program electives are optional.

## For more information, contact the Allied Health Occupations office:

Phone: 541-956-7500
Email: Dentallnfo@roguecc.edu

Web address: www.roguecc.edu/alliedhealth/dental
TTY: Oregon Telecom Relay Service, 711

# Emergency Medical Services, Certificate of Completion 


#### Abstract

About the Program The Emergency Medical Services (EMS) three-term certificate program is accredited by the Oregon Department of Education and the Oregon Health Authority - EMS. It offers career training for entry-level personnel in EMT. Successful completion of the EMT course leads to eligibility to sit for the state and National Registry EMT exams. This program is ideal for students who plan to go on to the Associate of Applied Science degree in Paramedicine. Students not interested in the paramedic level may wish to consider the EMT Career Pathway certificate.

Successful completion of the curriculum leads to a one-year RCC certificate and eligibility to apply for the Paramedicine courses at RCC, at any other Oregon community college offering the associate degree, or at the Oregon Health and Science University.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Emergency Medical Service Certificate of Completion are:

Perform a patient assessment and formulate and implement a Basic Life Support treatment plan for patients with a variety of medical and traumatic emergencies.

Demonstrate effective communication, cultural competency, and conflict management and intervention skills for people in crisis in simulated emergencies.

Implement self-care strategies and techniques to address the impact of stress and emotional trauma on emergency providers.

Demonstrate leadership, teamwork and decision making in the management, treatment, or transport of emergency patients.

Demonstrate workplace expectations regarding attendance, safety, conduct, and professionalism.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

This program requires an application and satisfaction of certain course admission criteria prior to enrolling in the EMT courses (ES 131, ES 132). Information is available on the Emergency Medical Services (EMS) Department website (https://www.roguecc.edu/dept/emergencyServices/ems.asp) or at the Emergency Services Department office located at the RCC Table Rock Campus. Students are strongly encouraged to meet with an Emergency Services Department advisor prior to beginning any coursework.

Students must be at least 17 years old to apply to the EMT course. Students must be a high school graduate or have a GED or equivalent for certification. In addition, students must complete all screening requirements outlined in OAR 409-030-0190 and additional RCC requirements or clinical site requirements.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Emergency Services Department Chair's recommendation. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the Emergency Services Department chair before being accepted toward core requirements.

## Graduation Requirements

Students completing all credits outlined in this program with a grade of "C-" or better will earn a certificate in Emergency Medical Services. Certain required courses are graded on a pass/no pass basis only. A grade of " $P$ " for these courses indicates a student earned the equivalent of a " C -" or better grade.

Students are strongly encouraged to meet with an Emergency Services Department advisor prior to beginning any coursework.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 46-50

Program Email Address: EmergencyServicesInfo@roguecc.edu

## Program Prerequisites:

## SOME COURSES MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math; required for graduation. Consider STAT 243Z/STAT 243R if you plan to transfer.
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition; required for graduation.
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.
- BI 211 - General Biology I 3 Credit(s) ${ }^{2}$ Required program prerequisite.
- BI 211L - General Biology I Lab 1 Credit(s) ${ }^{2}$ Required program prerequisite.


## Prerequisites Credits: 11-14

## Term 1

Check-in with Advisor

- ES 105 - Introduction to Emergency Services 4 Credit(s)
- ES 131 - Emergency Medical Technician - Part I 6 Credit(s)
- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- BI 231 - Anatomy and Physiology I 3 Credit(s)
- BI 231L - Anatomy and Physiology I Lab 1 Credit(s)

Term Credits: 17

## Term 2

- ES 132 - Emergency Medical Technician - Part II 6 Credit(s)
- ES 295 - Health and Fitness for Emergency Service Workers 3 Credit(s) or HPE 295
- BI 232 - Anatomy and Physiology II 3 Credit(s)
- BI 232L - Anatomy and Physiology II Lab 1 Credit(s)


## Term Credits: 13

## Term 3

- BI 233 - Anatomy and Physiology III 3 Credit(s)
- BI 233L - Anatomy and Physiology III Lab 1 Credit(s)
- ES 171 - Emergency Vehicle Operations 2 Credit(s)
- ES 205 - Crisis Intervention and Management for Emergency Services Workers 3 Credit(s)
- ES 268 - Emergency Service Rescue 3 Credit(s)
- COMM 100Z - Introduction to Communication 4 Credit(s) Consider COMM $218 Z$ or COMM $111 Z$ for future transfer.

Term Credits: 16

## Approved Program Electives

## 0-4 program elective credits allowed in program.

- Any college-level (100 or 200 numbered) transferrable non-studio humanities, social science, or science electives (variable credits)
- Any FRP or EMS 100 or higher course (variable credits)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2} \mathrm{BI} 211$ / BI 211 L is a prerequisite to BI 231 / BI 231L; CHEM 104 / CHEM 104L / CHEM 104R also highly recommended.

For more information, contact the Emergency Services Department:

Phone: 541-956-7500
Email: EmergencyServicesInfo@roguecc.edu
Web address: www.roguecc.edu/emergencyservices
TTY: Oregon Telecom Relay Service, 711

# Massage Therapy, Certificate of Completion 

## Fall 2024 Program Admission


#### Abstract

About the Program

The Massage Therapy four-term certificate program provides a comprehensive combination of classroom and hands-on experience in massage therapy. The courses and total hours meet the requirements for licensure application to the Oregon Board of Massage Therapists, the Federation of State Massage Therapy Board's Licensing Examination and National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) certification. Oregon law, however, sets the qualifications for certification of applicants. Grounds for denial of state licensure include physical or mental conditions that would make an applicant unable to safely conduct a massage, or conviction of a crime that bears a demonstrable relationship to the practice of massage. See Oregon Law 687.081.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Massage Therapy Certificate of Completion are:

Demonstrate professional communications, regulations, laws and ethics.
Classify, describe and apply treatments.
Locate, identify and describe the function of the body systems.
Recognize pathologic conditions and determine appropriate treatment.
Assess, create, implement and document individualized treatment plans.
Develop and implement a personalized career plan.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Massage Therapy is a limited-entry program. Interested applicants must view the massage therapy information video and complete the quiz. (https://www.roguecc.edu/dept/massage/infoSessions.asp) The timeline for submitting program application materials for fall 2024 admission is April 1-June 24, 2024. Applicants will be accepted on a first-come, first-served basis once prerequisites are completed. It is recommended that students receive influenza, varicella-zoster, rubella, Hepatitis A, and Hepatitis B series immunizations prior to entering the program. A tuberculin test, drug test, a criminal background check and COVID vaccination may be required for some Cooperative Work Experience activities. Students must attend a mandatory orientation prior to the beginning of fall term.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Massage Therapy Department Chair's approval. Sealed official transcripts and a transfer credit evaluation request must be submitted to RCC's Enrollment Services Office by May 1 to be considered in the application process. The transfer credit evaluation request may only be submitted online.

## Graduation Requirements

Students completing all credits in this program with a grade of "C-" or better will receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Credits earned in this program can be applied to the Associate of General Studies degree.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 48-56

Program email address: MassageTherapylnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

View massage therapy information video at https://www.roguecc.edu/dept/massage/infoSessions.asp and complete the quiz.

- CG 100-College Success and Survival 2 Credit(s) or transcript showing at least 30 college credits within any academic year and at least a 2.0 cumulative GPA
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63, BT 160, or higher-level math; Required for graduation.
- PSY 101 - Psychology of Human Relations 3 Credit(s) ${ }^{1}$ or BT 101; Required for graduation.
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition; Required for graduation.


## Recommended Preparatory Courses:

- AH 100 - Medical Terminology: Introduction 3 Credit(s) Recommended Preparatory Course
- BI 211 - General Biology I 3 Credit(s) ${ }^{2}$ AND BI 211L ${ }^{2}$ Recommended Preparatory Course


## Prerequisite Credits: 10-13

**Apply to the Massage Program at https://www.roguecc.edu/dept/massage/application.asp between April 1 and June 24 for Fall entry.

## Fall

Check-in with Advisor

- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) or BI 231; summer/fall term only
- BI 121L - Elementary Anatomy and Physiology I Lab 1 Credit(s) or BI 231L; summer/fall term only
- MT 100 - Massage I - Basic Swedish 2 Credit(s) fall term only
- MT 100L - Massage I - Basic Swedish Lab 1 Credit(s) fall term only
- MT 101 - Asian Bodywork I 1 Credit(s) fall term only
- MT 101L - Asian Bodywork I Lab 1 Credit(s) fall term only
- MT 108 - Kinesiology for Massage Therapists 3 Credit(s) fall term only
- MT 108L - Kinesiology for Massage Therapists Lab 1 Credit(s) fall term only
- MT 115 - Trigger Point Therapy 1 Credit(s) or MT 114; Only 6 program electives allowed. Options for fall - MT 115 / MT 115L and MT 114
- MT 115L - Trigger Point Therapy Lab 1 Credit(s)
- CIS 120 - Concepts in Computing 12 Credit(s) ${ }^{3}$


## Term Credits: 17

## Winter

- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) ${ }^{2}$ or BI 232 and BI 233. Note: BI 122 / BI 122L offered fall/winter term only
- BI 122L - Elementary Anatomy and Physiology II Lab 1 Credit(s) ${ }^{2}$ or BI 232L and BI 233L. Note: BI 122 / BI 122L offered fall/winter term only
- MT 102 - Massage II - Swedish 2 Credit(s) winter term only
- MT 102L - Massage II-Swedish Lab 1 Credit(s) winter term only
- MT 105 - Massage Therapeutics: Hydrotherapy and Oncology Massage 1 Credit(s) winter term only
- MT 105L - Massage Therapeutics: Hydrotherapy and Oncology Massage Lab 1 Credit(s) winter term only
- MT 106 - Integrated Studies in Massage I - Upper Body 1 Credit(s) winter term only
- MT 106L - Integrated Studies in Massage I - Upper Body Lab 1 Credit(s) winter term only
- MT 109 - Pathology for Massage Therapists 4 Credit(s) winter term only
- MT 121 - Asian Bodywork II 1 Credit(s) winter/spring term only
- MT 121L - Asian Bodywork II Lab 1 Credit(s) winter/spring term only


## Term Credits: 17

## Spring

- MT 103 - Massage III-Swedish 1 Credit(s) spring term only
- MT 103L - Massage III-Swedish Lab 1 Credit(s) spring term only
- MT 107 - Integrated Studies in Massage II - Lower Body 1 Credit(s) spring term only
- MT 107L - Integrated Studies in Massage II - Lower Body Lab 1 Credit(s) spring term only
- MT 116 - Massage Exam Review 2 Credit(s) spring term only
- MT 120A - Business for Massage Therapists - Part A 1 Credit(s) spring term only
- MT 120B - Business Practices for Massage Therapists - Part B 2 Credit(s) spring term only
- MT 180 - Cooperative Work Experience / Massage Therapy 3 Credit(s) additional credits are elective
- MT 180S - Cooperative Work Experience / Massage Seminar 1 Credit(s) must be taken with MT 180
- MT 112 - Massage for Pregnancy and the Infant/Child 1 Credit(s) Only 6 program electives allowed. Options for spring - MT 112/MT 112L, MT 113/MT 113L, MT 118/MT 118L
- MT 112L - Massage for Pregnancy and the Infant/Child Lab 1 Credit(s) Only 6 program electives allowed. Options for spring - MT 112/MT 112L, MT 113/MT 113L, MT 118/MT 118L
- MT 113 - Myofascial Release 1 Credit(s) or, see summer options
- MT 113L - Myofascial Release Lab 1 Credit(s) or, see summer options
- HE 261 - CPR/Basic Life Support Provider 1 Credit(s) or HE 252


## Term Credits: 16

## Summer (Optional)

## Check-in with Advisor

- Only 6 program electives allowed. Elective options for summer - MT 117 AND MT 117L, MT 119 AND MT 119L (2 credit courses)


## Approved Program Electives (6 Credits Required)

- BA 109 - Ready, Set, Work: Techniques for Landing A Job 2 Credit(s)
- BT 250 - Entrepreneurship 3 Credit(s)
- MT 111 - Sports Massage 1 Credit(s)
- MT 111L - Sport Massage Lab 1 Credit(s)
- MT 112 - Massage for Pregnancy and the Infant/Child 1 Credit(s)
- MT 112L - Massage for Pregnancy and the Infant/Child Lab 1 Credit(s)
- MT 113 - Myofascial Release 1 Credit(s)
- MT 113L - Myofascial Release Lab 1 Credit(s)
- MT 114 - Massage Therapy Study Skills Lab 1 Credit(s)
- MT 115 - Trigger Point Therapy 1 Credit(s)
- MT 115L - Trigger Point Therapy Lab 1 Credit(s)
- MT 117 - Body Maintenance for Massage Therapists 1 Credit(s)
- MT 117L - Body Maintenance for Massage Therapists Lab 1 Credit(s)
- MT 118 - Deep Tissue Massage 1 Credit(s)
- MT 118L - Deep Tissue Massage Lab 1 Credit(s)
- MT 119 - Introduction to Craniosacral Therapy 1 Credit(s)
- MT 119L - Introduction to Craniosacral Therapy Lab 1 Credit(s)
- MT 180 - Cooperative Work Experience / Massage Therapy 3 Credit(s)
- MT 199 - Special Studies: Massage Therapy Var. (1-3) Credit(s)


## Notes:

${ }^{1}$ Students who have successfully completed the 3-credit version of BT 113 will have met the writing requirement.
${ }^{2} \mathrm{BI} 211$ is a prerequisite for BI 231 . If BI 231 is taken, students must also complete BI 232 and BI 233 .
${ }^{3}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Massage Therapy Department:

Phone: 541-956-7500
Email: MassageTherapyInfo@roguecc.edu
Website: www.roguecc.edu/massage
TTY: Oregon Telecom Relay Service, 711

# Medical Assistant Bridge, Certificate of Completion 


#### Abstract

About the Program The three-term Medical Assistant Bridge program is designed for currently employed Medical Administrative Assistants (also called: Patient Service Specialists, Medical Office Assistants, Front desk receptionists, and others) with at least 500 hours of experience in their role and support from their employer, to take an abbreviated Medical Assistant Program in order to achieve certification and a role as a Medical Assistant in their current organization.

Students completing this program will be prepared to take the national Certified Clinical Medical Assistant (CCMA), Certified Phlebotomy Technician (CPT) and Certified ECG Technician (CET) Examinations through the National Healthcareer Association (NHA).


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Medical Assistant Bridge Certificate of Completion are:

Perform and document routine clinical procedures according to current office protocol.
Perform and document specialty procedures according to current office protocol.
Perform phlebotomy procedures.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Before acceptance into the program, students must complete the following:
Review the Medical Assistant Bridge Program Guide.
Complete the Rogue Community College Clinical Training Agreement for the Medical Assistant Bridge Program.

Apply to the program via application on the Allied Health Occupations Home
Page. https://www.roguecc.edu/dept/AHO/apply.asp

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the program coordinator's recommendation. In order to ensure coursework is current, program courses over seven years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. College Now credit earned in conjunction with local high schools will be accepted in accordance with the current agreement.

## Graduation Requirements

These requirements apply only to students admitted to the program during the current academic year. Students contemplating admission in a later year may have different requirements and must obtain the program map or catalog for that year. Students must complete all courses on this program map with a grade of "C-" or better to continue in and complete the program and receive their certificates. If certain required courses are graded only on a pass/no pass basis, a grade of " P " for these courses indicate a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Please consult an advisor with any program completion questions.

## Prerequisites

- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.


## Total Prerequisite Credits: 0-8

## Required Core Courses

## Term 1

- AH 102 - Medical Assistant II: Clinical 4 Credit(s)
- AH 108 - Introduction to Pharmacology for Medical Assistants 3 Credit(s)
- Approved program elective(s) 0-6 Credit(s)

Term Credits: 7-13

## Term 2

- AH 103 - Medical Assistant III: Specialty 4 Credit(s)
- AH 104 - Phlebotomy 3 Credit(s)
- Approved program elective(s) 0-3 Credit(s)

Term Credits: 7-10

## Term 3

- AH 170MAB - Medical Assistant Bridge Practicum 3 Credit(s)
- AH 107 - Electrocardiograms (ECG) for Medical Assistants 2 Credit(s)
- Approved program elective(s) 0-2 Credit(s)

Term Credits: 5-7
Total Program Credits: 19-30

## Approved Program Electives

## (0-11 credits allowed)

- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- AH 105 - Communication and Professional Behavior 3 Credit(s)
- AH 110 - Medical Terminology: Clinical 3 Credit(s)
- AH 123 - Legal and Ethical Issues for Medical Personnel 2 Credit(s)
- AH 202 - Infection Control for the Healthcare Professional 2 Credit(s)
- BI 100SB - Biology of Human Body Systems 3 Credit(s)
- HE 261 - CPR/Basic Life Support Provider 1 Credit(s)

For more information, contact the Allied Health Occupations office:

Phone: 541-956-7500
Email: AlliedHealthInfo@roguecc.edu
Web address: www.roguecc.edu/alliedhealth
TTY: Oregon Telecom Relay Service, 711

# Medical Assistant, Certificate of Completion 


#### Abstract

About the Program The Medical Assistant three-term certificate program provides a comprehensive combination of online, classroom and hands-on experience in Medical Assisting. Medical Assistants are health care practitioners qualified by education, experience, and examination to assist doctors in the performance of patient care, examination, and documentation. These multi-skilled practitioners perform a variety of clinical and administrative tasks and are critical members of the health care team. Successful completion of this threeterm program prepares students to be eligible for the Certified Medical Assistant (CCMA) exam through the National Healthcareer Association (NHA), or other national medical assisting accrediting agencies. In addition, students may also sit for the Certified Phlebotomy Technician (CPT) and the Certified ECG Technician (CET) exams through the Healthcareer Association. The curriculum for the program is based on the standards and guidelines for the CCMA which can be reviewed on the following website: NHA www.nhanow.com.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Medical Assistant Certificate of Completion are:

Perform and document routine clinical procedures according to current office protocol.
Perform and document routine administrative procedures according to current office protocol.
Effectively apply verbal, nonverbal, and written communication principles and skills.
Uphold legal and ethical standards and confidentiality for patient privacy.
Demonstrate professionalism through acceptable attitude, organization and time management skills, and attire.

Maintain industry standards of infection control and safety principles.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Students attend core MA courses as part of a structured cohort. Cohort students must meet certain minimum academic requirements. Students can apply for program entry prior to prerequisite completion; however, all listed program prerequisites must be satisfactorily complete with a "C-" or better prior to program start. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

Students must also complete specific health and immunization requirements and a criminal background check prior to starting the program. Students must complete a drug screen prior to placement in a practicum. This screening process has an associated fee. Contact the Allied Health Department for more information.

Students wishing to enter the program cohort must declare their interest by attending a mandatory Allied Health Information Session and apply online through the Allied Health website: Allied Health Occupations.

## Selection Process

Applications must be received by the application deadline. Applications received after the application deadline may be reviewed based on cohort capacity and at the discretion of the department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the program coordinator's recommendation. In order to ensure coursework is current, program courses over seven years old must be reviewed and approved by the appropriate department coordinator before being accepted toward core requirements. College Now credit earned in conjunction with local high schools will be accepted in accordance with the current agreement.

## Graduation Requirements

These requirements apply only to Medical Assistant students admitted to the program during the current academic year. The program of study, graduation requirements, and courses are under constant review and are subject to revision. Students contemplating admission in a later year may have different requirements and must obtain the program map or catalog for that year. Students must complete all courses on this program map with a grade of "C-" or better to continue in and complete the program and receive their certificates. If certain required courses are graded only on a pass/no pass basis, a grade of " P " for these courses indicate a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 45-53

Program Email AlliedHealthInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101. Required for graduation.
- CIS 120 - Concepts in Computing 12 Credit(s) Required for graduation. ${ }^{1}$
- HE 252 - First Aid/CPR 3 Credit(s) ${ }^{2}$ or HE 112 and HE 261 or 9.438P with Instructor Permission
- MTH 63 - Applied Algebra 14 Credit(s) or MTH 60 or higher-level math. Required for graduation.
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113. Required for graduation; or higher-level composition course.


## Prerequisite Credits: 10-16

## Term 1

## Check-in with Advisor

- AH 100 - Medical Terminology: Introduction 3 Credit(s) Can be taken outside of cohort.
- AH 101 - Medical Assistant I: Administrative 3 Credit(s)
- AH 102 - Medical Assistant II: Clinical 4 Credit(s)
- AH 123 - Legal and Ethical Issues for Medical Personnel 2 Credit(s) Can be taken outside of cohort with permission.
- BI 100SB - Biology of Human Body Systems 3 Credit(s) ${ }^{3}$ Can be taken outside of cohort.


## Term Credits: 15

## Term 2

- AH 103 - Medical Assistant III: Specialty 4 Credit(s)
- AH 104 - Phlebotomy 3 Credit(s)
- AH 105 - Communication and Professional Behavior 3 Credit(s) Can be taken outside of cohort with permission.
- AH 110-Medical Terminology: Clinical 3 Credit(s) Can be taken outside of cohort with permission.
- AH 150MAP - Introduction to Practicum and Seminar for Medical Assistants 2 Credit(s)


## Term Credits: 15

## Term 3

- AH 170MAP - Medical Assistant Practicum 8 Credit(s)
- AH 202 - Infection Control for the Healthcare Professional 2 Credit(s) Can be taken outside of cohort with permission.
- AH 107 - Electrocardiograms (ECG) for Medical Assistants 2 Credit(s)
- AH 108 - Introduction to Pharmacology for Medical Assistants 3 Credit(s) Can be taken outside of cohort with permission.


## Term Credits: 15

## Approved Program Electives (0-8 Credits Allowed):

- AH 22 - Healthcare Calculations 3 Credit(s)
- AH 170PHL - Phlebotomy Practicum 2 Credit(s)
- COMM 100Z - Introduction to Communication 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- HE 208 - HIV and Infectious Diseases 1 Credit(s)
- PSY - Psychology course 3-4 Credit(s)
- NFM 225 - Nutrition 4 Credit(s)
- HE / PE - Health or Physical Education course(s) 1-3 Credit(s)
- HS 152 - Stress Management 1 Credit(s) or HE 145


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2}$ See program advisor if you have American Heart Association (AHA) BLS Provider certification. AHA must remain current for the duration of the program.
${ }^{3}$ Students who have completed either BI 121 and BI 122 or BI 231 , BI 232 , and BI 233 (the entire sequence of either series) with an equivalent "C-" or better grade do not need to take BI 100SB.

## For more information, contact the Allied Health Occupations office:

Phone: 541-956-7500
Email: AlliedHealthInfo@roguecc.edu
Web address: www.roguecc.edu/alliedhealth
TTY: Oregon Telecom Relay Service, 711

# Pharmacy Technician, Certificate of Completion 


#### Abstract

About the Program

The Pharmacy Technician two-term certificate program prepares students for work in entry-level positions in hospitals and retail pharmacy settings. Students will learn to prepare prescription orders under the supervision of a licensed pharmacist, perform applicable pharmacy calculations, and comply with federal and state regulatory agency laws and regulations. Upon completion of this program students will be able to perform all the duties required in any pharmacy practice setting. Students completing this program will be prepared to take the national Certified Pharmacy Technician (CPhT) exam.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Pharmacy Technician Certificate of Completion program are:

Perform accurate pharmacy calculations and proficiently apply computer skills, record keeping and billing in adherence to industry regulations.

Accurately prepare, label, and package medications while working under the supervision of a licensed pharmacist.

Apply verbal, nonverbal, and written communication principles and skills effectively and compassionately within a team setting.

Uphold legal and ethical standards and confidentiality for patient privacy.
Demonstrate professionalism through acceptable attitude, organization and time management skills, and attire.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Prior to placement in a practicum, student must complete:

- $\quad$ specific health and immunization requirements, as required by the practicum facility;
- a criminal background check; and
- a drug screening (including an associated fee)

For more information:

- contact the Allied Health Occupations Department; or
- watch the video: Pharmacy Technician (Pharmacy Technician Observational Video)


## Advanced Standing

over seven years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. College Now credit earned in conjunction with local high schools will be accepted in accordance with the current agreement.

## Graduation Requirements

These requirements apply only to students admitted to the program during the current academic year. Students contemplating admission in a later year may have different requirements and must obtain the program map or catalog for that year. Students must complete all courses on this program map with a grade of "C-" or better to continue in and complete the program and receive their certificates. If certain required courses are graded only on a pass/no pass basis, a grade of " P " for these courses indicate a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 31

Program Email AlliedHealthInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- BT 113 - Business English I 4 Credit(s) or WR 115 or designated placement
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement or higher-level math
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.
- HE 252 - First Aid/CPR 3 Credit(s) ${ }^{2}$ or HE 112 and HE 261 or Instructor Permission

Prerequisite Credits: 0-13

## For more information:

Go to https://www.roguecc.edu/AHO

## Term 1

## Check-in with Advisor

- AH 22 - Healthcare Calculations 3 Credit(s)
- AH 100 - Medical Terminology: Introduction 3 Credit(s) can be taken outside of cohort
- AH 202 - Infection Control for the Healthcare Professional 2 Credit(s)
- AH 150 - Introduction to Practicum and Seminar 2 Credit(s)
- BI 100SB - Biology of Human Body Systems 3 Credit(s) ${ }^{3}$ can be taken outside of cohort
- PRX 101 - Pharmacy Technician I 4 Credit(s)

Term Credits: 17

## Term 2

- See footnote 4
- AH 105 - Communication and Professional Behavior 3 Credit(s)
- AH 123 - Legal and Ethical Issues for Medical Personnel 2 Credit(s)
- AH 165 - Introduction to Pharmacology for Pharmacy Technicians 2 Credit(s)
- AH 170PRX - Pharmacy Technician Practicum 3 Credit(s)
- PRX 102 - Pharmacy Technician II 4 Credit(s)


## Term Credits: 14

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2}$ See program advisor if you have American Heart Association (AHA) BLS Provider certification. AHA must remain current for the duration of the program.
${ }^{3}$ Students who have completed either BI 121 and BI 122 or BI 231 , BI 232 , and BI 233 (the entire sequence of either series) with an equivalent "C-" or better grade do not need to take BI 100SB.
${ }^{4}$ Successful completion of all prior program courses is required before advancement.
For more information, contact the Allied Health Occupations office:

Phone: 541-956-7500
Email: AlliedHealthInfo@roguecc.edu
Web address: www.roguecc.edu/alliedhealth
TTY: Oregon Telecom Relay Service, 711

## Practical Nursing, Certificate of Completion


#### Abstract

About the Program

Rogue Community College offers a limited-entry, three-term (33 week) program leading to a certificate in Practical Nursing (PN), which meets the educational requirements for the national exam for PN licensure (NCLEX-PN). The program is located at the Table Rock Campus (TRC). The Practical Nursing program is approved by the Oregon State Board of Nursing (OSBN), 17938 SW Upper Boones Ferry Rd., Portland, OR, 971-673-0685, www.oregon.gov/OSBN.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Practical Nursing Certificate of Completion are:

Demonstrate a personal commitment to service and the profession of nursing.
Demonstrate ethical and legal behavior in nursing practice.
Demonstrate clinical judgment using knowledge and problem-solving skills when contributing to and implementing the plan of care.

Provide culturally sensitive care across the lifespan.
Apply established principles of health promotion and preventive health care.
Use technological resources effectively and appropriately.
Provide clinically competent care through use of established standards and practice guidelines.
Use clear and effective therapeutic communication with clients, families, members of the healthcare team, and others.

Apply concepts of resource utilization to practice cost-effective nursing care.
Functions as a member of the health care team.
Manage and coordinate care within organizational and regulatory constraints.

## Entry Requirements

Students are required to complete the Placement Process to determine skill level and readiness in math, reading, and writing. As part of their training, students must begin with the courses within their skill level as determined through the Placement Process.

Program admission occurs once per year in winter term. The deadline for submitting program application material and completing the required program pre-admission test and other requirements is September 8 annually, for winter term admission.

To be eligible, prerequisite classes must have been completed with a grade of " C " or better prior to the application deadline. For courses graded only as pass/no pass, a pass that is equal to a "C" is required. If a course is repeated, only the most recent grade will be considered for the selection process. Applicants must have a minimum 2.0 cumulative GPA (for all courses completed at RCC, or at a college where anatomy and
physiology courses were completed, if applicant is new to RCC) and be in good standing (not on academic warning or probation) at RCC to be eligible.

If an applicant has taken an equivalent course elsewhere which has a course number, title, or credit hour different from the RCC course, she or he must contact Enrollment Services for a transfer credit evaluation as far in advance of the application deadline as possible.

Accepted students must attend mandatory program orientations the last two Friday mornings of fall term prior to the beginning of Practical Nursing courses in winter term. A notice of dates, times, and place of the orientations will be emailed to accepted students. Accepted applicants (notification occurs by midNovember) must have proof of a valid unencumbered OSBN CNA certification current through November 1 annually and have completed required preparatory courses with a "C" or better by the end of fall term to retain acceptance and enter practical nursing courses in winter term.

Accepted students must pass a criminal history background check and urine drug screen (with negative results) to retain acceptance and enter the program in January. Information regarding both can be found on the program website and will be provided to students before winter practical nursing classes begin. Since applicants are or will be CNAs, failed criminal history checks or urine drug screens will be reported to the OSBN. Accepted students must successfully complete a CPR Health Care Provider course (adult/infant/child, one- and two-person, with AED; online courses are not accepted) within one year prior to the September application deadline (and must remain current throughout program). The CPR course must comply with the American Heart Association standards.

CNA work experience is recommended before application but not required. Practical nursing faculty will evaluate the CNA skills of all students admitted to PN 101. More information is available by clicking on "enter here" on the program website at www.roguecc.edu/nursing/practicalnursing.

## Graduation Requirements

These requirements apply only to students admitted to the Practical Nursing Certificate program courses in January of each year. Students contemplating admission in a later year may have different requirements and must obtain the graduation guide for that year. Successful completion means that students must complete all courses in this program with a grade of " C " or better to continue in and complete the program and receive a certificate. Accepted PN students will forfeit their acceptance unless a complete anatomy and physiology sequence and all other required preparatory courses have been successfully completed, and the criminal history background check and urine drug screen have been passed prior to the start of PN 101 in January.

The OSBN screens all applicants for licensure and may deny licensure to applicants with a criminal offense or with a major physical or mental condition that could affect their ability to practice nursing safely. Licensure applicants with a history of chemical dependence may be required to have an assessment by a drug and alcohol counselor. Contact the OSBN with any questions.

Clinical (inclusive of skills lab) courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a " C " or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Prerequisites

- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) (within last seven years or BI 231 /BI 231 L and BI 232 / BI 232 L if both completed with labs within last seven years) ${ }^{1}$
- BI 121L - Elementary Anatomy and Physiology I Lab 1 Credit(s) (within last seven years or BI $231 / \mathrm{BI} 231 \mathrm{~L}$ and $\mathrm{BI} 232 / \mathrm{BI} 232 \mathrm{~L}$ if both completed with labs within last seven years) ${ }^{1}$
- MTH 65 - Fundamentals of Algebra II 4 Credit(s) or higher-level math ${ }^{2}$
- PSY 101 - Psychology of Human Relations 3 Credit(s) ${ }^{2}$
- WR 115 - Introduction to Expository Writing 3 Credit(s) (or designated placement or completion of WR 121Z)
- $\quad 5.400-$ CNA-1 (OSBN-approved CNA-1 course with completion certificate; course proof waived for students with copy of current OSBN CNA-1 certification attached to application) ${ }^{3}$


## Total Prerequisite Credits: 11-14

## Required Preparatory Courses

- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) or BI 233 within the last seven years if student completed BI 231 and BI 232 as prerequisites ${ }^{1}$
- BI 122L - Elementary Anatomy and Physiology II Lab 1 Credit(s) or BI 233L within the last seven years if student completed BI 231 L and BI 232 L as prerequisites ${ }^{1}$
- CPR Health Care Provider course (HE 261 or other AHA or ARC adult/infant/child, one- and twoperson course with AED) completed later than September one year before application deadline 0-1 Credit(s)
- CIS/CS - Approved Computer Information Science or Computer Science course, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years 0-2 Credit(s)
- WR 121Z - Composition I 4 Credit(s) ${ }^{4}$

Total Preparatory Credits: 8-11

## Required Courses

## Winter (First) Term

- PN 101 - Practical Nursing I 8 Credit(s)
- PN 101C - Practical Nursing I Clinical 4 Credit(s)

Term Credits: 12

## Spring (Second) Term

- PN 102 - Practical Nursing II 8 Credit(s)
- PN 102C - Practical Nursing II Clinical 4 Credit(s)
- AH 100 - Medical Terminology: Introduction 3 Credit(s) or approved program elective

Term Credits: 13-15

- PN 103 - Practical Nursing III 7 Credit(s)
- PN 103C - Practical Nursing III Clinical 3 Credit(s)
- PN 104C - Practical Nursing Leadership Clinical 2 Credit(s) (post-summer session) ${ }^{5}$

Term Credits: 12

## Total Program and Preparatory Credits: 45-50

## Approved Program Electives

- Any college-level (100 or 200 numbered) transferable non-studio humanities, social science or science electives.


## Notes:

${ }^{1}$ Virtual labs are not accepted; see end of this footnote. Remote or distance labs not conducted in the physical presence of an instructor are also not accepted for lab science courses. Note: due to the COVID pandemic, lab courses taken online during 2020-2022 will be accepted.
${ }^{2}$ Required for graduation.
${ }^{3}$ Accepted students will be required to provide the program secretary with proof of current unencumbered CNA certification in Oregon valid through at least November 1 in the year of application in order to retain acceptance and be admitted to the first practical nursing course the following winter term.
${ }^{4}$ WR121, 3 credits, completed before summer of 2009 is also acceptable.
${ }^{5}$ Students must register for PN 104C (summer session) at the same time they register for PN 103 and PN 103C. PN 103, PN 103C and PN 104C are in a new academic/financial aid year.

## For more information, contact the Nursing Department:

Phone: 541-956-7500
Email: Nursinglnfo@roguecc.edu
Web address: www.roguecc.edu/nursing/practicalnursing
TTY: Oregon Telecom Relay Service, 711

# Fire Science, Associate of Applied Science 


#### Abstract

About the Program

The fire service is a highly dynamic profession that offers a variety of daily challenges to the professionals who work within it. The primary mission of the RCC Fire Science program is to prepare students for careers as firefighters. Students who complete the program will be prepared to meet the unique demands of a rewarding profession. The program prides itself on delivering the highest education available by following standards set by the National Fire Protection Association (NFPA) and the Fire Emergency Services Higher Education (FESHE). Fire Science program coursework is accredited by the Oregon Department of Public Safety Standards and Training.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Fire Science Associate of Applied Science are:

Perform an adequate patient assessment and formulate and implement a Basic Life Support treatment plan for patients with a variety of medical and traumatic emergencies.

Perform safe and effective fire suppression techniques and hazard mitigation utilizing tools and appliances under high levels of stress.

Describe and use defensive and safe driving techniques and the operation of emergency vehicles and fire pumps.

Demonstrate leadership, teamwork and decision making in the management, treatment, or transport of emergency patients.

Describe and apply fire prevention, inspection, and investigations on and off the fire ground.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

The Fire Science program advisor will work with each student to design an individualized sequence of instruction.

Students must be at least 17 years old to apply to the ES 131 course. Students must be a high school graduate or have a GED ® or equivalent for certification. In addition, students will be required to complete all screening requirements outlined in OAR 409-030-0190 and additional RCC requirements.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Fire Science Program Coordinator's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their degrees.
Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 91-93

Program Email Address: EmergencyServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.


## Prerequisite Credits: 0-14

## Term 1

- ES 105 - Introduction to Emergency Services 4 Credit(s)
- FRP 251 - Firefighter Essentials I $8 \mathbf{C r e d i t}(\mathbf{s})^{2}$
- FRP 256 - Fire Behavior and Combustion 3 Credit(s)
- FRP 261 - Hazardous Materials Awareness and Operations 2 Credit(s)


## Term Credits: 16

## Term 2

- ES 131 - Emergency Medical Technician - Part I 6 Credit(s)
- FRP 233 - Firefighter Safety and Survival 3 Credit(s)
- FRP 252 - Firefighter Essentials II 4 Credit(s)
- FRP 262 - Fundamentals of Fire Prevention 3 Credit(s)


## Term Credits: 16

## Term 3

- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition.
- ES 132 - Emergency Medical Technician - Part II 6 Credit(s)
- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60 or higher-level math. Speak to an advisor, consider STAT $243 Z$ if transferring.


## Term Credits: 13

## Term 4

## Check-in with Advisor

- ES 171 - Emergency Vehicle Operations 2 Credit(s)
- ES 268 - Emergency Service Rescue 3 Credit(s)
- ES 295 - Health and Fitness for Emergency Service Workers 3 Credit(s) or HPE 295
- FRP 242 - Introduction to Codes and Ordinances 3 Credit(s)
- COMM 100Z - Introduction to Communication 4 Credit(s) or higher-level COMM course


## Term Credits: 15

## Term 5

- FRP 249 - Fire Service Leadership 3 Credit(s)
- FRP 258 - Pumper Operator 2 Credit(s)
- FRP 272 - Fixed Systems and Extinguishers 3 Credit(s)
- FRP 273 - Fire Investigation 3 Credit(s)
- Any college-level (100-200 numbered) transferrable non-studio humanities, social science or science electives. 3 Credit(s) or other approved program elective. Speak to your advisor.


## Term Credits: 14

## Term 6

- ES 205 - Crisis Intervention and Management for Emergency Services Workers 3 Credit(s)
- ES 280 - Cooperative Work Experience/Emergency Services 3 Credit(s) ${ }^{3}$ or documented practicum. This is a variable credit course. See advisor for any questions.
- FRP 259 - Water Supply Operations 2 Credit(s)
- FRP 264 - Building Construction for Fire Protection 3 Credit(s)
- FRP 274 - Firefighting Strategy and Tactics 3 Credit(s)
- FRP 285 - Fire Instructor I 3 Credit(s)

Term Credits: 17

## Approved Program Electives

## 3-4 Credits Required

- Any college-level (100 or 200 numbered) transferable non-studio humanities, social science or science elective(s) credits as needed to meet 90 credits.
- Any FRP or EMS 100 or higher course.


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2}$ FRP 251 taken previously for 8 credits but without a separate lab is also acceptable.
${ }^{3}$ Students with documented practicum experience need to complete electives to meet the minimum program total requirements.

## For more information, contact the Fire Science Department:

Phone: 541-956-7500
Email: EmergencyServicesInfo@roguecc.edu
Web address: www.roguecc.edu/emergencyservices
TTY: Oregon Telecom Relay Service, 711

## Nursing, Associate of Applied Science

## Fall Term 2024 Program Admission


#### Abstract

About the Program

RCC is a member of the Oregon Consortium for Nursing Education (OCNE) and offers a competency-based curriculum jointly developed by nursing faculties from the eleven community colleges and Oregon Health and Science University (OHSU) consortium partners. The core competencies address the need for nurses to be skilled in clinical judgment and critical thinking; evidence-based practice; relationship-centered care; interdisciplinary collaboration; assisting individuals and families in self-care practices for promotion of health and management of chronic and acute illness; end-of-life care; and teaching, delegation, leadership and supervision of caregivers.

Acceptance to the RCC Nursing program is a full-time commitment to two (2) years of nursing courses (after completing one (1) year of prerequisite/preparatory course work of 45 credits minimum and application to the limited-entry program.) Applicants admitted to the RCC Nursing program are co-admitted to the OHSU Nursing programs, and once students complete their Associate Degree in the Nursing program at RCC, the OCNE curriculum provides entry to OHSU's Nursing program. Continued full-time study for four (4) more terms leads to a Bachelor of Science degree in Nursing.

Graduates of the Rogue Community College Nursing program are eligible to sit for the NCLEX-RN licensure testing. Students who choose to complete their BSN through the OHSU School of Nursing program must complete an additional 15 credits of upper-division college credits in order to progress into nursing courses for the bachelor's degree through OHSU. RCC's Statistics course will apply, but all other upper-level courses must be taken at a college or university with $300+$ level courses.

Options available for baccalaureate completion can be found at https://www.ohsu.edu/school-of-nursing The Nursing program is approved by the Oregon State Board of Nursing (17938 SW Upper Boones Ferry Rd., Portland, OR, 971-673-0685, www.oregon.gov/OSBN).


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Ten collaboratively created OCNE competencies drive the curriculum. Program learning outcomes for the Nursing Associate of Applied Science are:

Base personal and professional actions on a set of shared core nursing values, including social justice, caring, advocacy, protection of patient autonomy, prevention of harm, respect for self and others, collegiality, authority, accountability, responsibility for nursing practice and ethical behavior.

Use reflection, self-analysis, and self-care to develop insight through reflection, self-analysis, and self-care.
Engage in intentional learning, developing self-awareness of the goals, processes, and potential actions of this learning and its effects on patient/client care.

Demonstrate leadership in nursing and health care to meet patient/client needs, improve the health care system, and facilitate community problem solving.

Collaborate as part of a health care team, providing, receiving, and using feedback in a constructive manner.

Practice within, utilize, and contribute to all health care systems.

Practice a relationship-centered approach, based on developing mutual trust and respect for the autonomy of the patient/client.

Communicate effectively, accurately and therapeutically, with attention to social and cultural influences, and use appropriate communication modalities and technologies to ensure patient safety and provide for comprehensive continuity of care.

Make sound clinical judgments through an iterative process of noticing, interpreting, responding and reflecting, use best available evidence, frameworks and systems to organize data and knowledge; accurately perform cognitive, affective and psychomotor skills in the delivery of care while maintaining safety of the patient/client, family, community, environment, and self.

Locate, evaluate, and use the best available evidence.

## Entry Requirements

Students are required to complete the Placement Process to determine skill level and readiness in math, reading, and writing. As part of their training, students must begin with the courses within their skill level as determined through the Placement Process. Students who have failed any two nursing courses (RN level, any program) are disqualified from applying for entry or re-entry to the RCC Nursing Program.

Program admission occurs once per year. Deadline for submitting program application material is
February 15 annually for fall term admission (see program website and/or application packet for more information). Transcripts showing satisfactory completion of the math and Anatomy and Physiology I prerequisites and at least 22 other credits of the prerequisite/preparatory courses (minimum of 30 credits) must be in the Enrollment Services office by the application deadline to be considered eligible. All prerequisite/preparatory courses must have been taken with a letter grade and completed with a "C" or better (C- grades are not accepted). Consortium partner schools will use shared standards in a point system and a set of core criteria for evaluation and selection of candidates to the consortium curriculum, but selection processes, acceptance decisions, and admissions will occur at individual schools. Application to the Nursing program requires a minimum GPA of 3.0 for all completed prerequisite/preparatory courses. Contact the Nursing Department or see the Nursing website for information regarding the application and selection process.

If an applicant has taken an equivalent course elsewhere which has a course number, title, or credit hour different from the RCC course, the applicant must contact RCC's Enrollment Services office for a transfer credit evaluation as far in advance of the application deadline as possible. To be admitted into nursing courses students must complete all required prerequisite and preparatory courses (minimum 45 credits) and be accepted into the Nursing program.

Accepted students must pass a criminal history background check and urine drug screen prior to nursing clinical experiences or their acceptance will be rescinded. Information regarding the background check and drug screen requirements can be found on the program's website with additional information and deadlines provided to students following acceptance and before fall nursing classes begin. Accepted students will also be required to complete by a specified deadline a CPR Health Care Provider course (adult/child/infant, oneand two-person, with AED, course must have been successfully completed within two years prior to admission to nursing courses. Information regarding required immunizations will be provided in the acceptance letter.

Internet and email access is an integral part of all nursing courses and access to a computer (at home or at the college) will be required on a daily basis. Nursing students attend classes at the Table Rock Campus in

White City. For the clinical practicum in both Josephine and Jackson Counties, the student will need reliable transportation. See the program website and/or program information for progression policies.

## Graduation Requirements

These requirements apply only to nursing students admitted to the program during 2023-24 academic year. The program of study, graduation requirements, and courses are under constant review and are subject to revision. Students contemplating admission in a later year may have different requirements and must obtain the program map or catalog for that year. If required courses (i.e., clinicals) are graded only on a pass/no pass basis, a grade of " P " for these courses indicate a student earned the equivalent of a " C " or better grade.

Students must complete all courses on this program map with a grade of " C " or better to continue in and complete the program, receive their degrees, and meet the educational requirements to apply to take the national licensure exam (NCLEX-RN). The OSBN screens all applicants for licensure and may deny licensure applicants with a criminal offense or with a major physical or mental condition that could affect their ability to practice nursing safely. Contact the OSBN with any questions.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation.

Please consult an advisor with any program completion questions.

## Fall Prerequisites/Required Preparatory Courses

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- WR 121Z - Composition I 4 Credit(s) ${ }^{2}$
- BI 211 - General Biology I 3 Credit(s) ${ }^{3}$
- BI 211L - General Biology I Lab 1 Credit(s) ${ }^{3}$
- MTH 95 - Intermediate Algebra 4 Credit(s) ${ }^{4}$

Total Credits: 12-14

## Winter Prerequisites/Required Preparatory Courses

- WR $122 Z$ - Composition II 4 Credit(s) ${ }^{2}$
- BI 231 - Anatomy and Physiology I 3 Credit(s) ${ }^{3}$
- BI 231L - Anatomy and Physiology I Lab 1 Credit(s) ${ }^{3}$
- PSY 201 - General Psychology I 4 Credit(s)

Total Credits: 12

## Spring Prerequisites/Required Preparatory Courses

- BI 232 - Anatomy and Physiology II 3 Credit(s) ${ }^{3}$
- BI 232L - Anatomy and Physiology II Lab 1 Credit(s) ${ }^{3}$
- NFM 225 - Nutrition 4 Credit(s)
- PSY 215 - Lifespan Human Development 4 Credit(s)

Total Credits: 12

## Fall Prerequisites/Required Preparatory Courses

- BI 233 - Anatomy and Physiology III 3 Credit(s) ${ }^{3}$
- BI 233L - Anatomy and Physiology III Lab 1 Credit(s) ${ }^{3}$
- BI 234 - Microbiology 3 Credit(s) ${ }^{3}$
- BI 234L - Microbiology Lab 1 Credit(s) ${ }^{3}$


## Total Credits: 8

30 Prerequisite/ Required Preparatory Credits to be eligible to apply

- Any college-level (100 or 200 numbered) transferable non-studio humanities, social science or science elective 0-6 Credit(s) ${ }^{4}$
- Application deadline is February 15 annually for fall term admission.

Remaining Prerequisite/Preparatory Credits (15-17) to be completed before admission to Nursing courses:

- To be admitted into nursing courses, students must complete all required prerequisite/required preparatory courses (minimum 45 credits) and be accepted into the Nursing program.


## Minimum Number of Prerequisite Credits Required: 45

See footnote 5.
See Nursing website for application materials: https://www.roguecc.edu/landing/nursing.asp

## First Year Nursing Course Requirements

## See footnote 6.

## Fall Term

- NRS 110 - Foundations of Nursing-Health Promotion 4 Credit(s)
- NRS 110C - Foundations of Nursing-Health Promotion Lab And Clinical 5 Credit(s)
- NRS 232 - Pathophysiological Processes I 3 Credit(s)
- Any college-level (100 or 200 numbered) transferable social science elective 3 Credit(s) ${ }^{7}$

Total Credits: 15
Winter Term

- NRS 111 - Foundations of Nursing in Chronic Illness I 2 Credit(s)
- NRS 111C - Foundations of Nursing in Chronic Illness I Lab/Clinical 4 Credit(s)
- NRS 230 - Clinical Pharmacology I 3 Credit(s)
- NRS 233 - Pathophysiological Processes II 3 Credit(s)

Total Credits: 12

## Spring Term

- NRS 112 - Foundations of Nursing in Acute Care I 2 Credit(s)
- NRS 112C - Foundations of Nursing in Acute Care I Lab/Clinical 4 Credit(s)
- NRS 231 - Clinical Pharmacology II 3 Credit(s)

Total Credits: 9

## Spring Term (LPN Transition Only)

- NRS 115 - LPN Transition to OCNE 4 Credit(s) (only for accepted advanced placed LPNs) ${ }^{8}$
- NRS 115C - LPN Transition to OCNE Clinical 2 Credit(s)


## Second Year Nursing Course Requirements

## Fall Term

- NRS 221 - Nursing in Chronic Illness II and End-of-Life 5 Credit(s)
- NRS 221C - Nursing in Chronic Illness II and End- of-Life Clinical 4 Credit(s)
- Any college-level (100 or 200 numbered) transferable non-studio humanities, social science or science electives 3 Credit(s) ${ }^{7}$

Total Credits: 12
Winter Term

- NRS 222 - Nursing in Acute Care II and End-of-Life 5 Credit(s)
- NRS 222C - Nursing in Acute Care II and End-of-Life Clinical 4 Credit(s)
- Any college-level (100 or 200 numbered) transferable non-studio humanities, social science or science electives $3 \mathbf{C r e d i t}(\mathbf{s})^{7}$

Total Credits: 12

## Spring Term

- NRS 224 - Integrative Practicum 2 Credit(s)
- NRS 224C - Integrative Practicum Clinical 7 Credit(s)
- Any college-level (100 or 200 numbered) transferable non-studio humanities, social science or science electives (credits as needed to meet 90 credits) $3 \mathbf{C r e d i t ( s )}{ }^{7}$

Total Credits: 12

## Total Program Credits: 102

## INCLUDING 30 PREREQUISITE CREDITS REQUIRED TO APPLY

${ }^{1}$ If computer proficiency is documented ( 0 credits), students must be sure to complete at least 30 credits from prerequisite/preparatory course list by application deadline and all prerequisites by end of summer term in the year of application to enroll in nursing courses, if accepted.
${ }^{2}$ Applicants who have completed a non-nursing bachelor's degree in an English-speaking country can use it to meet this requirement.
${ }^{3}$ Virtual labs are not accepted; see note at end of this footnote. Remote or distance labs not conducted in the physical presence of an instructor are also not accepted for lab science courses; see note at end of this footnote. No extension beyond the seven-year time limit extension will be granted for anatomy and physiology courses. An acceptable genetics course may replace BI 211 only if the student has already completed the required anatomy and physiology and microbiology courses. Note: due to the COVID pandemic, lab courses taken online during 2020-22 will be accepted.
${ }^{4}$ Electives may be required in prerequisites and applied in order to reach the minimum 45 prerequisite credits. As needed electives may be required if students completed NFM 225, PSY 201 or PSY 202, PSY 215, WR121 and WR122, at 3 credits each, which are acceptable. If Life Span Human Development is completed prior to the application deadline, any previously completed transferable 3-4 credit social science course can replace PSY 201.
${ }^{5}$ MTH 95 or higher-level math ( 4 credits) and BI 231 must be part of the 30 credits completed by application deadline for application to be eligible. Remaining 15-19 prerequisite credits for eligibility may be from any of the prerequisite/required preparatory courses. Minimum prerequisite GPA for eligibility is 3.0. C-(minus) grades are not accepted.
${ }^{6}$ Students who plan to continue through to OHSU must be aware that to earn a bachelor's degree from OHSU, they must have two years of the same high school-level language, or two terms of college-level language, or pass a language proficiency examination. College-level transferable foreign language (including American Sign Language) credits count toward degree requirements. A minimum of 9 credits of humanities is required for the OHSU degree. Students planning to transition to OHSU must have 132 credits of prerequisite and program required courses by the completion of the AAS degree in order to meet the 180credit requirement by the completion of the bachelor's degree with a major in Nursing from OHSU. Students planning to earn a bachelor's degree are encouraged to complete STAT $243 Z$ Elementary Statistics I soon after the prerequisite math course.
${ }^{7}$ General education courses in this year may be completed during summer term but must be completed to progress to second year nursing courses.
${ }^{8}$ NRS 115 LPN Transition to OCNE, 6 credits, will be offered in spring term through RCC and will be limited to space available and to those LPNs who meet application/selection criteria. The application deadline will be October 15 or first business day following, annually. See the Nursing program director for more information.

## For more information, contact the Nursing Department:

Phone: 541-956-7500
Email: NursingInfo@roguecc.edu
Web address: www.roguecc.edu/Nursing
TTY: Oregon Telecom Relay Service, 711

# Paramedicine, Associate of Applied Science 


#### Abstract

About the Program The Emergency Medical Services (EMS) program is accredited by the Oregon Department of Education and the Oregon Health Authority - EMS, and the Paramedicine program is nationally accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP).

The program offers career training for entry-level personnel ranging from EMTs to paramedics. During the first year of study, successful completion of the EMT course leads to eligibility to sit for the state and National Registry EMT exams. Successful completion of this curriculum qualifies the graduate to sit for the state and national registry exams to become a paramedic.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for Paramedicine Associate of Applied Science are:

Perform a patient assessment and formulate and implement an Advanced Life Support treatment plan for patients with a variety of medical and traumatic emergencies.

Demonstrate effective communication, cultural competency, and conflict management and intervention skills for people in crisis.

Implement self-care strategies and techniques to address the impact of stress and emotional trauma on emergency providers.

Demonstrate leadership, teamwork and decision making in the management treatment, or transport of emergency patients.

Demonstrate workplace expectations regarding attendance, safety, conduct, and professionalism.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

This program requires an application and satisfaction of certain course admission criteria prior to enrolling in paramedic courses. Information is available on the Emergency Medical Services (EMS) Department website (https://www.roguecc.edu/dept/emergencyServices/ems.asp) or at the Emergency Services Department office located at the RCC Table Rock Campus. Students are strongly encouraged to meet with an Emergency Services Department advisor prior to beginning any coursework.

Students must be at least 17 years old to apply to the EMT course. Students must be high school graduates or have a GED or equivalent for certification. In addition, students will be required to complete all screening requirements outlined in OAR 409-030-0190 and additional RCC requirements.

## Graduation Requirements

Students completing the credits outlined in this program with a grade of "C-" or better and successfully certifying at the EMT level, will earn an Associate of Applied Science degree in Paramedicine. Certain required courses may be graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

Students are strongly encouraged to meet with an Emergency Services Department advisor prior to beginning any coursework. This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 91-95

Program Email Address: EmergencyServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60; Required for graduation. or higher-level math. Consider STAT $243 Z$ for future transfer.
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113; Required for graduation or higher-level composition.
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.
- BI 211 - General Biology I 3 Credit(s) ${ }^{2}$ Prerequisite for BI 231
- BI 211L - General Biology I Lab 1 Credit(s) ${ }^{2}$ Prerequisite for BI 231


## Prerequisite Credits: 11-14

## Term 1

## Check-in with Advisor

- ES 105 - Introduction to Emergency Services 4 Credit(s)
- ES 131 - Emergency Medical Technician - Part I 6 Credit(s)
- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- BI 231 - Anatomy and Physiology I 3 Credit(s)
- BI 231L - Anatomy and Physiology I Lab 1 Credit(s)


## Term Credits: 17

## Term 2

- ES 132 - Emergency Medical Technician - Part II 6 Credit(s)
- ES 295 - Health and Fitness for Emergency Service Workers 3 Credit(s) or HPE 295
- BI 232 - Anatomy and Physiology II 3 Credit(s)
- BI 232L - Anatomy and Physiology II Lab 1 Credit(s)


## Term Credits: 13

## Term 3

- BI 233 - Anatomy and Physiology III 3 Credit(s)
- BI 233L - Anatomy and Physiology III Lab 1 Credit(s)
- ES 171 - Emergency Vehicle Operations 2 Credit(s)
- ES 205 - Crisis Intervention and Management for Emergency Services Workers 3 Credit(s)
- ES 268 - Emergency Service Rescue 3 Credit(s)
- COMM 100Z - Introduction to Communication 4 Credit(s) Consider COMM $218 Z$ or COMM $111 Z$ for future transfer.


## Term Credits: 16

Students are required to have completed a minimum of 39 credits, including EMT and the anatomy and physiology series before they are eligible to begin the paramedic course. Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, Anatomy \& Physiology courses over 5 years old and EMS program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements.

## Term 4

Check-in with Advisor

- EMS 271 - Paramedic Care and Practice I 9 Credit(s) fall term only
- EMS 281 - Paramedic Clinical Practice I 3 Credit(s) fall term only


## Term Credits: 12

## Term 5

- EMS 272 - Paramedic Care and Practice II 9 Credit(s) winter term only
- EMS 282 - Paramedic Clinical Practice II 3 Credit(s) winter term only


## Term Credits: 12

## Term 6

- EMS 273 - Paramedic Care and Practice III 9 Credit(s) spring term only
- EMS 283 - Paramedic Clinical Practice III 3 Credit(s) spring term only

Term Credits: 12
Term 7

## Term Credits: 9

## Approved Program Electives (0-4 Credits Required)

- Any college-level (100 or 200 numbered) transferrable non-studio humanities, social science, or science electives variable Credit(s)
- Any FRP or EMS 100 or higher course variable Credit(s)


## Emergency Medical Service and Inservice Training

Up to 16 credits may be applied to the Paramedicine AAS degree for students who have completed documented EMS education or specific pre-hospital care experience comparable to course content. See the Emergency Services Department chair for information.

## Notes: <br> Students are required to have completed a minimum of 39 credits, including EMT and the anatomy and physiology series before they are eligible to begin the paramedic course. Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, Anatomy \& Physiology courses over 5 years old and EMS program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. <br> ${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years. <br> ${ }^{2} \mathrm{BI} 211$ / BI 211 L is a prerequisite to BI 231 / BI 231L; CHEM 104 / CHEM 104L / CHEM 104R also highly recommended. <br> For more information, contact the Emergency Services Department:

Phone: 541-956-7500
Email: EmergencyServicesInfo@roguecc.edu
Web address: www.roguecc.edu/emergencyservices
TTY: Oregon Telecom Relay Service, 711

# Health and Exercise Science Transfer to Southern Oregon University, Associate of Science 

(Formerly titled Health and Physical Education Transfer to Southern Oregon University)


#### Abstract

About the Program

The Associate of Science (AS) degree is based on a signed articulation agreement with Southern Oregon University (SOU). The program is designed for students transferring to SOU's bachelor's degree program in Health and Exercise Science. Students must work closely with advisors in their areas of interest to ensure electives are appropriate.

The curriculum allows for 48 core credits within the major area. By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to SOU. Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Health and Exercise Science Transfer to Southern Oregon University degree are:

Document knowledge of demographic health changes and trends in chronic and acute diseases in the U.S. over the last 100 years.

Explain best practices for addressing nutritional requirements for health.
Describe the connections between emotional well-being and physical wellness.
Demonstrate improvement in physical education activities and competencies.
Model correct functional movement in emergency and first aid scenarios.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are also graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a " C -" or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

## Total Program Credits: 90-92

Program email address: HPERInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- WR 115 - Introduction to Expository Writing 3 Credit(s) or higher-level composition
- MTH 96 - Applied Algebra II 4 Credit(s) or MTH 95 or higher-level math
- CIS 120 - Concepts in Computing I $2 \operatorname{Credit(s)}{ }^{1}$ Required for graduation.


## Prerequisite Credits: 0-9

## Fall

Check-in with Advisor

- HE 131 - Introduction to Exercise and Sport Science 3 Credit(s)
- BI 211 - General Biology I 3 Credit(s)
- BI 211L - General Biology I Lab 1 Credit(s)
- HPE 295 - Health and Fitness for Life 3 Credit(s)
- PE 185PCW - Physical Conditioning - Weight Training 1 Credit(s) or approved PE course
- HE 253 - Wilderness First Aid 3 Credit(s) or approved program elective course (credits vary)


## Term Credits: 14

## Winter

- WR $121 Z$ - Composition I 4 Credit(s)
- HE 259 - Care and Prevention of Athletic Injury 3 Credit(s) winter term only
- STAT $243 Z$ - Elementary Statistics 14 Credit(s)
- BI 212 - General Biology II 3 Credit(s) ${ }^{2}$ any other science or non-science lower division transfer course
- BI 212L - General Biology II Lab 1 Credit(s)
- PE 185CAC - Core and Cardio 1 Credit(s) or approved PE transfer course


## Term Credits: 16

## Spring

- WR $122 Z$ - Composition II 4 Credit(s) or WR $227 Z$
- HE 252 - First Aid/CPR 3 Credit(s)
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s) or COMM $111 Z$ or COMM $218 Z$
- NFM 225 - Nutrition 4 Credit(s)
- PE 185BPA - Backpacking Adventure 1 Credit(s) or approved PE transfer course


## Term Credits: 16

## Fall

## Check-in with Advisor

- BI 231 - Anatomy and Physiology I 3 Credit(s)
- BI 231L - Anatomy and Physiology I Lab 1 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s) or approved Humanities course (credits vary)
- PSY 101 - Psychology of Human Relations 3 Credit(s) or approve Social Science course (credits vary) or PSY 119 or SOC 230
- PE 185WWT - Women and Weights: Weight Control and Strength Improvement 1 Credit(s) or approved PE transfer course
- HE 250 - Personal Health 3 Credit(s)


## Term Credits: 15

## Winter

- BI 232 - Anatomy and Physiology II 3 Credit(s)
- BI 232L - Anatomy and Physiology II Lab 1 Credit(s)
- OAL 250 - Foundations of Outdoor Adventure and Leadership 3 Credit(s) or approved program elective
- PHL 102 - Ethics 4 Credit(s) or ART 131 or approved Humanities course (credits vary)
- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- PE 185WSA - Winter Survival and Snow Camping Adventure 1 Credit(s) or approved PE185 transfer course
- PE 185MTA - Mountaineering Adventure 1 Credit(s) or approved program elective


## Term Credits: 16

## Spring

- HE 208 - HIV and Infectious Diseases 1 Credit(s) fall RWC, spring RVC
- BI 233 - Anatomy and Physiology III 3 Credit(s)
- BI 233L - Anatomy and Physiology III Lab 1 Credit(s)
- REL 201 - World Religions 4 Credit(s) or approved Humanities course (credits vary)
- PE 185LSW - Lap Swimming 1 Credit(s) or approved PE185 transfer course
- PE 185YOF - Yoga Flow 1 Credit(s) or approved PE185 transfer course
- HE 145 - Stress Management - Healthy Living 1 Credit(s) or HE 199 or approved program elective
- PE 280 - Cooperative Work Experience/Physical Education Var. (1-3) Credit(s) Department Chair approval needed


## Term Credits: 14

## Approved Humanities Electives

## Complete at least three courses from the following list, 9-12 credits.

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Approved Social Science Electives

## Complete at least one course from the following list, 3-4 credits.

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- COMM 237 - Communication and Gender 4 Credit(s)
- ECON 115 - Introduction to Economics 3 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- IS 110 - Introduction to International Studies I 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 215 - Lifespan Human Development 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) or HST 259


## Approved Program Electives

Select 7-9 credits from a related field, not otherwise required within the base program or option area.

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2} \mathrm{BI} 212$ (highly recommended) or any other science or non-science lower division transfer course.

## For more information, contact the Health/PE/Recreation Department:

Phone: 541-956-7500
Email: HPERInfo@roguecc.edu
Web address: www.roguecc.edu/HPER
TTY: Oregon Telecom Relay Service, 711

# Health Informatics - Transfer to Oregon Tech, Associate of Science 


#### Abstract

About the Program

This Associate of Science (AS) degree is based on a signed articulation agreement with Oregon Tech. The program is designed for students transferring to its baccalaureate degree program in Information Technology/Health Informatics Option. Students must work closely with advisors in their areas of interest to ensure electives are appropriate. The curriculum allows for 42 core credits within the major area. By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to Oregon Tech.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcomes for the Health Informatics - Transfer to Oregon Tech degree are:

Demonstrate the knowledge, techniques, skills, and modern tools of the discipline to defined health systems technology.

Ability to design and implement health systems using the latest technology and standard best practices.
Ability to identify, analyze, and solve technical issues with the use of health systems and technology.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: ComputerScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s)
- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 2-9

## Fall

Check-in with Advisor

- BA 211 - Financial Accounting I 4 Credit(s)
- CIS 145 - Introduction to Hardware/Software 5 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)
- MTH 111Z - Precalculus I: Functions 4 Credit(s)


## Term Credits: 17

## Winter

- CIS 179 - Introduction to Networks 4 Credit(s)
- BA 213 - Managerial Accounting 4 Credit(s)
- AH 100 - Medical Terminology: Introduction 3 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s)


## Term Credits: 14

## Spring

- WR 227Z - Technical Writing 4 Credit(s)
- CIS 240 - Advanced Operating Systems 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- ART 116 - Basic Design (Color Theory) 3 Credit(s)

Term Credits: 15
Fall

Check-in with Advisor

- CIS 125DB - Database Management Systems 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s) or approved Humanities transfer course (credits vary)
- COMM 1112 - Public Speaking 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)


## Term Credits: 15

## Winter

- CS 133C\# - Programming Fundamentals Using C\# 4 Credit(s) winter term only
- BI 102 - Introduction to Biology II 3 Credit(s) winter term only
- BI 102L - Introduction to Biology II Lab 1 Credit(s)
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s)
- BA 206 - Management Fundamentals 3 Credit(s)


## Term Credits: 15

## Spring

- CS 275 - Data Base Development I 4 Credit(s) spring term only
- CIS 279 - Network Operating Systems 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s) or approved Humanities transfer course (credits vary)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)


## Term Credits: 16

## Approved Transferable Electives

Complete a sufficient number of college-level (numbered 100 and above) courses to meet the total degree requirement of at least 90 credits.

## Humanities Electives

Complete at least two courses from the following list, 6-8 credits. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## For more information, contact the Computer Science Department:

Phone: 541-956-7500
Email: ComputerScienceInfo@roguecc.edu
Web address: www.roguecc.edu/computerscience
TTY: Oregon Telecom Relay Service, 711

# Outdoor Adventure Leadership Transfer to Southern Oregon University, Associate of Science 


#### Abstract

About the Program

The Associate of Science (AS) degree is based on a signed articulation agreement with Southern Oregon University (SOU). The program is designed for students transferring to SOU's bachelor's degree program in outdoor adventure leadership. Students must work closely with advisors in their areas of interest to ensure electives are appropriate.

The curriculum allows for 38-47 core credits within the major area. By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to SOU. Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Outdoor Adventure Leadership Transfer to Southern Oregon University degree are:

Document knowledge of demographic health changes and trends in chronic and acute diseases in the U.S. over the last 100 years.

Demonstrate responsible wilderness ethics as defined by current industry trends.
Demonstrate excellence in technical skills with competence in safety and industry standards.
Demonstrate expertise in logistics and expedition planning.
Facilitate a quality program through the use of effective communication, appropriate relationships, and compassionate leadership.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are also graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a " C -" or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

## Total Program Credits: 90-92

Program email address: HPERInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- WR 115 - Introduction to Expository Writing 3 Credit(s) or higher-level composition
- MTH 96 - Applied Algebra II 4 Credit(s) or MTH 95 or higher-level math
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.


## Prerequisite Credits: 0-9

## Fall

Check-in with Advisor

- HE 131 - Introduction to Exercise and Sport Science 3 Credit(s) fall term only
- WR $121 Z$ - Composition I 4 Credit(s)
- HE 253 - Wilderness First Aid 3 Credit(s) fall term RWC only
- G 101 - Introduction to Geology I 3 Credit(s) or approved Lab Science course (credits vary)
- G 101L - Introduction to Geology I Lab 1 Credit(s) or approved Lab Science course (credits vary)
- PE 185KSA - Kayaking the Sea Coast Adventure 1 Credit(s) or PE 185SUA or approved Water PE185 course F/W/Sp

Term Credits: 15

## Winter

- HE 259 - Care and Prevention of Athletic Injury 3 Credit(s) winter term only (rotated between RWC and RVC)
- WR $122 Z$ - Composition II 4 Credit(s) or WR $227 Z$
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s)
- PE 185WSA - Winter Survival and Snow Camping Adventure 1 Credit(s) or PE 185SSS or approved Land PE185 course F/W/Sp
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) or approved Lab Science course (credits vary)
- G 102L - Introduction to Geology II (Surface Process) Lab 1 Credit(s) or approved Lab Science course (credits vary)


## Term Credits: 16

## Spring

- HPE 295 - Health and Fitness for Life 3 Credit(s)
- COMM 225-Small Group Communication and Problem-solving 4 Credit(s) or COMM $111 Z$ or COMM $218 Z$
- REL 201 - World Religions 4 Credit(s) or REL 243 or approved Humanities transfer course
- PE 185RRV - Rafting the River 1 Credit(s) or approved Water PE185 course F/W/Sp
- ENV 111 - Introduction to Environmental Science 3 Credit(s) or GEOG 110 or GEOG 120 if not taken as a Social Science course


## Term Credits: 15

## Fall

Check-in with Advisor

- NFM 225 - Nutrition 4 Credit(s)
- OAL 150 - Outdoor Living Skills 2 Credit(s) fall term RWC only
- PHL 101 - Philosophical Problems 4 Credit(s) or ENG 275 or MUS 105 or approved Humanities course (credits vary)
- SPAN 101 - First Year Spanish 14 Credit(s) or program elective course applied toward total of 616
- PE 185SUA - Surfing Adventure 1 Credit(s) or approved Water PE185 course F/W/Sp


## Term Credits: 15

## Winter

- OAL 250 - Foundations of Outdoor Adventure and Leadership 3 Credit(s) winter term RWC only
- PHL 102 - Ethics 4 Credit(s) or HUM 101 or ENG 107 or approved Humanities course (credits vary)
- SOC 228 - Environment and Society 4 Credit(s) or approved Social Science course (credits vary)
- PE 185MTA - Mountaineering Adventure 1 Credit(s) or PE 185SSS or approved Land PE185 course F/W/Sp
- SPAN 102 - First Year Spanish II 4 Credit(s) or program elective course applied toward total of 616

Term Credits: 16

## Spring

- BI 100SB - Biology of Human Body Systems 3 Credit(s) or approved Science Lab course (credits vary)
- PE 185RCB - Rock Climbing Beginning 1 Credit(s) or PE 185BPA or approved Land PE185 course F/W/Sp
- SPAN 103 - First Year Spanish III 4 Credit(s) or program elective course applied toward total of 616
- OAL 223 - Wilderness Navigation 2 Credit(s) spring term RWC only
- SOC 230 - Introduction to Gerontology 4 Credit(s) or approved Social Science course (credits vary)

Term Credits: 14

## Summer Optional Electives

## (See summer schedule.)

Land

## Choose a minimum of three classes from the following list.

- PE 185BMT - Mountain Biking 1 Credit(s)
- PE 185BPA - Backpacking Adventure 1 Credit(s)
- PE 185CRD - Road Cycling 1 Credit(s)
- PE 185HOA - Hiking Oregon Adventure 1 Credit(s)
- PE 185MTA - Mountaineering Adventure 1 Credit(s)
- PE 185RCA - Rock Climbing Adventure 1 Credit(s)
- PE 185RCB - Rock Climbing Beginning 1 Credit(s)
- PE 185SSS - Snow Skiing - Snowboarding 1 Credit(s)
- PE 185WSA - Winter Survival and Snow Camping Adventure 1 Credit(s)
- PE 185ZLG - Zip Line Guide Technical Skills 1 Credit(s)


## Water

Choose a minimum of three classes from the following list.

- PE 185RRV - Rafting the River 1 Credit(s)
- PE 185SUA - Surfing Adventure 1 Credit(s)
- PE 185KSA - Kayaking the Sea Coast Adventure 1 Credit(s)
- PE 185KWW - Kayaking Whitewater 1 Credit(s)
- PE 291 - Red Cross Lifeguard Training 2 Credit(s)


## Approved Humanities Electives

Complete at least three courses from the following list, 9-12 credits.

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 201 - Media and Society 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Approved Social Science Electives

## Complete at least two courses from the following list, 6-8 credits.

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- IS 110 - Introduction to International Studies I 4 Credit(s)
- COMM 237 - Communication and Gender 4 Credit(s)
- ECON 115 - Introduction to Economics 3 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 215 - Lifespan Human Development 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) or HST 259
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)


## Approved Science Electives

Complete at least three courses, two of which must have labs, from the following list, 11-15 credits. Note that only one course can be a regional field studies course indicated by asterisk.

- BI 100SB - Biology of Human Body Systems 3 Credit(s) (non-lab course)
- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L AND CHEM 104R
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- CHEM 221 - General Chemistry I 3 Credit(s) AND CHEM 221L AND CHEM 221R
- CHEM 222 - General Chemistry II 3 Credit(s) AND CHEM 222L AND CHEM 222R
- CHEM 223 - General Chemistry III 3 Credit(s) AND CHEM 223L AND CHEM 223R
- CIS 195 - Web Authoring I 4 Credit(s) (non-lab course)
- ENV 111 - Introduction to Environmental Science 3 Credit(s) (non-lab course)
- G 100 - Fundamentals of Geology 3 Credit(s) (non-lab course)
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GEOG 100 - Introduction to Physical Geography 3 Credit(s) (non-lab course)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L
- GS 170 - Regional Field Studies 3 Credit(s) * AND GS 170L
- PH 201 - General Physics I 3 Credit(s) AND PH 201L AND PH 201R
- PH 202 - General Physics II 3 Credit(s) AND PH 202L AND PH 202R
- PH 203 - General Physics III 3 Credit(s) AND PH 203L AND PH 203R
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) AND PH 211L AND PH 211R
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) AND PH 212L AND PH 212R
- PH 213 - General Physics (Calculus Based) III 3 Credit(s) AND PH 213L AND PH 213R


## Approved Program Electives

Complete 6-16 credits from the followin list, as needed for a total of 90 program credits.

- HE 199 - Special Studies: Health and Wellness Issues Var. (1-3) Credit(s)
- HE 208 - HIV and Infectious Diseases 1 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- HE 252 - First Aid/CPR 3 Credit(s)
- PE 184 - Adaptive Physical Education 1 Credit(s)
- PE 185 - Any physical education course not required within corerequirements variable Credit(s)
- PE 199 - Special Studies: Physical Education Var. (1-3) Credit(s)
- PE 280 - Cooperative Work Experience/Physical Education Var. (1-3) Credit(s)
- Any lower division transfer course not already required variable Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Health/PE/Recreation Department:

Phone: 541-956-7500
Email: HPERInfo@roguecc.edu
Web address: www.roguecc.edu/HPER
TTY: Oregon Telecom Relay Service, 711

# Associate of Arts Oregon Transfer, Outdoor Adventure Leadership Interest 


#### Abstract

About the Program

The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is recommended that students also consult with the transfer college of choice regarding specific prerequisites since requirements for an outdoor adventure leadership major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given
term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. If students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor for any questions in preparing to complete your transfer degree.

## Total Program Credits: 90

Program email address: HPERInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Term 1

## Check-in with Advisor

- HE 131 - Introduction to Exercise and Sport Science 3 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)
- HE 253 - Wilderness First Aid 3 Credit(s)
- PE 185KSA - Kayaking the Sea Coast Adventure 1 Credit(s) or PE 185SUA
- G 101 - Introduction to Geology I 3 Credit(s) or approved AAOT Science Lab transfer course (credits vary)
- G 101L - Introduction to Geology I Lab 1 Credit(s) or approved AAOT Science Lab transfer course (credits vary)


## Term Credits: 15

## Term 2

- HPE 295 - Health and Fitness for Life 3 Credit(s)
- PE 185WSA - Winter Survival and Snow Camping Adventure 1 Credit(s) or PE 185MTA
- WR $122 Z$ - Composition II 4 Credit(s)
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s)
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) or approved AAOT Science Lab transfer course (credits vary)
- G 102L - Introduction to Geology II (Surface Process) Lab 1 Credit(s) or approved AAOT Science Lab transfer course (credits vary)


## Term Credits: 16

## Term 3

- HE 259 - Care and Prevention of Athletic Injury 3 Credit(s)
- PE 185BPA - Backpacking Adventure 1 Credit(s) or PE 185RRV
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $218 Z$ or COMM $115^{1}$
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s) or approved AAOT Social Science course
- MUS 206 - Introduction to Rock Music 3 Credit(s) ${ }^{1}$ or ENG 275 or approved AAOT Humanities transfer course


## Term Credits: 15

## Term 4

Check-in with Advisor

- NFM 225 - Nutrition 4 Credit(s) or approved AAOT Science transfer course (credits vary)
- SPAN 101 - First Year Spanish I 4 Credit(s) or SPAN $201{ }^{1}$
- PE 185SUA - Surfing Adventure 1 Credit(s) or PE 185KSA
- OAL 150 - Outdoor Living Skills 2 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s) or MUS $108{ }^{1}$ or approved AAOT Humanities transfer course


## Term Credits: 15

## Term 5

- SOC 228 - Environment and Society 4 Credit(s) or SOC $204{ }^{1}$ approved AAOT Social Science course
- PHL 102 - Ethics 4 Credit(s) or ENG $260{ }^{1}$ approved AAOT Humanities course
- OAL 250 - Foundations of Outdoor Adventure and Leadership 3 Credit(s)
- SPAN 102 - First Year Spanish II 4 Credit(s) or SPAN $202{ }^{1}$
- PE 185MTA - Mountaineering Adventure 1 Credit(s) or PE 185WSA

Term Credits: 16

## Term 6

- BI 211 - General Biology I 3 Credit(s) or approved AAOT Science lab transfer course (credits vary)
- BI 211L - General Biology I Lab 1 Credit(s) or approved AAOT Science lab transfer course (credits vary)
- PSY 215 - Lifespan Human Development 4 Credit(s) or approved AAOT Social Science course
- OAL 223 - Wilderness Navigation 2 Credit(s) as needed to meet minimum program requirements of 90 credits
- SOC 230 - Introduction to Gerontology 4 Credit(s) or approved AAOT Social Science course
- PE 185RCA - Rock Climbing Adventure 1 Credit(s) or PE 185BPA, PE 185ZLG, PE 185RRV as needed to meet minimum program requirements of 90 credits


## Term Credits: 15

## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).
Note:

- Three courses required in the Humanities category from at least two disciplines (at least 2 prefixes).
- Four courses required in Social Science category, from at least two disciplines (at least 2 prefixes).
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR121, WR122 and either WR123 or WR227 Students taking classes of 4 credits each must take WR 121 Z and either WR $122 Z$ or WR $227 Z$.
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.


## For more information, contact the HPER Department:

Phone: 541-956-7500
Email: HPERInfo@roguecc.edu
Web address: www.roguecc.edu/HPER
TTY: Oregon Telecom Relay Service, 711

# Science, Technology, Engineering, Math Pathway 

## Associate of General Studies, Architecture Interest

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AGS framework. See the AGS program map for full degree requirements. The following list includes recommended courses for students who have an interest in architecture, primarily focused on developing skills necessary for entry into an architecture, but may also be accepted as core required freshman architecture courses by the specific institution.

Students must research the specific requirements of the architectural program they plan to transfer into; all such programs, in Oregon and nationally, are rigorous, conservatory-based programs, requiring generally five years of full-time study, accepting limited transfer credits. Students will have to be accepted into the program before they can begin study. The great majority of the classwork is program-specific, students work in a cohort setting, and the courses are offered only at the transfer institution. Students are encouraged to work closely with their RCC academic advisors and visit the transfer school of choice website for specific admission and academic major requirements.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year public Oregon college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation.

Total Program Credits: 90

Program email address: Sciencelnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Fall

Check-in with Advisor

- MTH 111 - Precalculus I: Functions 4 Credit(s) or higher-level math
- ART 204 - History of Art I 4 Credit(s) ${ }^{1}$
- WR $121 Z$ - Composition I 4 Credit(s)
- ART 131 - Introduction to Drawing (Value) 3 Credit(s)


## Term Credits: 15

## Winter

- COMM 111 - Public Speaking 4 Credit(s) or COMM 100Z, or COMM 115, or COMM $218 Z$
- ART 205 - History of Art II 4 Credit(s)
- MTH 1122 - Precalculus II: Trigonometry 4 Credit(s)
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) ${ }^{1}$


## Term Credits: 15

## Spring

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) or any Social Science course
- ART 206 - History of Art III 4 Credit(s) ${ }^{1}$
- PE 185YOG - Yoga 1 Credit(s) or any College-level course
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{2}$
- HPE 295 - Health and Fitness for Life 3 Credit(s) or any Fitness/Health/PE course


## Term Credits: 14

## Fall

Check-in with Advisor

- PH 201-General Physics I 3 Credit(s) ${ }^{1}$ or any Science Lab course
- PH 201L - General Physics I Lab 1 Credit(s) ${ }^{1}$ or any Science Lab course
- PH 201R - General Physics I Recitation 1 Credit(s) or any Science Lab course
- ART 276 - Sculpture I 3 Credit(s) ${ }^{1}$
- ART 294 - Watercolor I 3 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)

Term Credits: 14

## Winter

- PH 202-General Physics II 3 Credit(s) ${ }^{1}$ or any Science Lab course
- PH 202L - General Physics II Lab 1 Credit(s) ${ }^{1}$ or any Science Lab course
- PH 202R - General Physics II Recitation 1 Credit(s) or any Science Lab course
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s) winter term only
- ART 281 - Painting I 3 Credit(s)
- ART 257 - Jewelry and Metalsmithing I 3 Credit(s)

Term Credits: 14

## Spring

- PH 203 - General Physics III 3 Credit(s) ${ }^{1}$ or any Science Lab course
- PH 203L - General Physics III Lab 1 Credit(s) ${ }^{1}$ or any Science Lab course
- PH 203R - General Physics III Recitation 1 Credit(s) or any Science Lab course
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s) or any Social Science course
- ART 234 - Figure Drawing I 3 Credit(s)
- ART 253 - Ceramics I 3 Credit(s)
- DDM 125 - Digital Photography 3 Credit(s)

Term Credits: 18

## University-recommended and other courses

- ART 132 - Introduction to Drawing (Line) 3 Credit(s) ${ }^{1}$
- ART 204 - History of Art I 4 Credit(s) ${ }^{1}$
- ART 205 - History of Art II 4 Credit(s) ${ }^{1}$
- ART 206 - History of Art III 4 Credit(s) ${ }^{1}$
- ART 276 - Sculpture I 3 Credit(s) ${ }^{1}$
- DDM 160 - Digital Imaging: Photoshop 3 Credit(s) ${ }^{1}$
- MTH 111Z - Precalculus I: Functions 4 Credit(s)
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s)
- PH 201 - General Physics I 3 Credit(s) ${ }^{1}$ AND PH 201L AND PH 201R
- PH 202 - General Physics II 3 Credit(s) ${ }^{1}$ AND PH 202 L AND PH 202R
- PH 203 - General Physics III 3 Credit(s) ${ }^{1}$ AND PH 203L AND PH 203R
- WR $122 Z$ - Composition II 4 Credit(s)

[^2]
## For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Associate of General Studies, Biology Interest 


#### Abstract

About the Program The Associate of General Studies degree is a two-year program designed to provide students the opportunity to acquire a broad education rather than pursuing a specific college major or program. The general studies degree may, in addition to general education coursework, include lower-division college transfer and career and technical education courses. Because of the flexibility of this degree, it may not fulfill requirements for transfer to a four-year institution.

If planning on a specific interest within the Associate of General Studies, see an academic advisor. https://web.roguecc.edu/advising


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to apply toward degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Individual courses may be challenged based on the student's life experience or knowledge. Arrangements may be made on an individual basis with the instructor teaching the course to determine specific challenge procedures. College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

The Associate of General Studies degree will be awarded to students who complete a minimum of 90 credit hours of college transfer and career and technical courses from the curriculum listed. Students must receive a grade of "C-" or better in all coursework. Certain required courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned a " C -" or better grade.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AGS framework. See the AGS program map for full degree requirements. It is recommended that students also consult with the transfer college of choice regarding specific prerequisites since requirements for a biology major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a public four-year Oregon college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. At least one four-credit elective course needs to be taken to achieve the minimum 90 credits required to graduate.

Total Program Credits: 90

Program email address: Sciencelnfo@roguecc.edu

## Program Prerequisites:

## MAY Be waived based on placement - see advising

- MTH 111 - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-11

## Fall

Check-in with Advisor

- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- PE 185TAI - Tai Chi 1 Credit(s) or PE 185SAS or any Fitness/Health/PE course.


## Term Credits: 13

## Winter

- CHEM 222 - General Chemistry II 3 Credit(s) winter term only
- CHEM 222L - General Chemistry II Lab 1 Credit(s) winter term only
- CHEM 222R - General Chemistry II Recitation 1 Credit(s) winter term only
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s)
- HS 152 - Stress Management 1 Credit(s) winter term only
- PE 185YOG - Yoga 1 Credit(s) or any College-level course


## Term Credits: 12

## Spring

- CHEM 223-General Chemistry III 3 Credit(s) spring term only
- CHEM 223L - General Chemistry III Lab 1 Credit(s) spring term only
- CHEM 223R - General Chemistry III Recitation 1 Credit(s) spring term only
- WR $121 Z$ - Composition I 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s) spring term only


## Term Credits: 13

## Summer

- WR $227 Z$ - Technical Writing 4 Credit(s) Strongly recommended.
- COMM 111Z - Public Speaking 4 Credit(s) or COMM 100Z, or COMM 115, or COMM $218 Z$
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PE 185RRV - Rafting the River 1 Credit(s) or any Fitness/Health/PE course


## Term Credits: 12

## Fall

Check-in with Advisor

- PH 201 - General Physics I 3 Credit(s) fall term only
- PH 201L - General Physics I Lab 1 Credit(s) fall term only
- PH 201R - General Physics I Recitation 1 Credit(s) fall term only
- BI 211 - General Biology I 3 Credit(s)
- BI 211L - General Biology I Lab 1 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s) or any Social Science course (credits vary)


## Term Credits: 13

## Winter

- PH 202 - General Physics II 3 Credit(s) winter term only
- PH 202L - General Physics II Lab 1 Credit(s) winter term only
- PH 202R - General Physics II Recitation 1 Credit(s) winter term only
- BI 212 - General Biology II 3 Credit(s)
- BI 212L - General Biology II Lab 1 Credit(s)
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or any Humanities course
- PE 185PCW - Physical Conditioning - Weight Training 1 Credit(s) or any Fitness/Health/PE course


## Term Credits: 14

## Spring

- PH 203 - General Physics III 3 Credit(s) spring term only
- PH 203L - General Physics III Lab 1 Credit(s) spring term only
- PH 203R - General Physics III Recitation 1 Credit(s)
- BI 213 - General Biology III 3 Credit(s)
- BI 213L - General Biology III Lab 1 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s) or any Social Science elective


## Term Credits: 13

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

For approved Humanities, Social Science and Science, see Associate of General Studies program map for Approved Electives.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Associate of General Studies, Chemistry Interest 


#### Abstract

About the Program The Associate of General Studies degree is a two-year program designed to provide students the opportunity to acquire a broad education rather than pursuing a specific college major or program. The general studies degree may, in addition to general education coursework, include lower-division college transfer and career and technical education courses. Because of the flexibility of this degree, it may not fulfill requirements for transfer to a four-year institution.

If planning on a specific interest within the Associate of General Studies, see an academic advisor. https://www.roguecc.edu/advising


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to apply toward degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Individual courses may be challenged based on the student's life experience or knowledge. Arrangements may be made on an individual basis with the instructor teaching the course to determine specific challenge procedures. College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

The Associate of General Studies degree will be awarded to students who complete a minimum of 90 credit hours of college transfer and career and technical courses from the curriculum listed. Students must receive a grade of "C-" or better in all coursework. Certain required courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned a " C -" or better grade.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AGS framework. See the AGS program map for full degree requirements. It is recommended that students also consult with the transfer college of choice regarding specific prerequisites since requirements for a chemistry major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a public four-year Oregon college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation.

Total Program Credits: 90

Program email address: ScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH $111 Z$ - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-11

## Fall

Check-in with Advisor

- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- PE 185YOG - Yoga 1 Credit(s) or any College-level course


## Term Credits: 13

## Winter

- CHEM 222 - General Chemistry II 3 Credit(s) winter term only
- CHEM 222L - General Chemistry II Lab 1 Credit(s) winter term only
- CHEM 222R - General Chemistry II Recitation 1 Credit(s) winter term only
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- WR 121Z - Composition I 4 Credit(s)


## Term Credits: 14

## Spring

- CHEM 223 - General Chemistry III 3 Credit(s) spring term only
- CHEM 223L - General Chemistry III Lab 1 Credit(s) spring term only
- CHEM 223R - General Chemistry III Recitation 1 Credit(s) spring term only
- MTH 253 - Calculus III (Infinite Series) 5 Credit(s) spring term only
- ART 204 - History of Art I 4 Credit(s) or any Humanities course


## Term Credits: 14

## Summer

Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only
- MTH 256 - Differential Equations 5 Credit(s) summer term only


## Term Credits: 10

## Fall

- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- HE 252 - First Aid/CPR 3 Credit(s) or any Fitness/Health/PE course
- WR $227 Z$ - Technical Writing 4 Credit(s) or any College-level course - talk to advisor

Term Credits: 12

## Winter

- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $100 Z$ or COMM 115 or COMM $218 Z$
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PE 185CAC - Core and Cardio 1 Credit(s) or PE 185SSS or any College-level course

Term Credits: 13

## Spring

- PH 213 - General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- PSY 201-General Psychology I 4 Credit(s) or any Social Science course


## Term Credits: 14

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

For approved Humanities, Social Science and Science, see Associate of General Studies program map for Approved Electives.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Associate of General Studies, Geology Interest 


#### Abstract

About the Program The Associate of General Studies degree is a two-year program designed to provide students the opportunity to acquire a broad education rather than pursuing a specific college major or program. The general studies degree may, in addition to general education coursework, include lower-division college transfer and career and technical education courses. Because of the flexibility of this degree, it may not fulfill requirements for transfer to a four-year institution.

If planning on a specific interest within the Associate of General Studies, see an academic advisor. https://web.roguecc.edu/advising


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to apply toward degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Individual courses may be challenged based on the student's life experience or knowledge. Arrangements may be made on an individual basis with the instructor teaching the course to determine specific challenge procedures. College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

The Associate of General Studies degree will be awarded to students who complete a minimum of 90 credit hours of college transfer and career and technical courses from the curriculum listed. Students must receive a grade of "C-" or better in all coursework. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned a "C-" or better grade.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AGS framework. See the AGS program map for full degree requirements. It is recommended that students also consult with the transfer college of choice regarding specific prerequisites since requirements for a geology major vary at each university.

The 100 series of Geology does not count toward a bachelor's in Geology and so is not included here.
This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given
term. When transferring to a public four-year Oregon college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation.

## Total Program Credits: 90

Program email address: Sciencelnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 111Z - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-11

## Fall

Check-in with Advisor

- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- PE 185YOG - Yoga 1 Credit(s) or any College-level course


## Term Credits: 13

## Winter

- CHEM 222 - General Chemistry II 3 Credit(s) winter term only
- CHEM 222L - General Chemistry II Lab 1 Credit(s) winter term only
- CHEM 222R - General Chemistry II Recitation 1 Credit(s) winter term only
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- WR 121Z - Composition I 4 Credit(s)


## Term Credits: 14

## Spring

- CHEM 223-General Chemistry III 3 Credit(s) spring term only
- CHEM 223L - General Chemistry III Lab 1 Credit(s) spring term only
- CHEM 223R - General Chemistry III Recitation 1 Credit(s) spring term only
- MTH 253 - Calculus III (Infinite Series) 5 Credit(s) spring term only
- PSY 101 - Psychology of Human Relations 3 Credit(s)


## Term Credits: 13

## Summer

## Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only
- MTH 256 - Differential Equations 5 Credit(s) summer term only


## Term Credits: 10

## Fall

- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- HE 252 - First Aid/CPR 3 Credit(s) or any Fitness/Health/PE course
- WR 227Z - Technical Writing 4 Credit(s)


## Term Credits: 12

## Winter

- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only
- COMM 111 - Public Speaking 4 Credit(s) or COMM 100Z, COMM 115 or COMM $218 Z$
- ART 205 - History of Art II 4 Credit(s) or any Humanities course
- PE 185WSA - Winter Survival and Snow Camping Adventure 1 Credit(s) or PE 185YOG or any Fitness/Health/PE course

Term Credits: 14

## Spring

- PH 213 - General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- ECON 202 - Principles of Macroeconomics 4 Credit(s) or any Social Science course


## Term Credits: 14

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

For approved Humanities, Social Science and Science, see Associate of General Studies program map for Approved Electives.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Associate of General Studies, Physics Interest 


#### Abstract

About the Program The Associate of General Studies degree is a two-year program designed to provide students the opportunity to acquire a broad education rather than pursuing a specific college major or program. The general studies degree may, in addition to general education coursework, include lower-division college transfer and career and technical education courses. Because of the flexibility of this degree, it may not fulfill requirements for transfer to a four-year institution.

If planning on a specific interest within the Associate of General Studies, see an academic advisor. https://web.roguecc.edu/advising


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to apply toward degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Individual courses may be challenged based on the student's life experience or knowledge. Arrangements may be made on an individual basis with the instructor teaching the course to determine specific challenge procedures. College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

The Associate of General Studies degree will be awarded to students who complete a minimum of 90 credit hours of college transfer and career and technical courses from the curriculum listed. Students must receive a grade of "C-" or better in all coursework. Certain required courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned a " C -" or better grade.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AGS framework. See the AGS program map for full degree requirements. It is recommended that students also consult with the transfer college of choice regarding specific prerequisites since requirements for a physics major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a public four-year Oregon college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation.

Total Program Credits: 90

Program email address: Sciencelnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH $111 Z$ - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-11

## Fall

## Check-in with Advisor

- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$
- PE 185YOG - Yoga 1 Credit(s) or any College-level course


## Term Credits: 13

## Winter

- CHEM 222 - General Chemistry II 3 Credit(s) winter term only
- CHEM 222L - General Chemistry II Lab 1 Credit(s) winter term only
- CHEM 222R - General Chemistry II Recitation 1 Credit(s) winter term only
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- WR 121Z - Composition I 4 Credit(s)


## Term Credits: 14

## Spring

- CHEM 223 - General Chemistry III 3 Credit(s) spring term only
- CHEM 223L - General Chemistry III Lab 1 Credit(s) spring term only
- CHEM 223R - General Chemistry III Recitation 1 Credit(s) spring term only
- MTH 253 - Calculus III (Infinite Series) 5 Credit(s) spring term only
- ART 206 - History of Art III 4 Credit(s) or any Humanities

Term Credits: 14

## Summer

Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only
- MTH 256 - Differential Equations 5 Credit(s) summer term only

Term Credits: 10
Fall

- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- HE 252 - First Aid/CPR 3 Credit(s) or any Fitness/Health/PE course
- WR 227Z - Technical Writing 4 Credit(s)

Term Credits: 12

## Winter

- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only
- COMM 111 - Public Speaking 4 Credit(s) or COMM 100Z, COMM 115, or COMM $218 Z$
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PE 185WSA - Winter Survival and Snow Camping Adventure 1 Credit(s) or PE 185YOG or any College-level course (1-4 credits as needed)


## Term Credits: 13

## Spring

- PH 213 - General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- ECON 201 - Principles of Microeconomics 4 Credit(s) or ECON 202 any Social Science course


## Term Credits: 14

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

For approved Humanities, Social Science and Science, see Associate of General Studies program map for Approved Electives.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Associate of General Studies, Pre-professional Medicine Interest (Dentistry, Medicine, Optometry, Pharmacy, Veterinary) 


#### Abstract

About the Program

The Associate of General Studies degree is a two-year program designed to provide students the opportunity to acquire a broad education rather than pursuing a specific college major or program. The general studies degree may, in addition to general education coursework, include lower-division college transfer and career and technical education courses. Because of the flexibility of this degree, it may not fulfill requirements for transfer to a four-year institution.

If planning on a specific interest within the Associate of General Studies, see an academic advisor. https://web.roguecc.edu/advising


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to apply toward degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Individual courses may be challenged based on the student's life experience or knowledge. Arrangements may be made on an individual basis with the instructor teaching the course to determine specific challenge procedures. College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

The Associate of General Studies degree will be awarded to students who complete a minimum of 90 credit hours of college transfer and career and technical courses from the curriculum listed. Students must receive a grade of "C-" or better in all coursework. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned a "C-" or better grade.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AGS framework. See the AGS program map for full degree requirements. It is recommended that students also consult with the transfer college of choice regarding specific prerequisites since requirements for a pre-professional medicine major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given
term. When transferring to a public four-year Oregon college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation.

## Total Program Credits: 90

Program email address: Sciencelnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 111Z - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation.


## Prerequisite Credits: 0-13

## Term 1

Check-in with Advisor

- STAT $243 Z$ - Elementary Statistics I 4 Credit(s) and STAT 243R for non-STEM students who have not taken MTH 95 / MTH 96
- BI 211 - General Biology I 3 Credit(s)
- BI 211L - General Biology I Lab 1 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)
- PE 185YOG - Yoga 1 Credit(s) or any College-level course

Term Credits: 13

## Term 2

- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s)
- BI 212 - General Biology II 3 Credit(s)
- BI 212L - General Biology II Lab 1 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- HE 252 - First Aid/CPR 3 Credit(s)

Term Credits: 16

## Term 3

- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s)
- BI 213 - General Biology III 3 Credit(s)
- BI 213L - General Biology III Lab 1 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s) or any Social Science course


## Term Credits: 17

## Term 4

Check-in with Advisor

- CHEM 221-General Chemistry I 3 Credit(s)
- CHEM 221L - General Chemistry I Lab 1 Credit(s)
- CHEM 221R - General Chemistry I Recitation 1 Credit(s)
- PH 201 - General Physics I 3 Credit(s)
- PH 201L - General Physics I Lab 1 Credit(s)
- PH 201R - General Physics I Recitation 1 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s) or any Humanities course


## Term Credits: 16

## Term 5

- CHEM 222 - General Chemistry II 3 Credit(s)
- CHEM 222L - General Chemistry II Lab 1 Credit(s)
- CHEM 222R - General Chemistry II Recitation 1 Credit(s)
- PH 202 - General Physics II 3 Credit(s)
- PH 202L - General Physics II Lab 1 Credit(s)
- PH 202R - General Physics II Recitation 1 Credit(s)
- COMM 111 - Public Speaking 4 Credit(s)


## Term Credits: 14

## Term 6

- CHEM 223-General Chemistry III 3 Credit(s)
- CHEM 223L - General Chemistry III Lab 1 Credit(s)
- CHEM 223R - General Chemistry III Recitation 1 Credit(s)
- PH 203-General Physics III 3 Credit(s)
- PH 203L - General Physics III Lab 1 Credit(s)
- PH 203R - General Physics III Recitation 1 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) or any Social Science course


## Term Credits: 14

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: ScienceInfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Computer and Embedded Systems Engineering Technology Transfer to Oregon Tech, Associate of Science 


#### Abstract

About the Program

The Associate of Science (AS) degree is based on a signed articulation agreement with Oregon Institute of Technology. The program is designed for students transferring to its baccalaureate degree program in Computer Engineering Technology and/or Embedded Systems Engineering Technology and graduates are guaranteed junior standing in the program upon transferring. Students must work closely with advisors in their areas of interest to ensure electives are appropriate. The curriculum allows for 53 core credits within the major area

Students must work closely with their advisors to ensure transferability. If students transfer before completing this degree or transfer in a major not covered by prior agreements, courses will be evaluated individually toward the transfer requirements of the college of their choice. Students are advised to obtain written approval from Oregon Tech to guarantee their catalog of transfer for three years.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcomes for the Computer and Embedded Systems Engineering Technology Transfer to Oregon Tech program are:

An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.

An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use technical literature.

An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; an ability to function effectively as a member of a technical team.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over four years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students should be aware that Oregon Tech requires a grade of "B" or better in all EET courses and CS 161U, CS 162U and CS 234U for transfer.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-93

Program email address ElectronicsInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation
- MTH 111 - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 0-13

## Fall

Check-in with Advisor

- EET 125 - DC Electronics - Circuits I 5 Credit(s)
- EET 129 - Introduction to Embedded Systems 3 Credit(s)
- WR 121Z - Composition I 4 Credit(s) ${ }^{2}$


## Term Credits: 12

## Winter

- EET 126 - AC Electronics - Circuits II 5 Credit(s)
- EET 130 - Digital and MSI Logic - Digital I 5 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- ART 115 - Basic Design (Composition) 3 Credit(s) or ART 131 or approved Humanities transfer course (credits vary)

Term Credits: 17

## Spring

- EET 131 - Sequential Logic and Interfacing - Digital II 5 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s) or MUS 264 or approved Humanities transfer course (credits vary)
- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) or PS 203 or approved Social Science transfer course (credits vary)


## Term Credits: 17

## Fall

Check-in with Advisor

- EET 132 - Introduction to Verilog 5 Credit(s) fall/spring terms only
- CS 161U - Computer Science I (C++) 4 Credit(s) fall term only
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC


## Term Credits: 14

## Winter

- EET 240 - Microcontrollers I 5 Credit(s) winter term only (lecture Tues at TRC)
- CS 162U - Computer Science II (C++) 4 Credit(s) winter term only
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC


## Term Credits: 14

## Spring

- EET 241 - Microcontrollers II 5 Credit(s) spring term only (lecture Tues at TRC)
- CS 234U - Object Oriented Programming in C++ 4 Credit(s) spring term only
- COMM 111Z - Public Speaking 4 Credit(s)


## Term Credits: 13

## Summer

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only


## Term Credits: 5

## Approved Humanities Electives

(Complete 6-8 credits from the following list below. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.)

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare 14 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103-Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Approved Social Science Electives

(Choose one course from the approved list below for a total of 3-4 credits.)

## Oregon Tech Social Science Electives

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 221 - Juvenile Delinquency 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years, precluding the .475 proficiency exam.
${ }^{2}$ The 3-credit version of any speech or humanities course taken prior to 2009 will meet the same degree requirements as the current 4-credit version. Students must still complete all required courses in this degree and at least 90 applicable credits to receive an associate degree.

For more information, contact the Electronics Technology Department:

Phone: 541-956-7500
Email: ElectronicsInfo@roguecc.edu
Web address: www.roguecc.edu/electronics
TTY: Oregon Telecom Relay Service, 711

# Computer Science Transfer to Southern Oregon University, Associate of Science 


#### Abstract

About the Program

This Associate of Science (AS) degree is based on a signed articulation agreement with Southern Oregon University (SOU). The program is designed for students transferring to its baccalaureate degree program in computer science. Students must work closely with advisors in their areas of interest to ensure electives are appropriate.

The curriculum allows for 24 core credits within the major area. By completing all appropriate credits (including electives), students will have fulfilled all required lower-division coursework for transfer to SOU. Students should be aware, however, that if they transfer before completing this degree, courses will be evaluated individually toward the transfer requirements of the college of their choice.

\section*{Program Learning Outcomes}

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcomes for the Computer Science Transfer to Southern Oregon University are:

Demonstrate the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined technology activities.

Ability to develop a knowledge of mathematics, science, engineering, and technology problems that require limited application of principles but extensive practical knowledge.


Ability to identify, analyze, and solve narrowly defined technology problems.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Students should be aware that SOU requires a grade of "B" in CS161 and CS162 for transfer. Certain required courses are also graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

Total Program Credits: 91-93

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s)
- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 2-9

## Fall

## Check-in with Advisor

- WR $121 Z$ - Composition I 4 Credit(s)
- CIS 145 - Introduction to Hardware/Software 5 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s) or approved Social Science transfer course (credits vary)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s) or approved Humanities transfer course (credits vary)


## Term Credits: 16

## Winter

- MTH 111Z - Precalculus I: Functions 4 Credit(s)
- WR $227 Z$ - Technical Writing 4 Credit(s) or WR $122 Z$
- COMM 225-Small Group Communication and Problem-solving 4 Credit(s) or COMM $100 Z$ or COMM 111Z or COMM $218 Z$
- CIS 125DB - Database Management Systems 3 Credit(s)


## Term Credits: 15

## Spring

- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s)
- CS 160 - Introduction to Computer Science 4 Credit(s) or approved programming language course
- CIS 195 - Web Authoring I 4 Credit(s) or approved Science transfer course (credits vary)
- PHL 101 - Philosophical Problems 4 Credit(s) or approved Humanities transfer course (credits vary)


## Term Credits: 16

## Fall

Check-in with Advisor

- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- CS 161U - Computer Science I (C++) 4 Credit(s) fall term only
- PH 201 - General Physics I 3 Credit(s) or approved Science transfer course (credit vary)
- PH 201L - General Physics I Lab 1 Credit(s) or approved Science transfer course (credits vary)
- PH 201R - General Physics I Recitation 1 Credit(s) or approved Science transfer course (credits vary)


## Term Credits: 14

## Winter

- CS 162U - Computer Science II (C++) 4 Credit(s) winter term only
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- PH 202 - General Physics II 3 Credit(s) or approved Science Lab course (credits vary)
- PH 202L - General Physics II Lab 1 Credit(s) or approved Science Lab course (credits vary)
- PH 202R - General Physics II Recitation 1 Credit(s) or approved Science Lab course (credits vary)


## Term Credits: 14

## Spring

- CS 275 - Data Base Development I 4 Credit(s) spring term only
- PSY 201 - General Psychology I 4 Credit(s) or approved Social Science transfer course (credits vary)
- MUS 108 - Music in World Cultures 4 Credit(s) or approved Humanities transfer course (credits vary)
- BA 101 - Introduction to Business 4 Credit(s) or approved Social Science transfer course (credits vary)

Term Credits: 16

## Approved Humanities Electives

## Complete at least three courses from the following list, 9-12 credits.

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- IS 110 - Introduction to International Studies I 4 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting 14 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Approved Science Electives

Complete at least three courses, two of which must have labs, from the following list, 11-15 credits. Note that only one course can be a regional field studies course indicated by an asterisk.

- BI 100SB - Biology of Human Body Systems 3 Credit(s) (non-lab course)
- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 231L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L AND CHEM 104R
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- CHEM 221 - General Chemistry I 3 Credit(s) AND CHEM 221L AND CHEM 221R
- CHEM 222-General Chemistry II 3 Credit(s) AND CHEM 222L AND CHEM 222R
- CHEM 223 - General Chemistry III 3 Credit(s) AND CHEM 223L AND CHEM 223R
- CIS 195 - Web Authoring I 4 Credit(s) (non-lab course)
- ENV 111 - Introduction to Environmental Science 3 Credit(s) (non-lab course)
- G 100 - Fundamentals of Geology 3 Credit(s) (non-lab course)
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GEOG 100 - Introduction to Physical Geography 3 Credit(s) (non-lab course)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L
- GS 170 - Regional Field Studies 3 Credit(s) * AND GS 170L *
- PH 201 - General Physics I 3 Credit(s) AND PH 201L AND PH 201R
- PH 202 - General Physics II 3 Credit(s) AND PH 202L AND PH 202R
- PH 203 - General Physics III 3 Credit(s) AND PH 203L AND PH 203R
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) AND PH 211L AND PH 211R
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) AND PH 212L AND PH 212R
- PH 213 - General Physics (Calculus Based) III 3 Credit(s) AND PH 213L AND PH 213R


## Approved Social Science Electives

Complete at least three courses from the following list, 9-12 credits.

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- BA 101 - Introduction to Business 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- COMM 237 - Communication and Gender 4 Credit(s)
- ECON 115 - Introduction to Economics 3 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- HPE 295 - Health and Fitness for Life 3 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 215 - Lifespan Human Development 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) or HST 259


## Approved Computer Science Electives (0-9 Credits Required)

Complete sufficient number of courses from the list below to meet total degree requirement of at least 90 credits.

- CIS 179 - Introduction to Networks 4 Credit(s)
- CIS 240LX - Advanced Operating Systems - Linux 4 Credit(s)
- CIS 279 - Network Operating Systems 4 Credit(s)
- CS 133 - Any CS 133 programming language not taken as core requirement 4 Credit(s)
- CS 234U - Object Oriented Programming in C++ 4 Credit(s)
- CS 260 - Data Structures 14 Credit(s)
- EET 240 - Microcontrollers I 5 Credit(s)
- MTH 253 - Calculus III (Infinite Series) 5 Credit(s)
- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s)

For more information, contact the Computer Science Department:

Phone: 541-956-7500
Email: ComputerScienceInfo@roguecc.edu
Web address: www.roguecc.edu/computerscience
TTY: Oregon Telecom Relay Service, 711

# Cybersecurity Transfer to Oregon Tech, Associate of Science 


#### Abstract

About the Program

The Associate of Science (AS) degree is based on a signed articulation agreement with Oregon Tech. The program is designed for students transferring to its baccalaureate degree program in Cybersecurity. Students must work closely with advisors in their areas of interest to ensure electives are appropriate. The curriculum allows for 47 core credits within the major area. By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to Oregon Tech.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcomes for the Cybersecurity Transfer to Oregon Tech degree are:

Demonstrate the knowledge, techniques, skills, and modern tools of the discipline to defined information systems technology.

Ability to design and implement information systems using the latest technology and standard best practices.
Ability to identify, analyze, and solve technical issues with the use of information systems and technology.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: ComputerScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s)
- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 2-9

## Fall

Check-in with Advisor

- BA 211 - Financial Accounting I 4 Credit(s)
- CIS 145 - Introduction to Hardware/Software 5 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)


## Term Credits: 17

## Winter

- CIS 179 - Introduction to Networks 4 Credit(s)
- BA 213 - Managerial Accounting 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- MTH 111Z - Precalculus I: Functions 4 Credit(s)


## Term Credits: 16

## Spring

- CIS 284 - Network Security Fundamentals 4 Credit(s)
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- COMM 111 - Public Speaking 4 Credit(s)

Term Credits: 16

Check-in with Advisor

- CIS 125DB - Database Management Systems 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s) or approved Humanities transfer course (credits vary)
- CHEM 104 - Introductory Chemistry 3 Credit(s) or approved Lab Science transfer course (credits vary)
- CHEM 104L - Introductory Chemistry Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)
- CHEM 104R - Introductory Chemistry Recitation 1 Credit(s) or approved Lab Science transfer course (credits vary)


## Term Credits: 12

## Winter

- CS 133C\# - Programming Fundamentals Using C\# 4 Credit(s) winter term only
- CIS 240LX - Advanced Operating Systems - Linux 4 Credit(s)
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s)
- BA 206 - Management Fundamentals 3 Credit(s) BA 206 offered winter term only


## Term Credits: 15

## Spring

- CS 275 - Data Base Development I 4 Credit(s) Offered Spring term only
- CIS 279 - Network Operating Systems 4 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s) or approved Humanities transfer course (credits vary)

Term Credits: 16

## Approved Humanities Electives

Complete at least two courses from the following list below, 6-8 credits. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Approved Science Electives

At least four credits must be completed from a laboratory-based science course in $\mathrm{BI}, \mathrm{CHEM}$ or PH .

## Electives

Complete a sufficient number of transfer-level elective (numbered 100 and above) courses to meet the total degree requirements of at least 90 credits.

For more information, contact the Computer Science Department:

Phone: 541-956-7500
Email: ComputerScienceInfo@roguecc.edu
Web address: www.roguecc.edu/computerscience
TTY: Oregon Telecom Relay Service, 711

# Engineering Transfer to Oregon Tech - Civil, Associate of Science 

About the Program<br>The Associate of Science - Engineering Transfer to Oregon Tech - Civil is for students interested in transferring to a bachelor's degree program at Oregon Tech.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Overall program learning outcomes for the Engineering Transfer to Oregon Tech - Civil are:

Identify the broad context of engineering problems.
Identify the fundamental elements of engineering design.
Employ mathematics, science, and computing techniques in a systematic and rigorous manner to support engineering problems.

Write and solve applicable equations of equilibrium for statically determinate objects.

## Entry Requirements

Students in engineering majors are asked to work closely with the Science Department Chair, Sciencelnfo@roguecc.edu, to ensure success in academic planning.

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and with a Science Department recommendation. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Students must complete coursework in their major at a "C-" or better level before proceeding to advanced coursework. Engineering requires advanced coursework, and may take additional time for an associate's degree. The preparatory transfer coursework, which can be taken at RCC, may take up to three years.

## Graduation Requirements

Students are required to complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-91

Program email address: ScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING ${ }^{1}$

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{2}$
- MTH 111Z - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-13

## Fall

Check-in with Advisor

- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- ENGR 101 - Engineering Orientation I: Careers, Skills and Computer Tools 2 Credit(s)
- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only


## Term Credits: 12

## Winter

- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- ENGR 102 - Engineering Orientation II: Careers, Skills and Computer Tools 2 Credit(s)
- CHEM 222 - General Chemistry II 3 Credit(s) winter term only
- CHEM 222L - General Chemistry II Lab 1 Credit(s) winter term only
- CHEM 222R - General Chemistry II Recitation 1 Credit(s) winter term only


## Term Credits: 12

## Spring

- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- ENGR 103 - Engineering Orientation III: Careers, Skills and Computer Tools 2 Credit(s)
- CHEM 223-General Chemistry III 3 Credit(s)
- CHEM 223L - General Chemistry III Lab 1 Credit(s)
- CHEM 223R - General Chemistry III Recitation 1 Credit(s)
- ART 204 - History of Art I 4 Credit(s) or approved transferable Humanities course


## Term Credits: 16

## Summer

Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only
- MTH 256 - Differential Equations 5 Credit(s) summer term only


## Term Credits: 10

## Fall

- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- WR $121 Z$ - Composition I 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)


## Term Credits: 13

## Winter

- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only
- ENGR 211 - Statics 3 Credit(s)
- COMM $111 Z$ - Public Speaking 4 Credit(s) Transferable General elective as needed. See advisor.
- PE 185 - Activity course 1 Credit(s) Transferable General elective as needed.


## Term Credits: 13

## Spring

- PH 213 - General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- ENGR 213 - Strength of Materials 3 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s) or approved transferable Social Science course
- WR 227Z - Technical Writing 4 Credit(s)

Term Credits: 16

## Approved Humanities Elective

One course, 3-4 credits, from the list below. A maximum of three performance or studio-based credits indicated by an asterisk are allowed. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare 14 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Approved Social Science Elective

(One course, 3-4 credits, from the list below.)

## Oregon Tech Social Science Electives

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 221 - Juvenile Delinquency 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)


## Notes:

${ }^{1}$ Prerequisite courses may have additional requirements.
${ }^{2}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: ScienceInfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Engineering Transfer to Oregon Tech - Electrical, Associate of Science 

## About the Program

The Associate of Science - Engineering Transfer to Oregon Tech - Electrical is for students interested in transferring to a bachelor's degree program at Oregon Tech.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Overall program learning outcomes for the Engineering Transfer to Oregon Tech - Electrical are:

Identify the broad context of engineering problems.
Identify the fundamental elements of engineering design
Employ mathematics, science, and computing techniques in a systematic and rigorous manner to support engineering problems.

Define how electrical concepts relate with each other.

## Entry Requirements

Students in engineering majors are asked to work closely with the Science Department Chair, Sciencelnfo@roguecc.edu, to ensure success in academic planning.

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and with a Science Department recommendation. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Students must complete coursework in their major at a "C-" or better level before proceeding to advanced coursework. Engineering requires advanced coursework, and may take additional time for an associate's degree. The preparatory transfer coursework, which can be taken at RCC, may take up to three years.

## Graduation Requirements

Students are required to complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

Total Program Credits: 92-94

Program email address: ScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING ${ }^{1}$

- MTH 111 - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{2}$


## Prerequisite Credits: 0-13

## Fall

Check-in with Advisor

- MTH 251-Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- ENGR 101 - Engineering Orientation I: Careers, Skills and Computer Tools 2 Credit(s)
- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only
- PSY 201 - General Psychology I 4 Credit(s) or approved Social Science course

Term Credits: 16

## Winter

- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- ENGR 102 - Engineering Orientation II: Careers, Skills and Computer Tools 2 Credit(s)
- WR 121Z - Composition I 4 Credit(s)
- CHEM 222 - General Chemistry II 3 Credit(s) winter term only
- CHEM 222L - General Chemistry II Lab 1 Credit(s) winter term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) winter term only

Term Credits: 16

## Spring

- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- ENGR 103 - Engineering Orientation III: Careers, Skills and Computer Tools 2 Credit(s)
- ART 204 - History of Art I 4 Credit(s) or approved Humanities course
- COMM 111 - Public Speaking 4 Credit(s)


## Term Credits: 15

## Summer

Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only
- MTH 256 - Differential Equations 5 Credit(s) summer term only


## Term Credits: 10

## Fall

- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- CS 161U - Computer Science I (C++) 4 Credit(s) fall term only
- ENGR 201 - Electrical Fundamentals I 2 Credit(s) fall term only
- ENGR 201L - Electrical Fundamentals I Lab 1 Credit(s) fall term only


## Term Credits: 12

## Winter

- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only
- ENGR 202 - Electrical Fundamentals II 2 Credit(s) winter term only
- ENGR 202L - Electrical Fundamentals II Lab 1 Credit(s) winter term only
- CS 162U - Computer Science II (C++) 4 Credit(s) winter term only

Term Credits: 12

## Spring

- PH 213-General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)


## Term Credits: 13

## Approved Humanities Elective

(One course, 3-4 credits, from the list below. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.)

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Approved Social Science Elective

(One course, 3-4 credits, from the list below.)

## Oregon Tech Social Science Electives

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 221 - Juvenile Delinquency 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)


## Notes:

${ }^{1}$ Prerequisite courses may have additional requirements.
${ }^{2}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Engineering Transfer to Oregon Tech - Mechanical, Associate of Science 

## About the Program

The Associate of Science - Engineering Transfer to Oregon Tech - Mechanical is for students interested in transferring to a bachelor's degree program at Oregon Tech.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Overall program learning outcomes for the Engineering Transfer to Oregon Tech - Mechanical are:

Identify the broad context of engineering problems.
Identify the fundamental elements of engineering design.
Employ mathematics, science, and computing techniques in a systematic and rigorous manner to support engineering problems.

Define how mechanical concepts relate with each other.

## Entry Requirements

Students in engineering majors are asked to work closely with the Science Department Chair, Sciencelnfo@roguecc.edu, to ensure success in academic planning.

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and with a Science Department recommendation. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Students must complete coursework in their major at a "C-" or better level before proceeding to advanced coursework. Engineering requires advanced coursework, and may take additional time for an associate's degree. The preparatory transfer coursework, which can be taken at RCC, may take up to three years.

## Graduation Requirements

Students are required to complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 93-95

Program email address: ScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING ${ }^{1}$

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{2}$
- MTH 111Z - Precalculus I: Functions 4 Credit(s)
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s)


## Prerequisite Credits: 0-13

## Fall

Check-in with Advisor

- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- ENGR 101 - Engineering Orientation I: Careers, Skills and Computer Tools 2 Credit(s) fall term only
- CHEM 221 - General Chemistry I 3 Credit(s) fall term only
- CHEM 221L - General Chemistry I Lab 1 Credit(s) fall term only
- CHEM 221R - General Chemistry I Recitation 1 Credit(s) fall term only
- WR 121Z - Composition I 4 Credit(s)


## Term Credits: 16

## Winter

- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- ENGR 102 - Engineering Orientation II: Careers, Skills and Computer Tools 2 Credit(s) winter term only
- CHEM 222 - General Chemistry II 3 Credit(s) winter term only
- CHEM 222L - General Chemistry II Lab 1 Credit(s) winter term only
- CHEM 222R - General Chemistry II Recitation 1 Credit(s) winter term only

Term Credits: 12

## Spring

- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- ENGR 103 - Engineering Orientation III: Careers, Skills and Computer Tools 2 Credit(s) spring term only
- WR 227Z - Technical Writing 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s) or approved Social Science course
- CHEM 223/CHEM 223L/CHEM 223R is strongly recommended (offered spring term only)


## Term Credits: 15

## Summer

Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only
- MTH 256 - Differential Equations 5 Credit(s) MTH 256 offered summer term only/suggested to ensure Junior status upon transfer to OT


## Term Credits: 10

## Fall

- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ENGR 201 - Electrical Fundamentals I 2 Credit(s) fall term only
- ENGR 201L - Electrical Fundamentals I Lab 1 Credit(s) fall term only


## Term Credits: 12

## Winter

- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only
- ENGR 211 - Statics 3 Credit(s) winter term only
- COMM 111 - Public Speaking 4 Credit(s)
- ENGR 202 - Electrical Fundamentals II 2 Credit(s) winter term only
- ENGR 202L - Electrical Fundamentals II Lab 1 Credit(s) winter term only


## Term Credits: 15

## Spring

- PH 213 - General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- ENGR 212 - Dynamics 3 Credit(s) spring term only
- ENGR 213 - Strength of Materials 3 Credit(s) spring term only
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) or approved Humanities course

Term Credits: 14

## Approved Humanities Elective

(One course 3-4 credits, from the list below. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.)

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing 13 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare 14 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Approved Social Science Elective

(One course 3-4 credits, from the list below.)
Oregon Tech Social Science Electives

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 221 - Juvenile Delinquency 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)

[^3]For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Engineering Transfer to Oregon Tech - Renewable Energy, Associate of Science 

## About the Program

The Associate of Science - Engineering Transfer to Oregon Tech - Renewable Energy is for students interested in transferring to a bachelor's degree program at Oregon Tech.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Overall program learning outcomes for the Engineering Transfer to Oregon Tech - Renewable Energy are:

Identify the broad context of engineering problems.
Identify the fundamental elements of engineering design.
Employ mathematics, science, and computing techniques in a systematic and rigorous manner to support engineering problems.

Write and solve applicable equations of equilibrium for statically determinate objects.
Define how electrical concepts relate with each other.

## Entry Requirements

Students in engineering majors are asked to work closely with the Science Department Chair, Sciencelnfo@roguecc.edu, to ensure success in academic planning.

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and with a Science Department recommendation. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate program coordinator before being accepted toward core requirements. Students must complete coursework in their major at a "C-" or better level before proceeding to advanced coursework. Engineering requires advanced coursework, and may take additional time for an associate's degree. The preparatory transfer coursework, which can be taken at RCC, may take up to three years.

## Graduation Requirements

Students are required to complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

Total Program Credits: 92-94

Program email address: ScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING ${ }^{1}$

- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{2}$
- MTH 111Z - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 0-13

## Fall

Check-in with Advisor

- MTH 251-Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- ENGR 101 - Engineering Orientation I: Careers, Skills and Computer Tools 2 Credit(s)
- CHEM 221-General Chemistry I 3 Credit(s)
- CHEM 221L - General Chemistry I Lab 1 Credit(s)
- CHEM 221R - General Chemistry I Recitation 1 Credit(s)
- ART 204 - History of Art I 4 Credit(s) or approved Humanities course

Term Credits: 16

## Winter

- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- ENGR 102 - Engineering Orientation II: Careers, Skills and Computer Tools 2 Credit(s)
- CHEM 222 - General Chemistry II 3 Credit(s)
- CHEM 222L - General Chemistry II Lab 1 Credit(s)
- CHEM 222R - General Chemistry II Recitation 1 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s) or approved Social Science course

Term Credits: 16

## Spring

- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- ENGR 103 - Engineering Orientation III: Careers, Skills and Computer Tools 2 Credit(s)
- CHEM 223-General Chemistry III 3 Credit(s)
- CHEM 223L - General Chemistry III Lab 1 Credit(s)
- CHEM 223R - General Chemistry III Recitation 1 Credit(s)


## Term Credits: 12

## Summer

Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only
- MTH 256 - Differential Equations 5 Credit(s) summer term only


## Term Credits: 10

## Fall

- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- WR $121 Z$ - Composition I 4 Credit(s)
- ENGR 201 - Electrical Fundamentals I 2 Credit(s) fall term only
- ENGR 201L - Electrical Fundamentals I Lab 1 Credit(s) fall term only


## Term Credits: 12

## Winter

- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only
- ENGR 202 - Electrical Fundamentals II 2 Credit(s) winter term only
- ENGR 202L - Electrical Fundamentals II Lab 1 Credit(s) winter term only
- ENGR 211 - Statics 3 Credit(s) winter term only
- COMM 111 - Public Speaking 4 Credit(s)

Term Credits: 15

## Spring

- PH 213 - General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- WR 227Z - Technical Writing 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)


## Term Credits: 13

## Approved Humanities Elective

(One course 3-4 credits, from the list below. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.)

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Approved Social Science Elective

(One course, 3-4 credits, from the list below.)

## Oregon Tech Social Science Electives

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- ANTH 150 - Introduction to Archaeology 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- GEOG 120 - World Regional Geography 4 Credit(s)
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s)
- PS 203 - State and Local Government 4 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- PSY 119 - Psychology of Personal Growth 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 231 - Human Sexuality 3 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 211 - Social Deviance and Social Control 3 Credit(s)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 221 - Juvenile Delinquency 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 228 - Environment and Society 4 Credit(s)
- SOC 230 - Introduction to Gerontology 4 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- SOC 244 - Introduction to Criminology 4 Credit(s)


## Notes:

${ }^{1}$ Prerequisite courses may have additional requirements.
${ }^{2}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Science Department:

Phone: 541-956-7500
Email: Sciencelnfo@roguecc.edu
Web address: www.roguecc.edu/science
TTY: Oregon Telecom Relay Service, 711

# Information Technology Transfer to Oregon Tech, Associate of Science 


#### Abstract

About the Program

The Associate of Science (AS) degree is based on a signed articulation agreement with Oregon Tech. The program is designed for students transferring to its baccalaureate degree program in Information Technology. Students must work closely with advisors in their areas of interest to ensure electives are appropriate. The curriculum allows for 46 core credits within the major area. By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to Oregon Tech.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcomes for the Information Technology Transfer to Oregon Tech are:

Demonstrate the knowledge, techniques, skills, and modern tools of the discipline to defined information systems technology.

Ability to design and implement information systems using the last technology and standard best practices.
Ability to identify, analyze, and solve technical issues with the use of information systems and technology.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-91

Program email address: ComputerScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s)
- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement

Prerequisite Credits: 2-9

## Fall

Check-in with Advisor

- BA 211 - Financial Accounting I 4 Credit(s)
- CIS 145 - Introduction to Hardware/Software 5 Credit(s)
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)

Term Credits: 17

## Winter

- CIS 179 - Introduction to Networks 4 Credit(s)
- BA 223 - Principles of Marketing 3 Credit(s)
- MTH 244 - Inferential Statistics 4 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)


## Term Credits: 15

## Spring

- BA 213 - Managerial Accounting 4 Credit(s)
- CIS 240 - Advanced Operating Systems 4 Credit(s)
- COMM $111 Z$ - Public Speaking 4 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)

Term Credits: 16

Check-in with Advisor

- CIS 125SS - Spreadsheet Applications 4 Credit(s)
- CIS 284 - Network Security Fundamentals 4 Credit(s)
- ECON 201 - Principles of Microeconomics 4 Credit(s)
- BI 211 - General Biology I 3 Credit(s) or approved Lab Science transfer course (credits vary)
- BI 211L - General Biology I Lab 1 Credit(s) or approved Lab Science transfer course (credits vary)


## Term Credits: 16

## Winter

- CS 133C\# - Programming Fundamentals Using C\# 4 Credit(s) winter term only
- BA 206 - Management Fundamentals 3 Credit(s) offered winter term only
- ECON 202 - Principles of Macroeconomics 4 Credit(s)
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s)


## Term Credits: 15

## Spring

- CIS 279 - Network Operating Systems 4 Credit(s)
- BA 226 - Business Law 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s) or approved Humanities transfer course (credit vary)


## Term Credits: 12

## Humanities Elective

(Complete at least one course from the following list, 3-4 credits. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.)

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)


## Approved Science Electives

At least four credits must be completed from a laboratory-based science course in BI, CHEM or PH.
For more information, contact the Computer Information Science Department:

Phone: 541-956-7500
Email: ComputerScienceInfo@roguecc.edu
Web address: www.roguecc.edu/computerscience
TTY: Oregon Telecom Relay Service, 711

# Software Engineering Technology Transfer to Oregon Tech, Associate of Science 


#### Abstract

About the Program

This Associate of Science (AS) degree is based on a signed articulation agreement with Oregon Tech (OT). The degree transfers directly into the bachelor's degree program at Oregon Tech in software engineering technology. Students must work closely with advisors in their areas of interest to ensure electives are appropriate. The curriculum allows for 35 core credits within the major area. By completing all appropriate credits (including electives), students will fulfill required lower division coursework for transfer to OT.

Students must work closely with their advisors to ensure transferability of this program. If students transfer before completing this degree or transfer in a major not covered by prior agreements, courses will be evaluated individually toward the transfer requirements of the college of their choice. Students are advised to obtain written approval from Oregon Tech to guarantee their catalog of transfer for three years.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcomes for the Software Engineering Technology Transfer to Oregon Tech are:

Demonstrate the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.

Ability to develop a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.

Ability to identify, analyze, and solve narrowly defined technology problems.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate Department Chair before being accepted toward core requirements.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students should be aware that Oregon Tech requires a grade of "B" in CS 162U and CS 234U for transfer.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-93

Program email address: ComputerScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s)
- MTH $111 Z$ - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 2-13

## Fall

Check-in with Advisor

- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- EET 125 - DC Electronics - Circuits I 5 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)


## Term Credits: 14

## Winter

- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- CIS 145 - Introduction to Hardware/Software 5 Credit(s)
- PSY 202 - General Psychology II 4 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)

Term Credits: 18

## Spring

- COMM 111 - Public Speaking 4 Credit(s)
- EET 129 - Introduction to Embedded Systems 3 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s) or approved Humanities transfer course (credits vary)
- REL 201 - World Religions 4 Credit(s) or approved Humanities transfer course (credits vary)


## Term Credits: 15

## Summer

Check-in with Advisor

- MTH 254 - Calculus IV (Vector Calculus) 5 Credit(s) summer term only


## Term Credits: 5

## Fall

- CS 161U - Computer Science I (C++) 4 Credit(s) fall term only
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) fall term only
- EET 130 - Digital and MSI Logic - Digital I 5 Credit(s)
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s) fall term only
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) fall term only


## Term Credits: 14

## Winter

- CS 162U - Computer Science II (C++) 4 Credit(s) winter term only
- EET 240 - Microcontrollers I 5 Credit(s) winter term only
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) winter term only
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) winter term only
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s) winter term only


## Term Credits: 14

## Spring

- CS 234U - Object Oriented Programming in C++ 4 Credit(s) spring term only
- PH 213 - General Physics (Calculus Based) III 3 Credit(s) spring term only
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) spring term only
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s) spring term only
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s) or approved Humanities transfer course (credits vary by course)


## Term Credits: 13

## Humanities Electives

(Complete three courses, 9-12 credits, from the following list. A maximum of three performance or studio-based credits indicated by an asterisk are allowed.)

## Oregon Tech Humanities Electives

- ART 115 - Basic Design (Composition) 3 Credit(s) *
- ART 116 - Basic Design (Color Theory) 3 Credit(s) *
- ART 131 - Introduction to Drawing (Value) 3 Credit(s) *
- ART 132 - Introduction to Drawing (Line) 3 Credit(s) *
- ART 133 - Introduction to Drawing (Mixed Media) 3 Credit(s) *
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- ART 234 - Figure Drawing I 3 Credit(s) *
- ART 235 - Figure Drawing II 3 Credit(s) *
- ART 236 - Figure Drawing III 3 Credit(s) *
- ART 237 - Illustration (Black and White Media) 3 Credit(s) *
- ART 238 - Illustration (Color Media) 3 Credit(s) *
- ART 239 - Illustration (Perspective) 3 Credit(s) *
- ART 281 - Painting I 3 Credit(s) *
- ART 282 - Painting II 3 Credit(s) *
- ART 283 - Painting III 3 Credit(s) *
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare 14 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 101 - Music Fundamentals 3 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 111 - Music Theory I 3 Credit(s)
- MUS 112 - Music Theory II 3 Credit(s)
- MUS 113 - Music Theory III 3 Credit(s)
- MUS 114 - Aural Skills I 1 Credit(s)
- MUS 115 - Aural Skills II 1 Credit(s)
- MUS 116 - Aural Skills III 1 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 211 - Music Theory IV 3 Credit(s)
- MUS 212 - Music Theory V 3 Credit(s)
- MUS 213 - Music Theory VI 3 Credit(s)
- MUS 224 - Aural Skills IV 1 Credit(s)
- MUS 225 - Aural Skills V 1 Credit(s)
- MUS 226 - Aural Skills VI 1 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103-Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)

For more information, contact the Computer Science Department:

Phone: 541-956-7500
Email: ComputerScienceInfo@roguecc.edu
Web address: www.roguecc.edu/computerscience
TTY: Oregon Telecom Relay Service, 711

# Computer Science, Associate of Science Oregon Transfer 


#### Abstract

About the Program

The statewide Associate of Science Oregon Transfer degree in Computer Science is designed for students transferring to baccalaureate degree programs in computer science or software engineering. Those completing the ASOT - Computer Science degree are assured junior level standing for registration purposes and will have met the lower division general education requirements of any institution in the Oregon public university system. Students should be aware that if they transfer before completing this degree, courses will be evaluated individually toward the general education requirements of the college of their choice. Students should use the ASOT-Computer Science university-specific degree requirements guide for specific transfer requirements for individual schools.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. The program learning outcomes for the Associate of Science Oregon Transfer - Computer Science are:

Demonstrate the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.

Ability to develop a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge.

Ability to identify, analyze, and solve narrowly defined technology problems.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

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

## Graduation Requirements

Students must complete a minimum of 90 term credits of lower division collegiate courses with a minimum grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time the ASOTBusiness is awarded.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given
term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note, some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

## Total Program Credits: 91-94

Program email address: ComputerScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s)
- MTH $111 Z$ - Precalculus I: Functions 4 Credit(s) or designated placement
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 2-13

## Fall

Check-in with Advisor

- WR 121Z - Composition I 4 Credit(s) ${ }^{1}$
- MTH 251 - Calculus I (Differential Calculus) 5 Credit(s)
- PH 201 - General Physics I 3 Credit(s) ${ }^{2}$ or approved Science transfer course
- PH 201L - General Physics I Lab 1 Credit(s) ${ }^{2}$ or approved Science transfer course
- PH 201R - General Physics I Recitation 1 Credit(s) ${ }^{2}$ or approved Science transfer course


## Term Credits: 14

## Winter

- WR $122 Z$ - Composition II 4 Credit(s) ${ }^{1}$ or WR $227 Z$
- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s)
- PH 202-General Physics II 3 Credit(s) ${ }^{2}$ or approved Science transfer course
- PH 202L - General Physics II Lab 1 Credit(s) ${ }^{2}$ or approved Science transfer course
- PH 202R - General Physics II Recitation 1 Credit(s) ${ }^{2}$ or approved Science transfer course
- PSY 101 - Psychology of Human Relations 3 Credit(s) or College-level course


## Term Credits: 17

## Spring

- COMM 111 - Public Speaking 4 Credit(s) or COMM $115^{1}$, or COMM $218 Z$
- PH 203 - General Physics III 3 Credit(s) ${ }^{2}$ or approved Science transfer course
- PH 203L - General Physics III Lab 1 Credit(s) ${ }^{2}$ or approved Science transfer course
- PH 203R - General Physics III Recitation 1 Credit(s) ${ }^{2}$ or approved Science transfer course
- CS 160 - Introduction to Computer Science 4 Credit(s) fall/spring term only
- PSY 201 - General Psychology I 4 Credit(s) or approved Social Science transfer course


## Term Credits: 17

## Fall

Check-in with Advisor

- CS 161U - Computer Science I (C++) 4 Credit(s) fall term only
- PSY 202 - General Psychology II 4 Credit(s) or approved Social Science transfer course
- ART 115 - Basic Design (Composition) 3 Credit(s) or approved Humanities transfer course
- CIS 125DB - Database Management Systems 3 Credit(s) or College-level course


## Term Credits: 14

## Winter

- CS 162U - Computer Science II (C++) 4 Credit(s) winter term only
- ECON 201 - Principles of Microeconomics 4 Credit(s) or approved Social Science transfer course
- CS 133C\# - Programming Fundamentals Using C\# 4 Credit(s) (CS 133C\# winter term only) or College-level course
- ART 204 - History of Art I 4 Credit(s) ${ }^{3}$ or approved Humanities transfer course


## Term Credits: 16

## Spring

- CS 260 - Data Structures 14 Credit(s) spring term only
- CS 234U - Object Oriented Programming in C++ 4 Credit(s) (CS 234 U spring term only) or College-level course
- MUS 208 - Film Music 3 Credit(s) or approved Humanities transfer course
- HE 250 - Personal Health 3 Credit(s) or approved Fitness/Health/PE course(s) 3 credits total


## Term Credits: 14

## Distribution Requirements

## Fitness/Health/Physical Education

Minimum one or more courses totaling at least 3 credits.

- HE 112 - Emergency First Aid 1 Credit(s)
- HE 208 - HIV and Infectious Diseases 1 Credit(s)
- HE 250 - Personal Health 3 Credit(s)
- HE 252 - First Aid/CPR 3 Credit(s)
- HE 253 - Wilderness First Aid 3 Credit(s)
- HE 261-CPR/Basic Life Support Provider 1 Credit(s)
- HPE 295 - Health and Fitness for Life 3 Credit(s)
- PE 185 - Activity Courses 1-3 Credit(s)
- PE 291 - Red Cross Lifeguard Training 2 Credit(s)


## Humanities 9-12

Choose three courses from at least two disciplines/prefixes. Courses must be at least 3 credits each and exclude first-year foreign language courses; second-year foreign language is acceptable.

## Social Science 12-16

Complete four courses from at least two disciplines/prefixes. Courses must be at least 3 credits each. See www.roguecc.edulcs and a computer science advisor for university-specific transfer requirements.

Science 12-15

Complete three biological and/or physical science laboratory courses from at least two disciplines/prefixes. ${ }^{2}$

## Electives

Complete a sufficient number of college-level (numbered 100 and above) courses to meet the total degree requirement of at least 90 credits. Students should use the ASOT-CS university-specific degree requirements guide to determine elective requirements for the transfer institution. A maximum of 12 career and technical credits may be used toward this degree. Note: WR 115 Introduction to Expository Writing may be used as elective credit if taken summer term 2000 or after and completed with a letter grade of "C-" or better.

## Total Elective Credits: 6-19

${ }^{1}$ Students who took writing classes of 3 credits each must have WR121, WR122 or WR227. Students taking classes of 4 credits each must take WR 121 Z and either WR 122 Z or WR 227 Z (A total of 8 credits is required.)
${ }^{2}$ Some schools require physics as the laboratory science chosen. It is recommended that students contact the specific school early in the first year of the program or use the ASOT-CS university-specific degree requirements guide to determine any additional science requirements and procedures for admission to a specific school or program.
${ }^{3}$ Meets cultural literacy criteria (one course required).

## For more information, contact the Computer Science Department:

Phone: 541-956-7500
Email: ComputerSciencelnfo@roguecc.edu
Web address: www.roguecc.edu/computerscience
TTY: Oregon Telecom Relay Service, 711

# Associate of Arts Oregon Transfer, Math Interest 


#### Abstract

About the Program The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a guide of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is strongly recommended that a student also consult with the transfer college of choice regarding specific prerequisites since requirements for a math major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

## Total Program Credits: 90

Program email address: MathInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Fall

## Check in with Advisor

- MTH 111Z - Precalculus I: Functions 4 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)
- HE 252 - First Aid/CPR 3 Credit(s) or approved AAOT Fitness/Health/PE course
- PHL 101 - Philosophical Problems 4 Credit(s) or approved AAOT Humanities transfer course


## Term Credits: 15

## Winter

- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s)
- WR 122Z - Composition II 4 Credit(s) or WR $227 Z$
- PHL 102 - Ethics 4 Credit(s) or approved AAOT Humanities transfer course
- ECON 201 - Principles of Microeconomics 4 Credit(s) or approved AAOT Social Science transfer course

Term Credits: 16

## Spring

- STAT $243 Z$ - Elementary Statistics 14 Credit(s)
- REL 201 - World Religions 4 Credit(s) ${ }^{1}$ or COMM $115{ }^{1}$ or approved AAOT Humanities transfer course
- ECON 202 - Principles of Macroeconomics 4 Credit(s) or approved AAOT Social Science transfer course
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s) or approved AAOT Social Science transfer course


## Term Credits: 16

## Fall

## Check in with Advisor

- MTH 251-Calculus I (Differential Calculus) 5 Credit(s) fall at RWC; fall/winter at RVC
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) or approved AAOT Lab Science transfer course
- PH 211L - General Physics (Calculus Based) I Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- PH 211R - General Physics (Calculus Based) I Recitation 1 Credit(s)
- COMM $111 Z$ - Public Speaking 4 Credit(s) or COMM $218 Z$


## Term Credits: 14

## Winter

- MTH 252 - Calculus II (Integral Calculus) 5 Credit(s) winter at RWC; winter/spring at RVC
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) or approved AAOT Lab Science transfer course
- PH 212L - General Physics (Calculus Based) II Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- PH 212R - General Physics (Calculus Based) II Recitation 1 Credit(s)
- PS 202 - U.S. Government: Ideologies and Political Participation 4 Credit(s) or GEOG $110^{1}$ or approved AAOT Social Science transfer course


## Term Credits: 14

## Spring

- MTH 253 - Calculus III (Infinite Series) 5 Credit(s) spring term only
- MTH 261 - Linear Algebra 5 Credit(s) spring term only
- PH 213-General Physics (Calculus Based) III 3 Credit(s) or approved AAOT Lab Science transfer course
- PH 213L - General Physics (Calculus Based) III Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- PH 213R - General Physics (Calculus Based) III Recitation 1 Credit(s)


## Term Credits: 15

## Summer

MTH 254, MTH 256 offered summer term only. Strongly suggested course to ensure prerequisites are met to begin junior level math classes.

## Additional Math Options. Please Speak With an Advisor.

- MTH 211 - Fundamentals of Elementary Math I 4 Credit(s) * Elective
- MTH 212 - Fundamentals of Elementary Math II 4 Credit(s) * Elective
- MTH 213 - Fundamentals of Elementary Math III 4 Credit(s) * Elective


## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).

* For students interested in teaching.

Note:

- Three courses required in the Humanities category from at least two disciplines (at least 2 prefixes).
- Four courses required in Social Science category, from at least two disciplines (at least 2 prefixes).
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR121, WR122 and either WR123 or WR227. Students taking classes of 4 credits each must take WR 121 Z and either WR 122 Z or WR $227 Z$
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.


## For more information, contact the Mathematics Department:

Phone: 541-956-7500
Email: MathInfo@roguecc.edu
Web address: www.roguecc.edu/mathematics
TTY: Oregon Telecom Relay Service, 711

# Social and Behavioral Science Education Pathway 

## Early Childhood Education (Basic), Career Pathway Certificate


#### Abstract

About the Program

The Early Childhood Education program prepares students to work with young children from birth through 8 years of age and their families in a variety of settings including child-care centers, family child-care, preschools, Head Start, school age programs, home visiting, and parent education. It is planned to accommodate both full- and part-time students, including those currently employed in the field.

The program has as its foundation the one-term basic certificate which also fulfills the formal training requirement for the Child Development Associate (CDA) credential. The basic certificate prepares students to work in entry-level positions in child-care programs, Head Start, or other early childhood settings. Students may choose to complete the CDA assessment process to achieve the CDA credential. The early childhood basic certificate is the first step in the Early Childhood Education career pathway leading to the intermediate certificate, the one-year certificate, and the AAS degree.

For the corresponding relationship of the Early Childhood Education coursework to the Oregon Registry: Pathways to Professional Recognition in Childhood Care and Education, go to https://www.pdx.edu/occd/steps-credentials-oro/\#Community\ Colleges and click on Rogue Community College.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Early Childhood Education Basic Career Pathway Certificate are:

Summarize stages of child development for ages birth through age 8, across developmental domains.
Describe the importance of building family and community partnerships to support successful early childhood outcomes.

Explain the purpose of child observation to assess and plan for individual developmental strengths and needs.

Explain the importance of supportive and responsive interactions with young children as the foundation of an early educator's work.

Identify the elements of being a professional in the early childhood field.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Early Childhood and Elementary Education Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students completing the required credits in this program with a grade of " $\mathrm{C}-$ " or better will receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.


## Prerequisite Credits: 0-8

## Required Program Courses

(Courses may be taken over multiple terms. Not all courses offered every term.)

- ECE 125 - Early Childhood Development 3 Credit(s)
- ECE 126 - Early Childhood Education Best Practices 3 Credit(s)
- ECE 135 - Applied Child Development 3 Credit(s)
- ECE 136 - Early Childhood Education: A Professional Overview 3 Credit(s)
- ED 170 - Introductory Practicum Var. (1-2) Credit(s)

Total Program Credits: 13

For more information, contact the Early Childhood and Elementary Education Department:

Phone: 541-956-7500
Email: ECEInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Early Childhood Education (Intermediate), Career Pathway Certificate 


#### Abstract

About the Program

The Early Childhood Education three-term program prepares students to work with young children from birth through 8 years of age and their families in a variety of settings including child-care centers, family childcare, preschools, Head Start, school age programs, home visiting, and parent education. It is planned to accommodate both full- and part-time students, including those currently employed in the field.

The program has as its foundation the basic certificate which also fulfills the formal training requirement for the Child Development Associate (CDA) credential. The three-term intermediate certificate is the second step on the career pathway leading to the one-year certificate and the AAS degree. The intermediate certificate prepares students to work as teacher assistants in child-care programs, Head Start, or other early childhood settings.

For the corresponding relationship of the early childhood education coursework to the Oregon Registry: Pathways to Professional Recognition in Childhood Care and Education, go to www.pdx.edu/occd/steps-credentials-oro/\#Community\ Colleges and click on Rogue Community College.

\section*{Program Learning Outcomes}

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Early Childhood Education (Intermediate) Career Pathway Certificate are:

Summarize stages of child development for ages birth through age 8, across developmental domains. Describe the importance of building family and community partnerships to support successful early childhood outcomes.

Utilize child observation to assess and plan for individual developmental strengths and needs. Describe developmentally appropriate teaching practices that are responsive to the learning pathways of young children.

Participate in and examine one's role as a professional in the early childhood field.


## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Early Childhood and Elementary Education Department chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 29

Program email address: ECEInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Prerequisite Credits: 0-8

## Fall

Check-in with Advisor

- ECE 125 - Early Childhood Development 3 Credit(s)
- ECE 126 - Early Childhood Education Best Practices 3 Credit(s)
- ECE 136 - Early Childhood Education: A Professional Overview 3 Credit(s)

Term Credits: 9

## Winter

- ECE 135 - Applied Child Development 3 Credit(s)
- ECE 151 - Guiding Children in Group Settings 3 Credit(s)
- ECE 163 - Preschool/Primary Development 3 Credit(s)
- ECE 175 - Developmentally Appropriate Practices 3 Credit(s) Winter term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 2 credits for completion (1 credit/term)


## Term Credits: 13

## Spring

- ECE 161 - Infant/Toddler Development 3 Credit(s) Spring term only
- ECE 152 - Fostering Creativity 3 Credit(s) Spring term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 2 credits for completion (1 credit/term)


## Term Credits: 7

## For more information, contact the Early Childhood and Elementary Education Department:

Phone: 541-956-7500
Email: ECEInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Family Support Services, Career Pathway Certificate 


#### Abstract

About the Program The Family Support Services four-term program is designed to provide pre-employment training and education for entry-level family support workers through classroom studies and practical training. Graduates may serve families as family advocates, home visitors, parent educators, or family outreach workers, among other occupations. Coursework for this program spans the disciplines of human services and early childhood development to provide a strong base for work with children and families in a variety of settings. It is designed to accommodate both full- and part-time students and those currently employed in the field. Embedded within the program is training which meets requirements for community health worker certification through the Oregon Health Authority.


Some courses in this program may not transfer to other institutions. Students intending to transfer should seek advisor assistance to determine transferability.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Family Support Services Career Pathway Certificate are:

Explain the benefits of a two-generation approach in creating healthy, stable, and attached families.
Describe strategies to build positive reciprocal relationships with families as the foundation of supporting growth and development.

Explain the importance of fostering family and community engagement to promote children's positive development.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Early Childhood and Elementary Education Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the Early Childhood and Elementary Education Department Chair to determine placement.

## Graduation Requirements

To graduate, students must complete all courses in this program with a grade of "C-" or better. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 32-34

Program email address: FamilySupportServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement


## Prerequisite Credits: 0-8

## Fall

Check-in with Advisor

- ECE 125 - Early Childhood Development 3 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition


## Term Credits: 9

## Winter

- HS 155 - Interviewing Theory and Techniques 4 Credit(s) winter term only
- PSY 201 - General Psychology I 4 Credit(s)


## Term Credits: 8

## Spring

- ECE 275 - Equity, Diversity, and Inclusion in Education 3 Credit(s) or SOC 213
- HS 158 - Trauma-informed Care: Theory and Practice 3 Credit(s) spring term only


## Term Credits: 6

## Fall

Check-in with Advisor

- ECE 258 - Family Education and Support 3 Credit(s) fall term only
- HS 200 - Child Abuse and Neglect 3 Credit(s) fall term only
- HS 201 - Family Dynamics 3 Credit(s) fall term only


## Term Credits: 9

## For more information, contact the Early Childhood and Elementary Education Department:

Phone: 541-956-7500
Email: FamilySupportServicesInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Addiction Studies, Certificate of Completion 


#### Abstract

About the Program

Addiction Studies is a three-term certificate program. It is designed for individuals who need coursework to complete the educational requirements to become a Certified Alcohol and Drug Counselor (CADC). In addition to the educational requirements, CADC certification requires 1,000 hours in the field and a passing score on the CADC exam. CADC status is a basic requirement for employment in the addictions field. Because some courses are offered only once per year, students may not be able to complete all requirements in a calendar year.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Addiction Studies Certificate of Completion are:

Apply principles of ethical decision making and practice ethical behavior in relation to self and others within the helping relationship.

Demonstrate skills in active listening with co-occurring mental health and addiction disorders.

## Entry Requirements

The Addiction Studies Certificate is a professional development curriculum requiring attendance at an Information Session and completion of an online application. For more details on Information Sessions, visit the Human Services website at www.roguecc.edu/humanservices.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Human Services Department Coordinator's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with a Human Services Department advisor to determine placement.

## Graduation Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive their certificates.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 24-27

Program email address: HumanServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Prerequisite Credits: 0-8

## Fall

Check-in with Advisor

- WR 115 - Introduction to Expository Writing 3 Credit(s) or higher level WR course
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Check with advisor before registering for CIS120.
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)


## Term Credits: 7-10

## Winter

Check-in with Advisor

- HS 155 - Interviewing Theory and Techniques 4 Credit(s) winter term only
- HS 175 - Ethics for Counselors 1 Credit(s) winter term only
- HS 260-Group Counseling 4 Credit(s) winter term only


## Term Credits: 9

## Spring

## Check-in with Advisor

- HE 208 - HIV and Infectious Diseases 1 Credit(s) fall/spring term only
- HS 115 - Principles of Client Record Management 1 Credit(s) spring term only
- HS 158 - Trauma-informed Care: Theory and Practice 3 Credit(s) spring term only
- HS 202 - Counseling Chemically Dependent Client 3 Credit(s) spring term only


## Term Credits: 8

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

Phone: 541-956-7500
Email: HumanServicesInfo@roguecc.edu
Web address: www.roguecc.edu/humanservices
TTY: Oregon Telecom Relay Service, 711

# Early Childhood Education, Certificate of Completion 


#### Abstract

About the Program

The Early Childhood Education four-term certificate program prepares students to work with young children from birth through 8 years of age and their families in a variety of settings including child-care centers, family child-care, preschools, Head Start, school age programs, home visiting, and parent education. It is planned to accommodate both full- and part-time students, including those currently employed in the field.

The program has as its basis preparation for the Child Development Associate (CDA) credential. Students may choose to complete the CDA assessment process and be eligible for entry-level jobs at that point. The CDA preparation courses serve as the foundation of the core coursework for the Early Childhood Education certificate, a one-year certificate which prepares students to work as teacher assistants or teachers in childcare programs, Head Start, or other early childhood settings.

For the corresponding relationship of the Early Childhood Education coursework to the Oregon Registry: Pathways to Professional Recognition in Childhood Care and Education, go to www.pdx.edu/occd/steps-credentials-oro/\#Community\ Colleges and click on Rogue Community College.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Early Childhood Education Certificate of Completion are:

Design strategies that promote child development for ages birth through age 8 across developmental domains relevant to the child's relational and cultural environments.

Generate strategies that build and sustain family and community partnerships, reflecting the complex characteristics of children's families and communities to support successful early childhood outcomes.

Describe developmentally, culturally, and linguistically appropriate teaching practices for children ages birth through age 8.

Utilize child observation to assess and plan for individual developmental strengths and needs.

Participate in and examine one's role as a professional in the early childhood field.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Early Childhood and Elementary Education Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 51-52

Program email address: ECEInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 or designated placement; WR 91 fulfills RD 90/WR 90
- CIS 120 - Concepts in Computing I $2 \operatorname{Credit}(\mathbf{s})^{1}$ Required for graduation
- RD 90 - College Reading 4 Credit(s) or WR 91 or designated placement; WR 91 fulfills RD 90/WR 90


## Prerequisite Credits: 0-14

## Fall

## Check-in with Advisor

- ECE 125 - Early Childhood Development 3 Credit(s)
- ECE 126 - Early Childhood Education Best Practices 3 Credit(s)
- ECE 136 - Early Childhood Education: A Professional Overview 3 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition
- ECE 163 - Preschool/Primary Development 3 Credit(s)

Term Credits: 15

## Winter

- ECE 135 - Applied Child Development 3 Credit(s)
- MTH 63 - Applied Algebra I 4 Credit(s) ${ }^{2}$ or BT 160 or MTH 60 or higher-level math
- ECE 154 - Children's Literature and Literacy 3 Credit(s) winter term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 2 credits for completion (1 credit/term)
- ECE 175 - Developmentally Appropriate Practices 3 Credit(s) winter term only


## Term Credits: 14

## Spring

- ECE 161 - Infant/Toddler Development 3 Credit(s) spring term only
- ECE 152 - Fostering Creativity 3 Credit(s) spring term only
- ECE 246 - Family, School, and Community Engagement 3 Credit(s) or ECE 258 (offered fall term)
- ECE 266 - Supporting Dual Language Learners 3 Credit(s)
- ECE 254 - Preschool Curriculum and Environments 3 Credit(s) or ECE 255; spring term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 2 credits for completion (1 credit/term)


## Term Credits: 16

## Summer

Check-in with Advisor

- PSY 101 - Psychology of Human Relations 3 Credit(s)
- ECE 151 - Guiding Children in Group Settings 3 Credit(s)


## Term Credits: 6

## Notes: <br> ${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years. <br> ${ }^{2}$ Or higher-level math as designated by placement or MTH 60 Fundamentals of Algebra I (MTH $105 Z$ or higher recommended for transfer). <br> For more information, contact the Early Childhood and Elementary Education Department:

Phone: 541-956-7500
Email: ECEInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Family Support Services, Certificate of Completion 


#### Abstract

About the Program The Family Support Services four-term program is designed to provide pre-employment training and education for entry-level family support workers through classroom studies and practical training. Graduates may serve families as family advocates, home visitors, parent educators, or family outreach workers, among other occupations. Coursework for this program spans the disciplines of human services and early childhood development to provide a strong base for work with children and families in a variety of settings. It is designed to accommodate both full- and part-time students and those currently employed in the field. Embedded within the program is training which meets requirements for community health worker certification through the Oregon Health Authority.


Some courses in this program may not transfer to other institutions. Students intending to transfer should seek advisor assistance to determine transferability.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Family Support Services Certificate of Completion are:

Explain the benefits of a two-generation approach in creating healthy, stable, and attached families.
Describe strategies to build positive reciprocal relationships with families as the foundation of supporting growth and development.

Explain the importance of fostering family and community engagement to promote children's positive development.

Describe effective collaboration with other agencies and organizations to support and advocate for children and families.

Explain ethical decision-making principles and practices within the helping relationship.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Early Childhood and Elementary Education Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the
appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the Early Childhood and Elementary Education Department Chair to determine placement.

## Graduation Requirements

To graduate, students must complete all courses in this program with a grade of "C-" or better. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 52-55

Program email address: FamilySupportServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I 2 Credit(s) Required for graduation. ${ }^{1}$
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- RD 90 - College Reading 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement
- WR 90 - Fundamentals of Composition 4 Credit(s) or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement

Prerequisite Credits: 0-14

## Fall

Check-in with Advisor

- ECE 125 - Early Childhood Development 3 Credit(s)
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or higher-level composition
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)


## Term Credits: 13

## Winter

- ECE 265 - Children at Risk 3 Credit(s)
- HS 155 - Interviewing Theory and Techniques 4 Credit(s) winter term only
- ECE 151 - Guiding Children in Group Settings 3 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)


## Term Credits: 14

## Spring

- PSY 215 - Lifespan Human Development 4 Credit(s) or HS 261C
- ECE 275 - Equity, Diversity, and Inclusion in Education 3 Credit(s) or SOC 213
- HS 158 - Trauma-informed Care: Theory and Practice 3 Credit(s) spring term only
- MTH 63 - Applied Algebra I 4 Credit(s) or MTH 60, BT 160, or higher-level math


## Term Credits: 14

## Fall

Check-in with Advisor

- HS 200 - Child Abuse and Neglect 3 Credit(s) fall term only
- HS 201 - Family Dynamics 3 Credit(s) fall term only
- ECE 258 - Family Education and Support 3 Credit(s) fall term only
- ECE 245 - Promoting Social/Emotional Development of Young Children 3 Credit(s) fall term only, or ECE 248 (offered sring term)

Term Credits: 12

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Early Childhood and Elementary Education Department:

Phone: 541-956-7500
Email: FamilySupportServicesInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Early Childhood Education, Associate of Applied Science 


#### Abstract

About the Program

The Early Childhood Education (ECE) program prepares students to work with young children from birth through 8 years of age and their families in a variety of settings including child-care centers, family childcare, preschools, Head Start, school age programs, home visiting, and parent education. It is planned to accommodate both full- and part-time students, including those currently employed in the field.

The ECE program has as its basis preparation for the Child Development Associate (CDA) credential. Students may choose to complete the CDA assessment process and be eligible for entry-level jobs at that point. The CDA preparation courses serve as the foundation of the core coursework for the Early Childhood Education certificate, a one-year certificate which prepares students to work as teacher assistants or teachers in child-care programs, Head Start, or other early childhood settings.

The Associate of Applied Science (AAS) degree in Early Childhood Education is based on the Guidelines for Preparation of Early Childhood Professionals from the National Association for the Education of Young Children (NAEYC). It is a comprehensive program that incorporates the core coursework for the ECE certificate and qualifies a student to become a head teacher in a child-care facility licensed by the Oregon Child Care Division, a teacher in Head Start, or a home visitor, among other professional roles. Students will have a choice of specialty areas: infant/toddler, preschool, or family childcare, and will complete between 240 and 288 supervised practicum hours as part of the curriculum. Some courses in the program may not transfer to other institutions. Students intending to transfer should seek advisor assistance to determine transferability.

For the corresponding relationship of the Early Childhood Education coursework to the Oregon Registry: Pathways to Professional Recognition in Childhood Care and Education, visit www.pdx.edu/occd/steps-credentials-oro/\#Community\ Colleges and click on Rogue Community College.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Early Childhood Education Associate of Applied Science are:

Implement strategies that promote child development for ages birth through age 8 across developmental domains relevant to the child's relational and cultural environments.

Generate strategies that build and sustain family and community partnerships, reflecting the complex characteristics of children's families and communities to support successful early childhood outcomes

Implement developmentally, culturally, and linguistically appropriate teaching practices for children ages birth through age 8.

Apply different observation methods to inform instruction and planning reflective of children's developmental, cultural, and linguistic needs.

Identify and conduct one's self as a member of the early childhood field.
Use academic content knowledge to build developmentally appropriate curriculum that promotes positive outcomes for each child.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Early Childhood and Elementary Education Department chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the department chair to determine placement.

Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Completion Requirements

Students completing the required credits in this program with a grade of "C-" or better will receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students will complete between 240 and 288 supervised practicum hours unless a waiver is granted for approved activities.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 92

Program email address: ECEInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or designated placement
- CIS 120 - Concepts in Computing I $2 \operatorname{Credit}(\mathbf{s})^{1}$ Required for graduation


## Prerequisite Credits: 0-10

## Check-in with Advisor

- ECE 125 - Early Childhood Development 3 Credit(s)
- ECE 126 - Early Childhood Education Best Practices 3 Credit(s) fall term only
- ECE 136 - Early Childhood Education: A Professional Overview 3 Credit(s)
- WR 1212 - Composition I 4 Credit(s) or BT 114
- ECE 163 - Preschool/Primary Development 3 Credit(s)


## Term Credits: 16

## Winter

- ECE 135 - Applied Child Development 3 Credit(s)
- ECE 175 - Developmentally Appropriate Practices 3 Credit(s) winter term only
- ECE 154 - Children's Literature and Literacy 3 Credit(s) winter term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 2 credits for completion (1 credit/term)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- ECE 151 - Guiding Children in Group Settings 3 Credit(s)


## Term Credits: 16

## Spring

- ECE 161 - Infant/Toddler Development 3 Credit(s) spring term only
- ECE 152 - Fostering Creativity 3 Credit(s) spring term only
- ECE 246 - Family, School, and Community Engagement 3 Credit(s)
- ECE 254 - Preschool Curriculum and Environments 3 Credit(s) or ECE 255; spring term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 2 credits for completion (1 credit/term)


## Term Credits: 13

## Fall

## Check-in with Advisor

- ECE 243 - Promoting Child Health and Physical Development 3 Credit(s) fall term only
- ECE 245 - Promoting Social/Emotional Development of Young Children 3 Credit(s) fall term only
- ECE 258 - Family Education and Support 3 Credit(s)
- ECE 261 - Advanced Practicum and Seminar 3 Credit(s) Permission required Total of 6 credits for completion (3 credits/term)
- MTH 63 - Applied Algebra I 4 Credit(s) or BT 160 or MTH 60 or higher-level math


## Term Credits: 16

## Winter

- HE 250 - Personal Health 3 Credit(s) or HPE 295
- ECE 244 - Observation and Assessment 3 Credit(s) winter term only
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or COMM 111Z or COMM 115
- ECE 265 - Children at Risk 3 Credit(s)
- ECE 285 - The Early Childhood Professional 3 Credit(s) winter term only


## Term Credits: 16

## Spring

- ECE 241 - Promoting Cognitive Development 3 Credit(s) spring term only
- ECE 275 - Equity, Diversity, and Inclusion in Education 3 Credit(s)
- ECE 248 - Children with Disabilities and Their Families 3 Credit(s) spring term only
- ECE 266 - Supporting Dual Language Learners 3 Credit(s)
- ECE 261 - Advanced Practicum and Seminar 3 Credit(s) permission required Total of 6 credits for completion (3 credits/term)


## Term Credits: 15

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Early Childhood and Elementary Education Department.

Phone: 541-956-7500
Email: ECEInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Family Support Services, Associate of Applied Science 


#### Abstract

About the Program The Family Support Services program is designed to provide pre-employment training and education for entry-level family support workers through classroom studies and practical training. Graduates may serve families as family advocates, home visitors, parent educators, or family outreach workers, among other occupations. Coursework for this program spans the disciplines of human services and early childhood development to provide a strong base for work with children and families in a variety of settings. It is designed to accommodate both full- and part-time students and those currently employed in the field. Embedded within the program is training which meets requirements for community health worker certification through the Oregon Health Authority.


Some courses in this program may not transfer to other institutions. Students intending to transfer should seek advisor assistance to determine transferability.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Family Support Services Associate of Applied Science are:

Explain the benefits of supporting the parent-child relationship in creating healthy, stable, and attached families.

Demonstrate strategies to build positive reciprocal relationships with families as the foundation of supporting growth and development.

Develop strategies to engage families in the support of their children's developmental characteristics and needs within the context of their environment.

Participate in effective collaboration with other agencies and organizations to support and advocate for children and families.

Utilize reflective practices to apply ethical decision-making principles within the helping relationship.
Function effectively as a member of a team in providing comprehensive services for children and families.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Early Childhood and Elementary Education Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with the Early Childhood and Elementary Education Department Chair to determine placement.

## Graduation Requirements

To graduate, students must complete all courses in this program with a grade of "C-" or better. Certain prerequisite courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: FamilySupportServicesInfo@roguecc.edu

## Program Prerequisites:

## may be waived based on placement - see advising

- CIS 120 - Concepts in Computing I $2 \operatorname{Credit}(\mathbf{s})^{1}$ Required for graduation
- WR 115 - Introduction to Expository Writing 3 Credit(s) or BT 113 or designated placement
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement

Prerequisite Credits: 0-9

## Fall

Check-in with Advisor

- ECE 125 - Early Childhood Development 3 Credit(s)
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- WR 121Z - Composition I 4 Credit(s) or BT 114


## Term Credits: 14

## Winter

- ECE 151 - Guiding Children in Group Settings 3 Credit(s)
- MTH 63 - Applied Algebra I 4 Credit(s) or BT 160, MTH 60, or higher-level math
- HS 155 - Interviewing Theory and Techniques 4 Credit(s) winter term only
- PSY 201 - General Psychology I 4 Credit(s)
- HS 175 - Ethics for Counselors 1 Credit(s) winter term only

Term Credits: 16

## Spring

- HC 100-Community Health Worker 6 Credit(s)
- HS 158 - Trauma-informed Care: Theory and Practice 3 Credit(s) spring term only
- PSY 215 - Lifespan Human Development 4 Credit(s)
- HS 261C - Human Services Practicum and Seminar 3 Credit(s) Total of 9 credits for completion (3 credits per term)


## Term Credits: 16

## Fall

Check-in with Advisor

- ECE 245 - Promoting Social/Emotional Development of Young Children 3 Credit(s) fall term only
- HS 200 - Child Abuse and Neglect 3 Credit(s) fall term only
- HS 201 - Family Dynamics 3 Credit(s) fall term only
- HS 210 - Motivational Interviewing 3 Credit(s) fall term only
- ECE 258 - Family Education and Support 3 Credit(s) fall term only


## Term Credits: 15

## Winter

- ECE 265 - Children at Risk 3 Credit(s)
- HS 260-Group Counseling 4 Credit(s) winter term only
- HS 261C - Human Services Practicum and Seminar 3 Credit(s) Total of 9 credits for completion (3 credits per term)
- HS 266 - Crisis Intervention Strategies 3 Credit(s) winter term only


## Term Credits: 13

## Spring

- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or COMM 115, COMM 111Z, COMM 100Z
- ECE 248 - Children with Disabilities and Their Families 3 Credit(s) or ECE 161 or other approved program elective
- HS 261C - Human Services Practicum and Seminar 3 Credit(s) Total of 9 credits for completion (3 credits per term)
- HE 250 - Personal Health 3 Credit(s) or HPE 295
- ECE 275 - Equity, Diversity, and Inclusion in Education 3 Credit(s) or SOC 213


## Term Credits: 16

## Approved Program Electives

Complete one course from the following list, 3-4 credits required.

- ECE 161 - Infant/Toddler Development 3 Credit(s)
- ECE 163 - Preschool/Primary Development 3 Credit(s)
- ECE 243 - Promoting Child Health and Physical Development 3 Credit(s)
- ECE 246 - Family, School, and Community Engagement 3 Credit(s)
- ECE 248 - Children with Disabilities and Their Families 3 Credit(s)
- ECE 266 - Supporting Dual Language Learners 3 Credit(s)
- PSY 219 - Introduction to Abnormal Psychology 4 Credit(s)
- PSY 228 - Introduction to Positive Psychology 4 Credit(s)
- SOC 204 - Introduction to Sociology 4 Credit(s)
- SOC 205 - American Society 4 Credit(s)
- SOC 218 - Sociology of Gender 4 Credit(s)
- SOC 225 - Social Problems and Solutions 4 Credit(s)
- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) or HST 259
- SPAN 101 - First Year Spanish 14 Credit(s)
- SPAN 102 - First Year Spanish II 4 Credit(s)
- SPAN 103 - First Year Spanish III 4 Credit(s)


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Early Childhood and Elementary Education Department.

Phone: 541-956-7500
Email: FamilySupportServicesInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

## Human Services, Associate of Applied Science


#### Abstract

About the Program The Human Services program is designed to provide pre-employment training and education for entry-level social service workers and addictions counselors through classroom studies and practical experience. They may be serving people in such areas as senior services, crisis counseling, corrections, health, recreation, developmental disabilities, residential treatment or chemical dependency. The agencies provide inpatient and outpatient programs. Students are prepared during the program to take the exam that provides Certified Alcohol Drug Counselor (CADC) Level 1 certification.

Some courses in this program may not transfer to other institutions. Students intending to transfer should seek advisor assistance to determine transferability.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Human Services Associate of Applied Science are:

Apply principles of ethical decision making and practice ethical behavior in relation to self and others within the helping relationship.

Practice therapeutic alliance and establish rapport with clients.
Demonstrate clinical skills.
Demonstrate skills in active listening with co-occurring mental health and addiction disorders.
Function effectively as a member of a team in providing services and working collaboratively among agencies and organizations.

## Entry Requirements

Students are required to complete the college 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 levels as determined by the Placement Process.

Prospective students should be aware of entry requirements of human services agencies prior to considering human services as a career choice. Practicum placement may require passing a criminal history background check. The inability to pass this check may preclude completion of the program. Students in recovery seeking placement in substance abuse treatment programs may also be required to demonstrate two years' sobriety. More information is available from the Human Services Department.

Human Services is a professional development program requiring attendance at an Information Session and completion of an online application. For more details on Information Sessions, visit the Human Services website at www.roguecc.edu/humanservices.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the Human Services Department Coordinator's approval. In order to ensure that coursework is current,
social science courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with a faculty member to determine placement.

## Graduation Requirements

Students completing the required credits in this program with a grade of "C-" or better and passing the counseling skills competency requirement as demonstrated through a series of videotaped counseling interviews will receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. A total of 528 hours of documented practicum ( 16 credits) is required. A minimum of three practicum seminars must also be completed.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: HumanServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 20 - Pre-algebra 4 Credit(s) or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Fall

Check-in with Advisor

- HS 100 - Introduction to Human Services 3 Credit(s) fall term only
- HS 170 - Introduction to Practicum 3 Credit(s) fall term only
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or BT 160 (BT 160 AAS Degree only), or higher-level math
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ See footnote 1 and check with your advisor.
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)


## Term Credits: 16

## Winter

- HS 144 - Introduction to Assertiveness 1 Credit(s) winter term only
- HS 152 - Stress Management 1 Credit(s) winter term only
- HS 155 - Interviewing Theory and Techniques 4 Credit(s) winter term only
- HS 175 - Ethics for Counselors 1 Credit(s) winter term only
- HS 261C - Human Services Practicum and Seminar 3 Credit(s) 16 total credits required (credits may vary by term)
- WR $121 Z$ - Composition I 4 Credit(s)


## Term Credits: 14

## Spring

- HE 208 - HIV and Infectious Diseases 1 Credit(s)
- HS 261C - Human Services Practicum and Seminar 3 Credit(s) 16 total credits required (credits may vary by term)
- HS 115 - Principles of Client Record Management 1 Credit(s) spring term only
- HS 158 - Trauma-informed Care: Theory and Practice 3 Credit(s) spring term only
- HS 202 - Counseling Chemically Dependent Client 3 Credit(s) spring term only
- HS 265 - Introduction to Counseling Theories 3 Credit(s) spring term only
- COMM 111Z - Public Speaking 4 Credit(s) or COMM 115 or COMM $218 Z$


## Term Credits: 18

## Fall

Check-in with Advisor

- HS 200 - Child Abuse and Neglect 3 Credit(s) fall term only
- HS 201 - Family Dynamics 3 Credit(s) fall term only
- HS 210 - Motivational Interviewing 3 Credit(s) fall term only
- HS 261D - Human Services Practicum and Seminar 4 Credit(s) 16 total credits required (credits may vary by term)
- PSY 201 - General Psychology I 4 Credit(s)

Term Credits: 17

## Winter

- HS 260 - Group Counseling 4 Credit(s) winter term only
- HS 261C - Human Services Practicum and Seminar 3 Credit(s) 16 total credits required (credits may vary by term)
- HS 266 - Crisis Intervention Strategies 3 Credit(s) winter term only
- HS 268 - Co-occurring Disorders: Introductory Theory and Counseling 3 Credit(s) winter term only

Term Credits: 13

## Spring

- HE 261 - CPR/Basic Life Support Provider 1 Credit(s)
- HS 261C - Human Services Practicum and Seminar 3 Credit(s) 16 total credits required (credits may vary by term)
- PSY 202 - General Psychology II 4 Credit(s) spring term only
- SOC 230 - Introduction to Gerontology 4 Credit(s) winter/spring term only, or PSY 215
- HS 185 - Equity, Diversity, and Inclusion in the Workplace 2 Credit(s) spring term only


## Term Credits: 14

## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

For more information, contact the Human Services Department:

Phone: 541-956-7500
Email: HumanServicesInfo@roguecc.edu
Web address: www.roguecc.edu/humanservices
TTY: Oregon Telecom Relay Service, 711

# Early Childhood Development Transfer to Southern Oregon University, Associate of Science 


#### Abstract

About the Program

Based on a signed articulation agreement, Rogue Community College (RCC) and Southern Oregon University (SOU) Department of Education offer an Associate of Science degree for students who want to work with children ages birth to 8. This Degree Completion Program was developed as a cooperative venture between SOU and RCC. This degree offers knowledge and application components drawn from curriculum at both institutions.

The Associate of Science degree articulates directly into a bachelor's degree program at SOU that will fulfill the standards of the National Association for the Education of Young Children, as the program objectives are designed to align with the national professional standards.

Students should work closely with their advisors to ensure transferability of this program. They should also contact the SOU School of Education early in the first year of the program to be advised about additional requirements and procedures for admission to SOU. Students transferring to SOU will be required to complete ECE300 at SOU during their first quarter. If students transfer before completing this degree or transfer in a major not covered by prior agreements, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Early Childhood Development Transfer to Southern Oregon University are:

Design strategies that promote child development for ages birth through age 8 and learning across developmental domains relevant to the child's relational and cultural environments.

Generate strategies that build and sustain family and community partnerships, reflecting the complex characteristics of children's families and communities to support successful early childhood outcomes.

Design developmentally, culturally, and linguistically appropriate teaching practices for children ages birth through age 8.

Apply different observation methods to inform instruction and planning reflective of children's developmental, cultural, and linguistic needs.

Identify and conduct one's self as a member of the early childhood field.
Use academic content knowledge to build developmentally appropriate curriculum that promotes positive outcomes for each child.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Early Childhood and Elementary Education Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now student must meet with the department chair to determine placement.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 92-97

Program email address: ECEInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 96 - Applied Algebra II 4 Credit(s) or MTH 95 or designated placement; Check with Advisor
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{1}$ Required for graduation


## Prerequisite Credits: 0-9

## Fall

Check-in with Advisor

- ECE 163 - Preschool/Primary Development 3 Credit(s)
- ECE 100 - Introduction to Early Childhood Education 3 Credit(s) fall term only
- PSY 101 - Psychology of Human Relations 3 Credit(s)
- WR $121 Z$ - Composition I 4 Credit(s)

Term Credits: 13

## Winter

- ECE 154 - Children's Literature and Literacy 3 Credit(s) winter term only
- ECE 151 - Guiding Children in Group Settings 3 Credit(s) winter term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) total of 2 credits for completion (1 credit/term)
- WR $122 Z$ - Composition II 4 Credit(s)
- ECE 175 - Developmentally Appropriate Practices 3 Credit(s) winter term only


## Term Credits: 14

## Spring

- ECE 161 - Infant/Toddler Development 3 Credit(s) Spring term only
- ECE 152 - Fostering Creativity 3 Credit(s) Spring term only
- ECE 254 - Preschool Curriculum and Environments 3 Credit(s) or ECE 255; Spring term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) total of 2 credits for completion (1 credit/term)
- BI 103-Introduction to Biology III 3 Credit(s) or BI 101 or approved Science Lab transfer course (credits vary)
- BI 103L - Introduction to Biology III Lab 1 Credit(s) or BI 101L or approved Science Lab transfer course (credits vary)


## Term Credits: 14

## Summer

Check-in with Advisor

- ECE 265 - Children at Risk 3 Credit(s) or ECE 248 (offered in spring term)
- HE 250 - Personal Health 3 Credit(s) or HPE 295
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or COMM $111 Z$

Term Credits: 10

- ECE 243 - Promoting Child Health and Physical Development 3 Credit(s) fall term only
- ECE 245 - Promoting Social/Emotional Development of Young Children 3 Credit(s) fall term only
- ECE 246 - Family, School, and Community Engagement 3 Credit(s) or ECE 258
- BI 101 - Introduction to Biology I 3 Credit(s) or CHEM 104 or approved Science Lab transfer course (credits vary)
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or CHEM 104L or approved Science Lab transfer course (credits vary)


## Term Credits: 13

## Winter

- ECE 244 - Observation and Assessment 3 Credit(s) winter term only
- ECE 285 - The Early Childhood Professional 3 Credit(s) winter term only
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s) ${ }^{2}$ or MTH $105 Z$ or approved Math course; Check with Advisor
- STAT 243R - Corequisite Support for STAT243Z 1 Credit(s) Not required for students who have completed MTH 95 or MTH 96
- MUS 108 - Music in World Cultures 4 Credit(s) or MUS 201 or approved Humanities transfer course (credits vary)


## Term Credits: 14-15

## Spring

- ECE 241 - Promoting Cognitive Development 3 Credit(s) spring term only
- ECE 266 - Supporting Dual Language Learners 3 Credit(s)
- ECE 275 - Equity, Diversity, and Inclusion in Education 3 Credit(s)
- ECE 261 - Advanced Practicum and Seminar 3 Credit(s) Permission required
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s) or approved Humanities transfer course (credits vary)

Term Credits: 16

## Approved Math Electives

## Complete one course from the following list.

- MTH $105 Z$ - Math in Society 4 Credit(s)
- MTH 111Z - Precalculus I: Functions 4 Credit(s)
- MTH $112 Z$ - Precalculus II: Trigonometry 4 Credit(s)
- MTH 211 - Fundamentals of Elementary Math I 4 Credit(s) AND MTH 212 (must take both)
- STAT $243 Z$ - Elementary Statistics 14 Credit(s)


## Approved Humanities Electives

Complete at least two courses from the following list, 6-8 credits.

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare 14 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- IS 110 - Introduction to International Studies I 4 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- PHL 103 - Critical Reasoning 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Approved Lab Science Electives

Complete at least two courses which must have labs, from the following list for a total of 8 credits. Note that only one course can be a regional field studies course indicated by asterisk.

- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L AND CHEM 104R
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- CHEM 221 - General Chemistry I 3 Credit(s) AND CHEM 221L AND CHEM 221R
- CHEM 222 - General Chemistry II 3 Credit(s) AND CHEM 222L AND CHEM 222R
- CHEM 223-General Chemistry III 3 Credit(s) AND CHEM 223L AND CHEM 223R
- CIS 195 - Web Authoring I 4 Credit(s) (non-lab course)
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L
- GS 170 - Regional Field Studies 3 Credit(s) AND GS 170L *
- PH 201 - General Physics I 3 Credit(s) AND PH 201L AND PH 201R
- PH 202 - General Physics II 3 Credit(s) AND PH 202L AND PH 202R
- PH 203 - General Physics III 3 Credit(s) AND PH 203L AND PH 203R
- PH 211 - General Physics (Calculus Based) I 3 Credit(s) AND PH 211L AND PH 211R
- PH 212 - General Physics (Calculus Based) II 3 Credit(s) AND PH 212L AND PH 212R
- PH 213-General Physics (Calculus Based) III 3 Credit(s) AND PH 213L AND PH 213R


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.
${ }^{2}$ Complete at least one course, 4-5 credits - MTH 211, MTH 212 and MTH 213 are required for application to the Master of Arts in Teaching (MAT) program at SOU.

For more information, contact the Early Childhood and Elementary Education Department:

Phone: 541-956-7500
Email: ECEInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Education Studies Transfer to Southern Oregon University, Associate of Science 

(Previously titled Elementary Education transfer to Southern Oregon University)


#### Abstract

About the Program

Based on a signed articulation agreement, Rogue Community College (RCC) and Southern Oregon University (SOU) School of Education offer an Associate of Science degree for students who wish to ultimately obtain a teaching credential with early childhood (pre-kindergarten through fourth grade) and/or elementary authorization (third through sixth grades).

This degree was developed as a cooperative venture between SOU and RCC. It offers knowledge and application components drawn from curriculum at both institutions. The degree transfers directly into the bachelor's degree program in Education Studies at SOU. If a student's career goal is to teach in an elementary school, successful completion of the bachelor's degree will lead to an initial teaching license.

Students must work closely with their advisors to ensure transferability of this program. If students transfer before completing this degree or in a major not covered by prior agreements, their courses will be evaluated individually toward the transfer requirements of the college of their choice.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Education Studies Transfer to Southern Oregon University are:

Design strategies that promote child development for elementary school-aged children and learning across developmental domains relevant to the child's relational and cultural environments.

Generate strategies to build and sustain family and community partnerships, reflecting the complex characteristics of children's families and communities to support successful outcomes for elementary schoolaged children.

Design developmentally, culturally, and linguistically appropriate teaching practices for elementary schoolaged children.

Apply different observation methods to inform instruction and planning reflective of children's developmental, cultural, and linguistic needs.

Identify and conduct one's self as a member of the early childhood field.
Use academic content knowledge to build developmentally appropriate curriculum that promotes positive outcomes for each child.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Many courses in this department require participation in community schools, programs, and agencies for observation and practicum experiences. Practicum placement and classroom observations will require proof of measles immunization status, RCC Student ID, and may require proof of COVID vaccination status or criminal history background check. More information is available from the Early Childhood and Elementary Education Department.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college registration policies and the Early Childhood and Elementary Education Department Chair's approval. In order to ensure that coursework is current, program courses over 10 years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now student must meet with the department chair to determine placement.

## Graduation Requirements

The Associate of Science degree will be awarded to students who complete all credits in this program with a grade of "C-" or better. Certain courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a " C -" or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: ECEInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 96 - Applied Algebra II 4 Credit(s) ${ }^{1}$ or MTH 95 or designated placement
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement
- CIS 120 - Concepts in Computing I 2 Credit(s) ${ }^{2}$ Required for graduation


## Prerequisite Credits: 0-9

## Fall

Check-in with Advisor

- ED 200 - Introduction to Teaching 3 Credit(s) or ECE 100; fall term only
- ED 225 - Child Development 3 Credit(s) or ECE 163; fall term only
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or COMM 111Z, or COMM 225
- WR 121Z - Composition I 4 Credit(s)


## Term Credits: 14

## Winter

- ECE 151-Guiding Children in Group Settings 3 Credit(s) winter term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 3 credits for completion (1 credit/term)
- GS 104 - Physical Science: Physics 3 Credit(s) or CHEM 104 (offered fall term), or approved Physical Lab Science transfer course (credits vary)
- GS 104L - Physical Science: Physics Lab 1 Credit(s) or CHEM 104L (offered fall term), or approved Physical Lab Science transfer course (credits vary)
- ED 256 - Primary Curriculum 3 Credit(s) winter term only
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s) or HST 105, or approved History transfer course


## Term Credits: 15

## Spring

- ED 240 - Play-Based Learning in Elementary Schools 3 Credit(s) spring term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) spring term only Total of 3 credits for completion (1 credit/term)
- WR $122 Z$ - Composition II 4 Credit(s)
- BI 101 - Introduction to Biology I 3 Credit(s) or BI 103, or approved Life Lab Science transfer course (credits vary)
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or BI 103L, or approved Life Lab Science transfer course (credits vary)
- ECE 152 - Fostering Creativity 3 Credit(s) spring term only


## Term Credits: 15

## Fall

Check-in with Advisor

- ECE 246 - Family, School, and Community Engagement 3 Credit(s)
- ECE 245 - Promoting Social/Emotional Development of Young Children 3 Credit(s) fall term only
- ED 170 - Introductory Practicum Var. (1-2) Credit(s) Total of 3 credits for completion (1 credit/term)
- MTH 211 - Fundamentals of Elementary Math 14 Credit(s) fall term only
- MUS 108 - Music in World Cultures 4 Credit(s) or MUS 201, or approved Humanities transfer course


## Term Credits: 15

## Winter

- ECE 244 - Observation and Assessment 3 Credit(s) winter term only
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- MTH 212 - Fundamentals of Elementary Math II 4 Credit(s) winter term only
- ECE 265 - Children at Risk 3 Credit(s)


## Term Credits: 14

## Spring

- ECE 266 - Supporting Dual Language Learners 3 Credit(s)
- ECE 248 - Children with Disabilities and Their Families 3 Credit(s) spring term only
- ECE 275 - Equity, Diversity, and Inclusion in Education 3 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s) or ENG 109, or approved Humanities Literature transfer course
- MTH 213 - Fundamentals of Elementary Math III 4 Credit(s) spring term only


## Term Credits: 17

## Approved Humanities Electives

Complete any two courses, 8 credits, from the following list. Courses have been pre-selected to meet Oregon Teacher Standards and Practices Commission licensure preparation.

At least one course must be a literature course.

- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare 14 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Approved Social Science Electives

Complete at least one history course, a minimum of 4 credits, from the following list.

- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s)
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s)
- HST 201 - U.S. History through Reconstruction 4 Credit(s)
- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s)


## Approved Lab Science Electives

Complete at least two courses, 8-9 credits, from the following list. At least one course must be a physical science and one a biological science. Note that only one course can be a regional field studies course indicated by asterisk.

- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CHEM 104 - Introductory Chemistry 3 Credit(s) AND CHEM 104L and Recitation
- CHEM 105 - Introductory Organic Chemistry 3 Credit(s) AND CHEM 105L
- CHEM 106 - Introductory Biochemistry 3 Credit(s) AND CHEM 106L
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L
- GS 170 - Regional Field Studies 3 Credit(s) AND GS 170L *


## Notes:

${ }^{1}$ MTH 96 is not accepted as a pre-requisite for MTH 211 at Southern Oregon University as it is at Rogue Community College. Students intending to take MTH 211 at SOU, who take MTH 96, will need to take the SOU Placement Test to determine that they have met the prerequisite.
${ }^{2}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

For more information, contact the Early Childhood and Elementary Education Department:

Phone: 541-956-7500
Email: ECEInfo@roguecc.edu
Web address: www.roguecc.edu/ecee
TTY: Oregon Telecom Relay Service, 711

# Human Services Transfer to Southern Oregon University, Associate of Science 


#### Abstract

About the Program

The Associate of Science degree is based on a signed articulation agreement with Southern Oregon University (SOU). It has been developed in close cooperation with the School of Social Sciences, Health and Physical Education at SOU. The SOU departments of psychology and sociology/ anthropology offer an interdisciplinary bachelor's degree program focusing on the needs of human service professionals, a Bachelor of Arts or Science in Social Science. RCC's Associate of Science (AS) degree is articulated with SOU's Human Service program.

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


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Human Services Transfer to Southern Oregon University are:

Apply principles of ethical decision making and practice ethical behavior in relation to self and others within the helping relationship.

Practice therapeutic alliance and establish rapport with clients.
Demonstrate clinical skills.
Demonstrate skills in active listening with co-occurring mental health and addiction disorders.
Incorporate knowledge about the interrelated effects of addictions, poverty, mental and physical illness, and homelessness on family dynamics and intimate relationships.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

Prospective students should be aware of entry requirements of human services agencies prior to considering human services as a career choice. Practicum placement may require passing a criminal history background check. The inability to pass this check may preclude completion of the program.

Students in recovery seeking placement in substance abuse treatment programs may also be required to demonstrate two years' sobriety. More information is available from the Human Services Department.

Human Services is a professional development program requiring attendance at an Information Session and completion of an online application. For details on Information Sessions, visit the Human Services website at www.roguecc.edu/humanservices.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and the department coordinator's approval. In order to ensure that coursework is current, program courses over seven years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Each College Now credit student must meet with a Human Services Department advisor to determine placement.

## Graduation Requirements

Students must successfully complete all credits in this program with a grade of "C-" or better and passing the counseling skills competency requirement as demonstrated through a series of videotaped counseling interviews, to receive their degrees. A total of 264 hours ( 8 credits) of documented practicum is required and a minimum of two practicum seminars must also be completed. For admission to the SOU Human Services program, RCC students who begin this degree fall term 2017 or later must earn a minimum grade of "C-" in, STAT 243Z, PSY 201, PSY 202, SOC 204 and WR $122 Z$.

Certain required courses are graded on a pass/no pass basis only. A grade of " P " for these courses indicates a student earned the equivalent of a "C-" or better grade.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a four-year Oregon state college or university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. Additionally, if students intend to complete a Bachelor of Arts (BA) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 4-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult an advisor with any program completion questions.

## Total Program Credits: 90-92

Program email address: HumanServicesInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- CIS 120 - Concepts in Computing I $2 \operatorname{Credit}(\mathbf{s})^{1}$ Required for graduation
- COMM 111 - Public Speaking 4 Credit(s) or COMM 218Z; Required for graduation
- MTH 20 - Pre-algebra 4 Credit(s) or designated placement; check in with Advisor
- WR 121 - Composition I 4 Credit(s) Required for graduation


## Prerequisite Credits: 8-14

## Fall

## Check-in with Advisor

- HS 100 - Introduction to Human Services 3 Credit(s) fall term only
- HS 170 - Introduction to Practicum 3 Credit(s) fall term only
- SOC 243 - Drugs, Crime and Addiction 4 Credit(s)
- STAT $243 Z$ - Elementary Statistics 14 Credit(s)
- STAT 243R - Corequisite Support for STAT243Z 1 Credit(s) Not required for students who have completed MTH 95 or MTH 96


## Term Credits: 14-15

## Winter

- HS 152 - Stress Management 1 Credit(s) winter term only
- HS 155 - Interviewing Theory and Techniques 4 Credit(s) winter term only
- HS 175 - Ethics for Counselors 1 Credit(s) winter term only
- HS 261D - Human Services Practicum and Seminar 4 Credit(s)
- PSY 201 - General Psychology I 4 Credit(s)


## Term Credits: 14

## Spring

- HE 208 - HIV and Infectious Diseases 1 Credit(s) fall/spring term only
- HS 115 - Principles of Client Record Management 1 Credit(s) spring term only
- HS 202 - Counseling Chemically Dependent Client 3 Credit(s) spring term only
- HS 261D - Human Services Practicum and Seminar 4 Credit(s)
- HS 158 - Trauma-informed Care: Theory and Practice 3 Credit(s) spring term only
- HS 265 - Introduction to Counseling Theories 3 Credit(s) spring term only


## Term Credits: 15

## Fall

Check-in with Advisor

- SOC 204 - Introduction to Sociology 4 Credit(s)
- HS 210 - Motivational Interviewing 3 Credit(s) fall term only
- BI 101 - Introduction to Biology I 3 Credit(s) or approved Lab Science course (credits vary)
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved Lab Science course (credits vary)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s) or approved Humanities transfer course (credits vary)


## Term Credits: 15

## Winter

- HS 260-Group Counseling 4 Credit(s) winter term only
- HS 268 - Co-occurring Disorders: Introductory Theory and Counseling 3 Credit(s) winter term only
- WR 122Z - Composition II 4 Credit(s) or WR $227 Z$
- BI 102 - Introduction to Biology II 3 Credit(s) or GS 104 or approved Lab Science course (credits vary)
- BI 102L - Introduction to Biology II Lab 1 Credit(s) or GS 104L or approved Lab Science course (credits vary)
- MUS 206 - Introduction to Rock Music 3 Credit(s) or MUS 201 or approved Humanities transfer course (credits vary)


## Term Credits: 18

## Spring

- PSY 202 - General Psychology II 4 Credit(s)
- HS 185 - Equity, Diversity, and Inclusion in the Workplace 2 Credit(s) spring term only
- BI 100SB - Biology of Human Body Systems 3 Credit(s) or GEOG 100, GS 107, or approved Science course (credits vary)
- REL 243 - Nature, Religion and Ecology 4 Credit(s) or REL 201 or approved Humanities transfer course (credits vary)


## Term Credits: 13

## Approved Humanities Electives

Complete at least three courses from the following list, 11-12 credits, in order to meet minimum program requirement of 90 credits.

- ART 131 - Introduction to Drawing (Value) 3 Credit(s)
- ART 204 - History of Art I 4 Credit(s)
- ART 205 - History of Art II 4 Credit(s)
- ART 206 - History of Art III 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- ENG 104 - Introduction to Literature (Fiction) 4 Credit(s)
- ENG 105 - Introduction to Literature (Drama) 4 Credit(s)
- ENG 106 - Introduction to Literature (Poetry) 4 Credit(s)
- ENG 107 - World Literature: Ancient to Classical 4 Credit(s)
- ENG 108 - World Literature: Medieval to Renaissance 4 Credit(s)
- ENG 109 - World Literature: Enlightenment to Modern 4 Credit(s)
- ENG 201 - Shakespeare I 4 Credit(s)
- ENG 202 - Shakespeare II 4 Credit(s)
- ENG 204 - Survey of English Literature: Medieval to Renaissance 4 Credit(s)
- ENG 205 - Survey of English Literature: 18th Century to Romantic 4 Credit(s)
- ENG 206 - Survey of English Literature: Victorian to Modern 4 Credit(s)
- ENG 253 - Survey of American Literature: Colonial 4 Credit(s)
- ENG 254 - Survey of American Literature: 19th Century 4 Credit(s)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- ENG 275 - The Bible as Literature 4 Credit(s)
- HUM 101 - Introduction to Humanities: Classical to Medieval 4 Credit(s)
- HUM 102 - Introduction to Humanities: Renaissance to Enlightenment 4 Credit(s)
- HUM 103 - Introduction to Humanities: Romanticism to 20th Century 4 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- MUS 105 - Music Appreciation 3 Credit(s)
- MUS 108 - Music in World Cultures 4 Credit(s)
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s)
- MUS 206 - Introduction to Rock Music 3 Credit(s)
- MUS 208 - Film Music 3 Credit(s)
- MUS 261 - History of Western Music I: Ancient to Baroque 4 Credit(s)
- MUS 262 - History of Western Music II: Classical and Romantic 4 Credit(s)
- MUS 263 - History of Western Music III: 20th Century to Modern Day 4 Credit(s)
- MUS 264 - History of Rock I: The Roots of Rock 3 Credit(s)
- MUS 265 - History of Rock II: Rock's Golden Age 3 Credit(s)
- MUS 266 - History of Rock III: Heavy Metal to Hip-Hop 3 Credit(s)
- PHL 101 - Philosophical Problems 4 Credit(s)
- PHL 102 - Ethics 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s)
- SPAN 201 - Second Year Spanish 14 Credit(s)
- SPAN 202 - Second Year Spanish II 4 Credit(s)
- SPAN 203 - Second Year Spanish III 4 Credit(s)
- TA 141 - Fundamentals of Acting I 4 Credit(s)
- WR 241 - Imaginative Writing I 4 Credit(s)
- WR 242 - Imaginative Writing II 4 Credit(s)
- WR 243 - Imaginative Writing III 4 Credit(s)


## Approved Science/Lab Science Electives

Complete as needed to meet minimum program requirement of 90 credits; at least three courses from the following list, 11-12 credits - at least two courses must have labs. Note that only one course can be a regional field studies course indicated by asterisk.

- BI 100SB - Biology of Human Body Systems 3 Credit(s) (non-lab course)
- BI 101 - Introduction to Biology I 3 Credit(s) AND BI 101L
- BI 102 - Introduction to Biology II 3 Credit(s) AND BI 102L
- BI 103 - Introduction to Biology III 3 Credit(s) AND BI 103L
- BI 121 - Elementary Anatomy and Physiology I 3 Credit(s) AND BI 121L
- BI 122 - Elementary Anatomy and Physiology II 3 Credit(s) AND BI 122L
- BI 211 - General Biology I 3 Credit(s) AND BI 211L
- BI 212 - General Biology II 3 Credit(s) AND BI 212L
- BI 213 - General Biology III 3 Credit(s) AND BI 213L
- BI 231 - Anatomy and Physiology I 3 Credit(s) AND BI 231L
- BI 232 - Anatomy and Physiology II 3 Credit(s) AND BI 232L
- BI 233 - Anatomy and Physiology III 3 Credit(s) AND BI 233L
- BI 234 - Microbiology 3 Credit(s) AND BI 234L
- CIS 195 - Web Authoring I 4 Credit(s) (non-lab course)
- G 100 - Fundamentals of Geology 3 Credit(s) (non-lab course)
- G 101 - Introduction to Geology I 3 Credit(s) AND G 101L
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) AND G 102L
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) AND G 103L
- GEOG 100 - Introduction to Physical Geography 3 Credit(s) (non-lab course)
- GS 104 - Physical Science: Physics 3 Credit(s) AND GS 104L
- GS 107 - Physical Science: Astronomy 3 Credit(s) AND GS 107L
- GS 108 - Physical Science: Oceanography 3 Credit(s) AND GS 108L
- GS 170 - Regional Field Studies 3 Credit(s) * AND GS 170L *


## Notes:

${ }^{1}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

## For more information, contact the Human Services Department:

Phone: 541-956-7500
Email: HumanServicesInfo@roguecc.edu
Web address: www.roguecc.edu/humanservices
TTY: Oregon Telecom Relay Service, 711

# Associate of Arts Oregon Transfer, History Interest 


#### Abstract

About the Program The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is recommended that a student also consult with the transfer college of choice regarding specific prerequisites since requirements for a history major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. If students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

Total Program Credits: 90

Program email address: SocialSciencelnfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement; check in with Advisor
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Term 1

Check-in with Advisor

- WR $121 Z$ - Composition I 4 Credit(s)
- COMM 111Z - Public Speaking 4 Credit(s) or COMM $115{ }^{1}$ or COMM $218 Z$
- HST 104 - World Civilizations: Prehistory - Middle Ages 4 Credit(s) ${ }^{1}$


## Term Credits: 12

## Term 2

- HPE 295 - Health and Fitness for Life 3 Credit(s) or HE 250 or HE 252 or approved Fitness/Health/PE course
- HST 105 - World Civilizations: Byzantium - Present 4 Credit(s) ${ }^{1}$
- WR $122 Z$ - Composition II 4 Credit(s)
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s) or MTH 105Z; Students should inquire with their receiving institution as to whether STAT $243 Z$ is accepted.
- STAT 243R - Corequisite Support for STAT243Z 1 Credit(s) Not required for students who have completed MTH 95 or MTH 96


## Term Credits: 15-16

## Term 3

- ART 204 - History of Art I 4 Credit(s) ${ }^{1}$ or ART $205{ }^{1}$, ART $206{ }^{1}$, ENG 253, ENG 254, SPAN $201{ }^{1}$ or approved AAOT Humanities transfer course - talk to your advisor
- G 101 - Introduction to Geology I 3 Credit(s) or BI 101, GS 104, GS 108, GS 170 or approved AAOT Lab Science transfer course
- G 101L - Introduction to Geology I Lab 1 Credit(s) or BI 101L, GS 104L, GS 108L, GS 170L or approved AAOT Lab Science transfer course
- HST 201 - U.S. History through Reconstruction 4 Credit(s) 1
- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) ${ }^{1}$ or GEOG $110{ }^{1}$, GEOG 120, SPAN 101, ASL 101 or approved College-level course - talk with your advisor


## Term Credits: 16

## Term 4

Check-in with Advisor

- HST 202 - U.S. History: Post-Reconstruction to Present 4 Credit(s) ${ }^{1}$
- G 102 - Introduction to Geology II (Surface Process) 3 Credit(s) or BI 102 or GS 170 or approved AAOT Lab Science transfer course
- G 102L - Introduction to Geology II (Surface Process) Lab 1 Credit(s) or BI 102L or GS 170L or approved AAOT Lab Science transfer course
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s) or PS 202, PS 203, ECON 115, ECON 201, ECON 202, GEOG $110^{1}$, GEOG 120 or approved College-level course - talk to your advisor
- MUS 201 - Exploring Music: Introduction to Music History 4 Credit(s) ${ }^{1}$ or MUS $205{ }^{1}$, MUS 261, MUS 262, MUS 263, MUS 265, SPAN $202{ }^{1}$ or approved AAOT Humanities transfer course talk to your advisor


## Term Credits: 16

## Term 5

- ENG 107 - World Literature: Ancient to Classical 4 Credit(s) ${ }^{1}$ or ENG $108{ }^{1}$, ENG $109{ }^{1}$, ENG 253, ENG 254, ENG 255, ENG $260{ }^{1}$, SPAN $203{ }^{1}$ or approved AAOT Humanities transfer course - talk to your advisor
- G 103 - Introduction to Geology III (Historical) 3 Credit(s) or BI 103 or GS 107, or approved AAOT Lab Science transfer course
- G 103L - Introduction to Geology III (Historical) Lab 1 Credit(s) or BI 103L or GS 107L or approved AAOT Lab Science transfer course
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) ${ }^{1}$ or HS 185 , SOC $204{ }^{1}$, SOC $205{ }^{1}$, SPAN 102, ASL 102 or approved College-level course - talk to your advisor
- HST 259 - The Chicano/Latino Historical Experience 4 Credit(s) ${ }^{1}$ or SOC $235{ }^{1}$

Term Credits: 16

## Term 6

- PHL 102 - Ethics 4 Credit(s)
- ED 200 - Introduction to Teaching 3 Credit(s) or CIS 125SS, CIS 125WW, HUM $101{ }^{1}$, HUM $102{ }^{1}$, HUM $103{ }^{1}$
- ENV 111 - Introduction to Environmental Science 3 Credit(s) or NFM 225 or approved AAOT Math/Science/Computer Science transfer course
- REL 201 - World Religions 4 Credit(s) ${ }^{1}$ or REL $2433^{1}$, COMM $115^{1}$, COMM 201, COMM 218Z, COMM 225 or approved College-level course - talk to your advisor


## Term Credits: 14

## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).
Note:

- Three courses required in the Humanities category from at least two disciplines (at least 2 prefixes).
- Four courses required in Social Science category, from at least two disciplines (at least 2 prefixes).
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR 121, WR 122, and either WR 123 or WR 227. Students taking classes of 4 credits each must take WR $121 Z$ and either WR $122 Z$ or WR $227 Z$.
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.


## For more information, contact the Social Science Department office:

Phone: 541-956-7500
Email: SocialSciencelnfo@roguecc.edu
Web address: www.roguecc.edu
TTY: Oregon Telecom Relay Service, 711

## Associate of Arts Oregon Transfer, Psychology Interest


#### Abstract

About the Program The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is recommended that a student also consult with the transfer college of choice regarding specific prerequisites since requirements for a psychology major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. If students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

Total Program Credits: 90

Program email address: SocialScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING ${ }^{1}$

- MTH 95 - Intermediate Algebra 4 Credit(s) or designated placement; check in with Advisor
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Term 1

Check-in with Advisor

- WR $121 Z$ - Composition I 4 Credit(s)
- COMM $218 Z$ - Interpersonal Communication 4 Credit(s) or COMM 111Z, COMM $115^{1}$
- PSY 201 - General Psychology I 4 Credit(s)


## Term Credits: 12

## Term 2

- STAT $243 Z$ - Elementary Statistics I 4 Credit(s) Students should inquire with their receiving institution as to whether STAT $243 Z$ is accepted
- STAT 243R - Corequisite Support for STAT243Z 1 Credit(s) Not required for students who have completed MTH 95 or MTH 96
- PSY 202 - General Psychology II 4 Credit(s)
- HPE 295 - Health and Fitness for Life 3 Credit(s) or HE 250, HE 252, HE 253 or approved AAOT Fitness/Health/PE course
- WR $122 Z$ - Composition II 4 Credit(s)


## Term Credits: 15-16

## Term 3

- PSY 101 - Psychology of Human Relations 3 Credit(s) or CJ 200, COMM 111Z, SPAN 101 or ASL 101 - talk to advisor
- BI 101 - Introduction to Biology I 3 Credit(s) or approved AAOT Lab Science transfer course
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- SOC 204 - Introduction to Sociology 4 Credit(s) ${ }^{1}$
- COMM 225 - Small Group Communication and Problem-solving 4 Credit(s) or COMM $115{ }^{1}$, COMM $237{ }^{1}$, SPAN $201{ }^{1}$, PHL 101, PHL 102 or approved AAOT Humanities transfer course


## Term Credits: 15

## Term 4

Check-in with Advisor

- SOC 243 - Drugs, Crime and Addiction 4 Credit(s) or PSY 219 or PSY 228
- BI 102 - Introduction to Biology II 3 Credit(s) or approved AAOT Lab Science transfer course
- BI 102L - Introduction to Biology II Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- PSY 215 - Lifespan Human Development 4 Credit(s) or PSY 219, PSY 228, PSY 231
- REL 201 - World Religions 4 Credit(s) ${ }^{1}$ or MUS $108{ }^{1}$, REL $243{ }^{1}$, MUS $201{ }^{1}$, MUS $205{ }^{1}$, MUS $206{ }^{1}$, MUS 208, SPAN $202{ }^{1}$ or approved AAOT Humanities transfer course


## Term Credits: 16

## Term 5

- PHL 102 - Ethics 4 Credit(s) or PHL 101, SPAN $203{ }^{1}$, HUM $101^{1}$, HUM $102{ }^{1}$, HUM $103{ }^{1}$ or approved AAOT Humanities transfer course
- BI 103 - Introduction to Biology III 3 Credit(s) or approved AAOT Lab Science transfer course
- BI 103L - Introduction to Biology III Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- PSY 231 - Human Sexuality 3 Credit(s) or HS 185, SOC $213^{1}$, SOC $218{ }^{1}$, SPAN 102, ASL 102 talk to advisor
- OAL 250 - Foundations of Outdoor Adventure and Leadership 3 Credit(s) or ART 115, BI 121/BI 121L, ED 200, GEOG $110^{1}$ or approved College-level course - talk to advisor
- HS 185 - Equity, Diversity, and Inclusion in the Workplace 2 Credit(s) or BA 109 and HS 144; talk to your advisor


## Term Credits: 16

## Term 6

- CIS 125SS - Spreadsheet Applications 4 Credit(s) or ART 133, TA 144, CIS 125WW, GEOG $110{ }^{1}$, GEOG 120; WR 241 or approved College-level course
- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) ${ }^{1}$
- ENV 111 - Introduction to Environmental Science 3 Credit(s) or NFM 225 or approved AAOT Science/Math/Computer Science transfer course
- SOC 230 - Introduction to Gerontology 4 Credit(s) or SOC $213{ }^{1}$, SOC $218{ }^{1}$, SOC $228{ }^{1}$, SOC $235{ }^{1}$ or approved College-level course - talk to advisor


## Term Credits: 15

## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).
Note:

- Three courses required in the Humanities category from at least two disciplines.
- Four courses required in Social Science category, from at least two disciplines.
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR121, WR122 and either WR123 or WR227. Students taking classes of 4 credits each must take WR 121 Z and either WR $122 Z$ or WR $227 Z$.
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.


## For more information, contact the Social Science Department:

Phone: 541-956-7500
Email: SocialScienceInfo@roguecc.edu
Web address: www.roguecc.edu
TTY: Oregon Telecom Relay Service, 711

# Associate of Arts Oregon Transfer, Sociology / Social Work Interest 


#### Abstract

About the Program

The Associate of Arts Oregon Transfer degree is a two-year program designed for students who intend to transfer to an Oregon university. Completion of the degree will satisfy lower division general education requirements and ensures junior standing at a university for registration purposes. Additionally, with careful planning, students may satisfy many of the lower division courses required in their academic majors.

Students should be aware, however, that if they transfer before completing this degree, their courses will be evaluated individually toward the general education requirements of the school of their choice. Students are encouraged to work closely with their academic advisors to maximize the benefits of this degree.


## Program Learning Outcomes

The Higher Education Coordinating Commission has approved certain general education outcomes for courses selected to fulfill AAOT degree requirements. All courses listed meet those identified outcomes. For more information see this catalog or visit www.roguecc.edu/general-ed-outcomes.

## Entry Requirements

Students are required to complete the 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 through the Placement Process.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies. Discipline studies-approved coursework in humanities, social science, and science/math/computer science transferred from another Oregon community college will be accepted if students have a declared AAOT major at RCC and received a "C-" or better grade in the course(s). College Now credit will be accepted in accordance with current agreement.

## Graduation Requirements

Students must complete a minimum of 90 college-level credits with a minimum grade of "C-" or better, including at least one course designated as meeting cultural literacy criteria. Students must also have a 2.0 cumulative GPA at the time the AAOT is awarded.

The courses listed below are only meant to serve as a of recommended choices within categories required in the AAOT framework. See the AAOT program map for full degree requirements. It is recommended that a student also consult with the transfer college of choice regarding specific prerequisites since requirements for a sociology or social work major vary at each university.

This guide lays out an optimal path to graduate in two years as you prepare to transfer to a four-year Oregon college or university. Please meet with an advisor for any questions about alternate classes in any given
term. When transferring to a public four-year Oregon university, one of the following options must be met as a requirement for admission:

1. Two years of the same high school-level world language, or
2. Two terms of college-level world language (may be first-year world language, which can be used as elective credits)

This is for students who have graduated from high school or completed a high school equivalency program in 1997 or after. If students intend to complete a Bachelor of Arts (B.A.) degree at a four-year school, they must complete two years of a college level world language regardless of when they graduated from high school or an equivalency program. Completing the first year of the college language sequence in terms 3-6 at RCC sets students up for the second-year sequence when they transfer. Students should inquire with their intended receiving institution for world language requirements.

This guide lays out an optimal path to graduate. Where zero credits are listed in the prerequisites, students may place into a higher level(s) based on designated placement. Note: some prerequisites may be required for graduation. Please consult with an advisor regularly as you complete your transfer degree.

## Total Program Credits: 90

Program email address: SocialScienceInfo@roguecc.edu

## Program Prerequisites:

## MAY BE WAIVED BASED ON PLACEMENT - SEE ADVISING ${ }^{1}$

- MTH 95 - Intermediate Algebra 4 Credit(s) or MTH 96 or designated placement; check in with Advisor
- WR 115 - Introduction to Expository Writing 3 Credit(s) or designated placement


## Prerequisite Credits: 0-7

## Term 1

## Check-in with Advisor

- WR $121 Z$ - Composition I 4 Credit(s)
- PE 185YOG - Yoga 1 Credit(s) or other approved College-level general elective
- SOC 204 - Introduction to Sociology 4 Credit(s) ${ }^{1}$
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s) ${ }^{1}$ or COMM 111 I or COMM $218 Z$


## Term Credits: 13

## Term 2

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s) ${ }^{1}$
- WR $122 Z$ - Composition II 4 Credit(s)
- STAT $243 Z$ - Elementary Statistics I 4 Credit(s) or approved College-level math course; Students should inquire with their receiving institution as to whether STAT $243 Z$ is accepted
- STAT 243R - Corequisite Support for STAT243Z 1 Credit(s) Not required for students who have completed MTH 95 or MTH 96
- HPE 295 - Health and Fitness for Life 3 Credit(s) or HE 250, HE 252, HE 253 or approved Fitness/Health/PE course


## Term Credits: 15-16

## Term 3

- HST 201 - U.S. History through Reconstruction 4 Credit(s) ${ }^{1}$ or HST $202{ }^{1}$ or approved AAOT Social Science
- BI 101 - Introduction to Biology I 3 Credit(s) or approved AAOT Lab Science transfer course - talk to advisor
- BI 101L - Introduction to Biology I Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- PSY 201 - General Psychology I 4 Credit(s)
- MUS 205 - History of Jazz 3 Credit(s) ${ }^{1}$ or ART $204{ }^{1}$, ART $205{ }^{1}$, ART $206{ }^{1}$, ENG $107{ }^{1}$, ENG $108{ }^{1}$, ENG $109{ }^{1}$; SPAN $201{ }^{1}$ or approved AAOT Humanities transfer course


## Term Credits: 15

## Term 4

## Check-in with Advisor

- PSY 202 - General Psychology II 4 Credit(s)
- BI 102 - Introduction to Biology II 3 Credit(s) or approved AAOT Lab Science transfer course
- BI 102L - Introduction to Biology II Lab 1 Credit(s) or approved AAOT Lab Science transfer course
- SOC 225 - Social Problems and Solutions 4 Credit(s) ${ }^{1}$ or HST $202{ }^{1}$, SOC $205{ }^{1}$, SOC 211, SOC $213{ }^{1}$, SOC $218{ }^{1}$, SOC $228{ }^{1}$, SOC 230, SOC $235{ }^{1}$, SOC 243
- REL 201 - World Religions 4 Credit(s) ${ }^{1}$ or REL $2433^{1}$, SPAN $202{ }^{1}$, COMM 111Z, COMM $115{ }^{1}$, COMM 218Z, COMM 225; MUS $108{ }^{1}$ or approved AAOT Humanities transfer course


## Term Credits: 16

## Term 5

- SOC 218 - Sociology of Gender 4 Credit(s) ${ }^{1}$ or HS 185 , SOC $235{ }^{1}$, SOC 211 , SOC $213{ }^{1}$, SOC $228{ }^{1}$, SOC 230, SOC $243{ }^{1}$
- PSY 231 - Human Sexuality 3 Credit(s) or PSY 215, PSY 228, GEOG $110^{1}$, GEOG 120; SPAN 101 or ASL 101
- PS 201 - U.S. Government: Institutions and Policy 4 Credit(s) or PS 202, PS 203, ECE 125, ECE 161; ED 200; HC 100
- BI 103 - Introduction to Biology III 3 Credit(s) or approved AAOT Lab Science transfer course - talk to your advisor
- BI 103L - Introduction to Biology III Lab 1 Credit(s) or approved AAOT Lab Science transfer course


## Term Credits: 15

## Term 6

- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) ${ }^{1}$ or SOC 228, SOC 230, SOC $205{ }^{1}$, SOC 211, SOC $213^{1}$, SOC $218{ }^{1}$ or SPAN 102 or ASL 102
- COMM 201 - Media and Society 4 Credit(s) or CJ 200, CIS 125SS, BA 109, CIS 125WW, OAL 250, SRV 101 or CIS 125PT (fall term only)
- ENG 255 - Survey of American Literature: 20th Century 4 Credit(s) or MUS 264, MUS 265, MUS 266; IS $110{ }^{1}$, or approved AAOT Humanities transfer course
- ENV 111 - Introduction to Environmental Science 3 Credit(s) or NFM 225 or approved AAOT Science/Math/Computer Science non-lab transfer course


## Term Credits: 15

## Notes:

${ }^{1}$ Meets cultural literacy criteria (one course required).
Note:

- Three courses required in the Humanities category from at least two discipline.
- Four courses required in Social Science category, from at least two disciplines.
- Four courses required in Science/Math/Computer Science from two disciplines. Three must be lab science courses.
- Students who took writing classes of 3 credits each must have WR121, WR122, and either WR123 or WR227 Students taking classes of 4 credits each must take WR 121 Z and either WR $122 Z$ or WR $227 Z$.
- Fitness/Health/Physical Education (minimum of one or more courses totaling at least 3 credits).
- General elective(s) as needed to meet minimum program total requirement of 90 credits.


## For more information, contact the Social Science Department:

Phone: 541-956-7500
Email: SocialSciencelnfo@roguecc.edu
Web address: www.roguecc.edu
TTY: Oregon Telecom Relay Service, 711

## Sustainable Community Development, Focus Award

The Sustainable Community Development focus award (16-22 credits) provides students with the knowledge, skills and experiences that will allow them to play a vital role in developing and strengthening their communities in the twenty-first century. Diversity and sustainability are issues that present great challenges as well as incredible opportunities to create strong, thriving communities that meet the needs of their members and the environment.

Community development includes nurturing the integration of diverse groups to work together for common interests and the expansion of sustainable practices. Community development is studied holistically, including learning communication skills, how to effectively utilize the diversity inherent in American communities, and how people can live sustainably.

Completing the Sustainable Community Development focus award is an excellent addition to a resume. Knowledge of sustainability and diversity issues may be skills employers consider. Students should be aware that prerequisites exist for most courses, so they should plan accordingly.

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Sustainability Focus Award are:

Community Engagement: Demonstrate the ability to communicate effectively within a group setting. Demonstrate knowledge of community issues, needs, strengths, problems and resources.

Diversity: Analyze the relationship between diversity and social inequality and demonstrate knowledge of ways diverse groups can work together.

Sustainability: Apply the concept of sustainability in examining human relationships with the environment and identify sustainable solutions to environmental problems.

At least six of the credits of the Focus Award must be completed at RCC.

## Required Courses

- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) or SOC 218
- SOC 228 - Environment and Society 4 Credit(s)
- SRV 101 - Service Learning Var. (1-6) Credit(s) (SRV 101 is 1 credit in this term), or HS 261A


## Total Required Credits: 9

## Electives

(Choose elective courses from the following):

## Community Engagement (3-4 Credits Minimum)

- BA 214 - Business Communications 4 Credit(s)
- COMM 1112 - Public Speaking 4 Credit(s)
- COMM 115 - Introduction to Intercultural Communication 4 Credit(s)
- COMM 218 - Interpersonal Communication 4 Credit(s)
- ED 120 - Leadership I 1 Credit(s)
- ED 121 - Leadership II 1 Credit(s)
- ED 122 - Leadership III 1 Credit(s)
- HS 261C - Human Services Practicum and Seminar 3 Credit(s)
- WR 227Z - Technical Writing 4 Credit(s)
- Cooperative Work Experience as approved within major 3 Credit(s) ${ }^{1}$


## Diversity (One Class, 2-4 Credits)

- ANTH 110 - Introduction to Cultural Anthropology 4 Credit(s)
- COMM 237 - Communication and Gender 4 Credit(s)
- ECE 275 - Equity, Diversity, and Inclusion in Education 3 Credit(s)
- ENG 257 - African American Literature 4 Credit(s)
- ENG 260 - Introduction to Women Writers 4 Credit(s)
- HS 185 - Equity, Diversity, and Inclusion in the Workplace 2 Credit(s)
- HUM 215 - Native American Arts/Cultures (Eskimo/Inuit) 4 Credit(s)
- HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast) 4 Credit(s)
- HUM 217 - Native American Arts/Cultures (Nations of the Plains) 4 Credit(s)
- HUM 218 - Native American Arts/Cultures (Nations of the Southwest) 4 Credit(s)
- HUM 219 - Native American Arts Cultures (Peoples of Mexico) 4 Credit(s)
- IS 110 - Introduction to International Studies I 4 Credit(s)
- REL 201 - World Religions 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s) (if not taken as Sustainability elective)
- SOC 213 - Race and Ethnicity in the U.S. 4 Credit(s) (if not taken as part of Required)
- SOC 218 - Sociology of Gender 4 Credit(s) (if not taken as part of Required)
- SOC 235 - The Chicano/Latino Historical Experience 4 Credit(s) or HST 259


## Sustainability (One Class, 3-5 Credits)

- BI 213-General Biology III 3 Credit(s)
- BI 213L - General Biology III Lab 1 Credit(s)
- ENV 111 - Introduction to Environmental Science 3 Credit(s)
- GEOG 100 - Introduction to Physical Geography 3 Credit(s)
- GEOG 110 - Introduction to Human Geography 4 Credit(s)
- REL 243 - Nature, Religion and Ecology 4 Credit(s) (if not taken as Diversity elective)
- Cooperative Work Experience classes as approved within major 3 Credit(s) ${ }^{1}$

Total Elective Credits: 8-13

## Total Focus Award Credits: 17-22

Note: This focus award is not a formal, transcripted degree or certificate but recognizes student achievement in a specific topic or theme. Focus awards may be earned in combination with a certificate or degree. Classes are lower-division collegiate courses (except where noted) that may transfer to a variety of programs at a four-year college or university as elective credits, program requirements, and/or graduation
requirements for the receiving institution. Students are encouraged to check with the receiving institution and their RCC academic advisor for the most accurate transfer requirement information.
${ }^{1}$ A maximum of three Cooperative Work Experience credits may be used toward the focus award as approved by focus award advisor.

## For more information, contact the Social Science Department:

Phone: 541-956-7500
Email: SocialScienceInfo@roguecc.edu
Web address: www.roguecc.edu/socialscience
TTY: Oregon Telecom Relay Service, 711

## Apprenticeship

# Industrial Mechanics and Maintenance Technology: Mechanical Maintenance Apprenticeship, Career Pathway Certificate 


#### Abstract

About the Program

The Mechanical Maintenance Apprenticeship certificate program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. The certificate is available only to BOLI-registered apprentices. If you are interested in becoming a registered apprentice in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu. RCC supports these 4,000-hour BOLI-ATD trades: airframe/power plant technician and boiler operator.

The certificate is a credential within Rogue Community College's Industrial Mechanics and Maintenance Technology Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, laddertype certificates of completion, and an optional transfer path into a Bachelor of Science degree at the Oregon Tech. It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Industrial Mechanics and Maintenance Technology Mechanical Maintenance Apprenticeship Career Pathway Certificate are:

Complete 4,000 hours State of Oregon-approved on-the-job-training (OJT).
Repair, install and maintain industrial equipment using trade specific tools and techniques in compliance with state regulations.

Complete a minimum of 288 to 440 State of Oregon-approved related training hours in the classroom.
Complete required related training with a grade C - or better.

## Entry Requirements

Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair. Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway.

## Completion Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship certificate and be recommended by the Joint Apprenticeship and Training Committee or Trades Apprenticeship and Training Committee. This certificate does not guarantee licensure.

## Related Training

## Airframe and Power Plant Technician

- APR 129A - Apprenticeship / Aviation Overview 6 Credit(s)
- APR 129B - Apprenticeship / Aircraft Systems I 6 Credit(s)
- APR 129C - Apprenticeship / Aircraft Systems II 6 Credit(s)
- APR 129F - Apprenticeship / Basic Electrical Theory 3 Credit(s)
- APR 229A - Apprenticeship / Power Plant Systems and Flight Controls 6 Credit(s)
- APR 229B - Apprenticeship / Structural Inspection and Repair 6 Credit(s)
- APR 229C - Apprenticeship / Avionics 4 Credit(s)


## Total Airframe and Power Plant Technician Program Credits Required: 37

## Boiler Operator \& Repairer

- APR 120A - Apprenticeship / Boiler Operator: Introduction to Boiler Operation 4 Credit(s)
- APR 120B - Apprenticeship / Boiler Operator: Mechanics of Steam Generated Power 4 Credit(s)
- APR 120C - Apprenticeship / Boiler Operator: Boiler Component Design and Operation 4 Credit(s)
- APR 120D - Apprenticeship / Boiler Operator: Steam Turbine Operation 4 Credit(s)
- APR 120E - Apprenticeship / Boiler Operator: Instrumentation and Control Devices 4 Credit(s)
- APR 120F - Apprenticeship / Boiler Operator: Installation and Operation of the Heating Boiler 4 Credit(s)

Total Boiler Operator and Repairer Program Credits Required: 24
For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

# Construction Trades - General Apprenticeship, Certificate of Completion 


#### Abstract

About the Program

The Construction Trades, General Apprenticeship certificate program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. The certificate is available only to BOLI-registered apprentices. If you are interested in becoming registered in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu. RCC supports the following BOLI-ATD trades: HVAC/R, Plumber and Sheet Metal (8,000-hour trades).

The certificate is a credential within Rogue Community College's Construction Trades, General Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, a ladder-type certificate of completion, and an optional transfer path into a Bachelor of Science degree at Oregon Tech. This program features general education courses prescribed by Rogue Community College, related training credits, college credit for an earned journey-level card, and industry electives. It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program Learning Outcomes for the Construction Trades General Apprenticeship Certificate of Completion are:

Complete a minimum of 4,000 to 8,000 hours State of Oregon-approved on-the-job training (OJT).
Repair, install, and maintain building construction projects using trade specific tools and techniques in compliance with building codes and OSHA regulations.

Complete a minimum of 288 to 576 State of Oregon-approved related training hours in the classroom.
Complete required related training with a grade C - or better.

## Entry Requirements

Students are required to show documentation when applying that they meet the minimum requirements to apply to the desired Apprenticeship Program. Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair. Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship Certificate and be recommended by the Joint Apprenticeship and Training Committee or the Trades Apprenticeship and Training Committee. This certificate does not guarantee licensure.

## Program Prerequisite

- CIS - Approved Computer Information Science or Computer Science class, 0-2 Credit(s) CIS 120/ CS120 or above, or documented computer proficiency within the past ten years ${ }^{1}$


## General Education Requirements

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math
- WR 115 - Introduction to Expository Writing 3 Credit(s) or higher-level composition


## Total General Education Credits: 10-11

HVAC/R

- APR 107A - Apprenticeship / HVAC: Basics 4 Credit(s)
- APR 107B - Apprenticeship / HVAC: Air Conditioning and Refrigeration 4 Credit(s)
- APR 107C - Apprenticeship / HVAC: Safety and Environmental Controls 4 Credit(s)
- APR 107D - Apprenticeship / HVAC: Electrical Basics 4 Credit(s)
- APR 107E - Apprenticeship / HVAC: Electrical Circuit I 4 Credit(s)
- APR 107F - Apprenticeship / HVAC: Electrical Circuit II 4 Credit(s)
- APR 207A - Apprenticeship / HVAC: Systems 14 Credit(s)
- APR 207B - Apprenticeship / HVAC: Systems II 2 Credit(s)
- APR 207C - Apprenticeship / HVAC: Systems III 2 Credit(s)
- APR 207D - Apprenticeship / HVAC: Airflow and Systems Controls 14 Credit(s)
- APR 207F - Apprenticeship / HVAC: Operation and Systems Review 4 Credit(s)
- APR 211A - Apprenticeship / Water Supply Systems 4 Credit(s)

Total HVAC Credits: 44

## Plumber

- APR 111A - Apprenticeship / Introduction to Plumbing Skills 4 Credit(s)
- APR 111B - Apprenticeship / Plumbing Principles I 4 Credit(s)
- APR 111C - Apprenticeship / Plumbing Principles II 4 Credit(s)
- APR 111D - Apprenticeship / Mathematics of Plumbing and Commercial Drawing 4 Credit(s)
- APR 111E - Apprenticeship / Water Piping and Fixture Installation 4 Credit(s)
- APR 111F - Apprenticeship / Installation of DWV Systems and Water Heaters 4 Credit(s)
- APR 211A - Apprenticeship/Water Supply Systems 4 Credit(s)
- APR 211B - Apprenticeship / Plumbing DWV and Compressed Air Systems 4 Credit(s)
- APR 211C - Apprenticeship / Plumbing Backflow Prevention 4 Credit(s)
- APR 211D - Apprenticeship / Review of Oregon Plumbing Code 4 Credit(s)
- APR 211E - Apprenticeship / Test Preparation I 4 Credit(s)
- APR 211F - Apprenticeship / Test Preparation II 4 Credit(s)


## Total Plumbing Credits: 48

## Sheet Metal

- APR 118A - Apprenticeship / Introduction to Sheet Metal 3 Credit(s)
- APR 118B - Apprenticeship / Introduction to Duct Lay Out 3 Credit(s)
- APR 118C - Apprenticeship / Parallel Line Development 3 Credit(s)
- APR 118D - Apprenticeship / Applied Field Practices 3 Credit(s)
- APR 118E - Apprenticeship / Architectural Sheet Metal 3 Credit(s)
- APR 118F - Apprenticeship / Round Fittings 3 Credit(s)
- APR 218A - Apprenticeship / Duct Design 3 Credit(s)
- APR 218B - Apprenticeship / Field Math 3 Credit(s)
- APR 218C - Apprenticeship / Triangulation 3 Credit(s)
- APR 218D - Apprenticeship / Industry Standards 3 Credit(s)
- APR 218E - Apprenticeship / Specialty Items 3 Credit(s)
- APR 218F - Apprenticeship / Advanced Sheet Metal 3 Credit(s)

Total Sheet Metal Credits: 36

## Total Program Credits: 46-59

${ }^{1}$ Required for graduation.

## For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

# Electrician Apprenticeship Technologies, Certificate of Completion 


#### Abstract

About the Program

The Electrician Apprenticeship Technologies program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. The certificate is available only to BOLI-registered apprentices. If you are interested in becoming a registered apprentice in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu. RCC supports the following 8,000-hour BOLI-ATD trades: inside electrician, limited manufacturing plant electrician, and sign assembler/maker.

This certificate is a credential within Rogue Community College's Electrician Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, ladder-type certificates of completion, and an optional transfer path into a Bachelor of Science degree at the Oregon Tech. The certificate features general education courses prescribed by Rogue Community College and related training credits focusing on the repair or installation of electrical wire devices according to National Electrical Code (NEC) and Oregon Specific Codes (OSC). It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program Learning Outcomes for the Electrician Apprenticeship Technologies Certificate of Completion are:

Complete a minimum of 8,000 hours State of Oregon-approved on-the-job training (OJT).
Repair and install electrical wire devices according to licensure regulations to meet NEC and OSC guidelines.

Repair and install electrical wire devises according to licensure regulations to meet NEC and OSC for inside electrician, limited energy technician-license A, limited manufacturing plant electrician, sign assembler/fabricator, sign maker/erector, and stationary engineer.

Complete a minimum of 576 State of Oregon-approved related training hours in the classroom.
Complete required related training with a grade C - or better.

## Entry Requirements

Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair. Credits earned in the successful completion of Career Pathway

Certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship Certificate and be recommended by the Joint Apprenticeship and Training Committee or the Trades Apprenticeship and Training Committee. This certificate does not guarantee licensure.

## Program Prerequisite

- CIS - Approved Computer Information Science or Computer Science course, 0-2 Credit(s) CIS 120 CS120 or above, or documented computer proficiency within the past ten years ${ }^{1}$


## General Education Requirements

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math
- WR 115 - Introduction to Expository Writing 3 Credit(s) or higher-level composition course


## Total General Education Credits: 10-11

## Related Training

## Inside Electrician

- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 127D - Apprenticeship / Advanced Electrical I 4 Credit(s)
- APR 127E - Apprenticeship / Advanced Electrical II 4 Credit(s)
- APR 127F - Apprenticeship / Advanced Electrical III 4 Credit(s)
- APR 227A - Apprenticeship / National Electrical Code I 4 Credit(s)
- APR 227B - Apprenticeship / National Electrical Code II 4 Credit(s)
- APR 227C - Apprenticeship / National Electrical Code III 4 Credit(s)
- APR 227D - Apprenticeship / Oregon Electrical License Preparation 14 Credit(s)
- APR 227E - Apprenticeship / Oregon Electrical License Preparation II 4 Credit(s)
- APR 227F - Apprenticeship / Oregon Electrical License Preparation III 4 Credit(s)

Total Inside Electrician Credits: 48
Manufacturing Plant Electrician

- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 127D - Apprenticeship / Advanced Electrical I 4 Credit(s)
- APR 127E - Apprenticeship / Advanced Electrical II 4 Credit(s)
- APR 227A - Apprenticeship / National Electrical Code I 4 Credit(s)
- APR 227B - Apprenticeship / National Electrical Code II 4 Credit(s)
- APR 227C - Apprenticeship / National Electrical Code III 4 Credit(s)
- APR 227D - Apprenticeship / Oregon Electrical License Preparation 14 Credit(s)
- APR 227E - Apprenticeship / Oregon Electrical License Preparation II 4 Credit(s)
- APR 227F - Apprenticeship / Oregon Electrical License Preparation III 4 Credit(s)

Total Manufacturing Plant Electrician Credits: 44
Sign Assembler/Maker

- APR 116E - Apprenticeship / Millwright: Welding I 2 Credit(s)
- APR 116F - Apprenticeship / Millwright: Welding II 2 Credit(s)
- APR 118A - Apprenticeship / Introduction to Sheet Metal 3 Credit(s)
- APR 118B - Apprenticeship / Introduction to Duct Lay Out 3 Credit(s)
- APR 118C - Apprenticeship / Parallel Line Development 3 Credit(s)
- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 216C - Apprenticeship / Millwright: Drafting 4 Credit(s)
- APR 216F - Apprenticeship / Millwright: Rigging 4 Credit(s)
- APR 227E - Apprenticeship / Oregon Electrical License Preparation II 4 Credit(s)
- APR 227F - Apprenticeship / Oregon Electrical License Preparation III 4 Credit(s)

Total Sign Assembler/Maker Credits: 40

## Total Program Credits Required: 48-59

${ }^{1}$ Required for graduation.

## For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

# Electrician Apprenticeship Technologies: Limited Electrician Apprenticeship Technologies, Certificate of Completion 


#### Abstract

About the Program

The Limited Electrician Apprenticeship Technologies less than one-year certificate program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. This certificate is available only to BOLI-registered apprentices. If you are interested in becoming a registered apprentice in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu. RCC supports the 4,000hour BOLI-ATD trade limited maintenance electrician.

The certificate is a credential within Rogue Community College's Electrician Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, ladder-type certificates of completion, and an optional transfer path into a Bachelor of Science degree at Oregon Tech. The certificate features related training credits specific to the limited maintenance electrician trade in order to repair or install electrical wire devices according to National Electrical Code (NEC) and Oregon Specific Codes (OSC). It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program Learning Outcomes for the Electrician Apprenticeship Technologies Limited Certificate of Completion are:

Complete 4,000 hours State of Oregon-approved on-the-job-training (OJT).
Repair and install electrical wire devices according to licensure regulations to meet NEC \& OSC guidelines.
Repair or install electrical wire devices according to limited licensure regulations to meet NEC and OSC code for limited energy technician-license B, limited maintenance electrician, limited renewable energy technician, and limited residential electrician.

Complete a minimum of 288 State of Oregon-approved related training hours in the classroom.
Complete all required related training with a grade of C - or better.

## Entry Requirements

Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair. Credits earned in the successful completion of Career Pathway Certificates can be applied to other certificates and degrees in the Career Pathway.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship Certificate and be recommended by the Joint Apprenticeship and Training Committee or Trades Apprenticeship and Training Committee. This certificate does not guarantee licensure.

## Related Training

- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 227A - Apprenticeship / National Electrical Code I 4 Credit(s)
- APR 227B - Apprenticeship / National Electrical Code II 4 Credit(s)
- APR 227C - Apprenticeship / National Electrical Code III 4 Credit(s)

Total Program Credits Required: 24

## For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

# Industrial Mechanics and Maintenance Technology Apprenticeship, Certificate of Completion 


#### Abstract

About the Program

The Industrial Mechanics and Maintenance Technology Apprenticeship certificate program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint and Trade Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. This certificate is available only to BOLI-registered apprentices. If you are interested in becoming a registered apprentice in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu. RCC supports this 8,000hour BOLI-ATD trade: millwright.

The certificate is a credential within Rogue Community College's Industrial Mechanics and Maintenance Technology Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, laddertype certificates of completion, and an optional transfer path into a Bachelor of Science degree at the Oregon Tech. It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for the Industrial Mechanics and Maintenance Technology Apprenticeship Certificate of Completion are:

Complete a minimum of 8,000 hours State of Oregon approved on-the-job training (OJT).
Repair, install and maintain industrial equipment using trade specific tools and techniques in compliance with state regulations.

Complete a minimum of 576 State of Oregon-approved related training hours in the classroom.
Complete required related training with a grade C - or better.

## Entry Requirements

Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair. Credits earned in the successful completion of Career Pathways certificates can be applied to other certificates and degrees in the Career Pathway.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their certificates. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship certificate and be recommended by the Joint Apprenticeship and Training Committee or the Trades Apprenticeship and Training Committee. This certificate does not guarantee licensure.

## Program Prerequisite

- CIS - Approved Computer Information Science or Computer Science course, 0-2 Credit(s) CIS 120 / CS120 or above, or documented computer proficiency within the past ten years


## General Education Requirements

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math
- WR 115 - Introduction to Expository Writing 3 Credit(s) or higher-level composition

Total General Education Credits: 10-11
Millwright

- APR 116A - Apprenticeship / Millwright: Basic Electricity 4 Credit(s)
- APR 116B - Apprenticeship / Millwright: Carpentry 2 Credit(s)
- APR 116C - Apprenticeship / Millwright: Power Transmission 2 Credit(s)
- APR 116D - Apprenticeship / Millwrights: Boilers 4 Credit(s)
- APR 116E - Apprenticeship / Millwright: Welding I 2 Credit(s)
- APR 116F - Apprenticeship / Millwright: Welding II 2 Credit(s)
- APR 216A - Apprenticeship / Millwright: Machine Shop 12 Credit(s)
- APR 216B - Apprenticeship / Millwright: Machine Shop II 2 Credit(s)
- APR 216C - Apprenticeship / Millwright: Drafting 4 Credit(s)
- APR 216D - Apprenticeship / Millwrights: Hydraulics and Pneumatics I 2 Credit(s)
- APR 216E - Apprenticeship / Millwrights: Hydraulics and Pneumatics II 2 Credit(s)
- APR 216F - Apprenticeship / Millwright: Rigging 4 Credit(s)

Total Millwright Credits: 32

## Total Program Credits Required: 42-43

## For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

# Construction Trades - General Apprenticeship, Associate of Applied Science 


#### Abstract

About the Program

The Construction Trades, General Apprenticeship program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. The degree is available only to BOLI-registered apprentices. If you are interested in becoming a registered apprenticeship in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu.

RCC supports the following BOLI-ATD trades: HVAC/R, plumber and sheet metal (8,000-hour trades). It combines full-time, on-the-job work experience with trade-related theoretical instruction. This certificate is a limited entry program available only to BOLI-registered apprentices.

The AAS degree is a credential within Rogue Community College's Construction Trades, General Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, ladder-type certificate of completion, and an optional transfer path into a Bachelor of Science degree at Oregon Tech. The degree features general education courses prescribed by Rogue Community College, related training credits previously earned in the certificate of completion, college credit for an earned journey-level card, and industry electives. It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.

If students intend to transfer to Southern Oregon University's Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an advisor for more information or visit www.sou.edu/degreecompletion.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program Learning Outcomes for the Construction Trades General Apprenticeship Associate of Applies Science are:

Complete a minimum of 8,000 hours State of Oregon-approved on-the-job training (OJT).
Repair, install and maintain building construction projects using trade specific tools and techniques in compliance with building codes and OSHA regulations.

Seventy-five percent of applicants will have documented trade-specific skills listed on the Construction Trades, General Apprenticeship Outcomes Assessment Tool.

Complete a minimum of 576 State of Oregon-approved related training hours in the classroom.
Complete required related training with a grade C - or better.

## Entry Requirements

Students are required to show documentation when applying that they meet the minimum requirements to apply to the desired Apprenticeship Program.

Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship Certificate and be recommended by the Joint Apprenticeship and Training Committee or Trades Apprenticeship and Training Committee. This degree does not guarantee licensure.

## General Education Requirements

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- CIS___ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years ${ }^{1}$
- HE 112 - Emergency First Aid 1 Credit(s)
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math course
- WR 115 - Introduction to Expository Writing 3 Credit(s) ${ }^{2}$
- WR 121Z - Composition I 4 Credit(s) ${ }^{2}$

Total General Education Credits: 14-18

## Credit for Prior Certification (Work-based Learning)

See footnote 3

- APR 105 - Apprenticeship: Credit for Prior Learning Credit(s)
- HVAC/R - 22 Credit(s)
- Plumber-22 Credit(s)
- Sheet Metal - 22 Credit(s)


## Total Credit for Prior Certification: 22

## HVAC/R

- APR 107A - Apprenticeship / HVAC: Basics 4 Credit(s)
- APR 107B - Apprenticeship / HVAC: Air Conditioning and Refrigeration 4 Credit(s)
- APR 107C - Apprenticeship / HVAC: Safety and Environmental Controls 4 Credit(s)
- APR 107D - Apprenticeship / HVAC: Electrical Basics 4 Credit(s)
- APR 107E - Apprenticeship / HVAC: Electrical Circuit I 4 Credit(s)
- APR 107F - Apprenticeship / HVAC: Electrical Circuit II 4 Credit(s)
- APR 207A - Apprenticeship / HVAC: Systems I 4 Credit(s)
- APR 207B - Apprenticeship / HVAC: Systems II 2 Credit(s)
- APR 207C - Apprenticeship / HVAC: Systems III 2 Credit(s)
- APR 207D - Apprenticeship / HVAC: Airflow and Systems Controls 14 Credit(s)
- APR 207F - Apprenticeship / HVAC: Operation and Systems Review 4 Credit(s)
- APR 211A - Apprenticeship / Water Supply Systems 4 Credit(s)


## Total HVAC Credits: 44

## Plumber

- APR 111A - Apprenticeship / Introduction to Plumbing Skills 4 Credit(s)
- APR 111B - Apprenticeship / Plumbing Principles I 4 Credit(s)
- APR 111C - Apprenticeship / Plumbing Principles II 4 Credit(s)
- APR 111D - Apprenticeship / Mathematics of Plumbing and Commercial Drawing 4 Credit(s)
- APR 111E - Apprenticeship / Water Piping and Fixture Installation 4 Credit(s)
- APR 111F - Apprenticeship / Installation of DWV Systems and Water Heaters 4 Credit(s)
- APR 211A - Apprenticeship / Water Supply Systems 4 Credit(s)
- APR 211B - Apprenticeship / Plumbing DWV and Compressed Air Systems 4 Credit(s)
- APR 211C - Apprenticeship / Plumbing Backflow Prevention 4 Credit(s)
- APR 211D - Apprenticeship / Review of Oregon Plumbing Code 4 Credit(s)
- APR 211E - Apprenticeship / Test Preparation I 4 Credit(s)
- APR 211F - Apprenticeship / Test Preparation II 4 Credit(s)


## Total Plumbing Credits: 48

## Sheet Metal

- APR 118A - Apprenticeship / Introduction to Sheet Metal 3 Credit(s)
- APR 118B - Apprenticeship / Introduction to Duct Lay Out 3 Credit(s)
- APR 118C - Apprenticeship / Parallel Line Development 3 Credit(s)
- APR 118D - Apprenticeship / Applied Field Practices 3 Credit(s)
- APR 118E - Apprenticeship / Architectural Sheet Metal 3 Credit(s)
- APR 118F - Apprenticeship / Round Fittings 3 Credit(s)
- APR 218A - Apprenticeship / Duct Design 3 Credit(s)
- APR 218B - Apprenticeship / Field Math 3 Credit(s)
- APR 218C - Apprenticeship / Triangulation 3 Credit(s)
- APR 218D - Apprenticeship / Industry Standards 3 Credit(s)
- APR 218E - Apprenticeship / Specialty Items 3 Credit(s)
- APR 218F - Apprenticeship / Advanced Sheet Metal 3 Credit(s)

Total Sheet Metal Credits: 36

## Approved Program Electives

- Any college-level course (numbered 100 or above) to meet minimum degree requirement 2-18 Credit(s)


## Minimum Total Program Credits: 90

${ }^{1}$ Required for graduation.
${ }^{2} 6-8$ credits total is needed, which can be a combination of two Writing courses, or one Writing and one Communication course. Course options include, BT 113, BT 114, COMM 100Z, COMM 111Z, COMM 218Z, WR 115, and WR 121Z. Students transferring to a four-year institution should consult an academic advisor prior to course selection.
${ }^{3}$ A maximum of 22 credits can be earned for documented work-based learning for registered apprentices and journey persons. Students must provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD certificate.

## For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

# Electrician Apprenticeship Technologies, Associate of Applied Science 


#### Abstract

About the Program

The Electrician Apprenticeship Technologies program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. The degree is available only to BOLI-registered apprentices or electricians holding a journeylevel card. If you are interested in becoming a registered apprentice in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu. RCC supports the following BOLI-ATD trades: limited maintenance electrician (4,000-hour trade); inside electrician, limited manufacturing plant electrician, and sign maker/erector (8,000-hour trades).

The AAS degree is a credential within Rogue Community College's Electrician Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, ladder-type certificates of completion, and an optional transfer path into a Bachelor of Science degree at Oregon Tech. The degree features general education courses prescribed by Rogue Community College, related training credits previously earned in the certificate of completion, college credit for an earned journey-level card, and some industry electives. It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for Electrician Apprenticeship Technologies Associate of Applied Science are:

Complete a minimum of 4,000 to 8,000 State of Oregon-approved on-the-job-training. Apply theory to electrical wiring.

Repair and install electrical wire devices according to licensure regulations to meet National Electrical Code (NEC) and Oregon Specific Code (OSC) guidelines.

Seventy-five percent of applicants will have documented trade-specific skills listed on the Electrician Apprenticeship Trades Outcomes Assessment Tool.

Complete a minimum of 576 State of Oregon-approved related training hours in the classroom.
Complete all required related training with a grade of C - or better.

## Entry Requirements

Students are required to show documentation when applying that they meet the minimum requirements to apply to the desired Apprenticeship Program. Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair. Credits earned in the successful completion of Career Pathways Certificates can be applied to other certificates and degrees in the Career Pathway.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship Certificate and be recommended by the Joint Apprenticeship and Training Committee or Trades Apprenticeship and Training Committee. This degree does not guarantee licensure.

## General Education Requirements

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- CIS - Approved Computer Information Science or Computer Science class, 0-2 Credit(s) CIS 120 / CS120 or above, or documented computer proficiency within the past ten years ${ }^{1}$
- HE 112 - Emergency First Aid 1 Credit(s)
- MTH 60 - Fundamentals of Algebra I 4 Credit(s) or MTH 63 or higher-level math
- WR 115 - Introduction to Expository Writing 3 Credit(s) ${ }^{2}$
- WR 121Z - Composition I 4 Credit(s) ${ }^{2}$

Total General Education Credits: 14-18

## Credit for Prior Certification (Work-based Learning)

See footnote 3. A maximum of 22 credits can be earned for documented work-based learning for registered apprentices and journey persons. Students must provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD certificate.

- APR 105 - Apprenticeship: Credit for Prior Learning Credit(s)
- Limited Electrician-11 Credit(s)
- Inside Electrician-22 Credit(s)
- Manufacturing Plant Electrician - 22 Credit(s)
- Sign Assembler/Maker - 22 Credit(s)


## Total Credit for Prior Certification: 11-22

## Related Training

## Limited Maintenance Electrician

- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 227A - Apprenticeship / National Electrical Code I 4 Credit(s)
- APR 227B - Apprenticeship / National Electrical Code II 4 Credit(s)
- APR 227C - Apprenticeship / National Electrical Code III 4 Credit(s)

Total Limited Maintenance Electrician Credits: 24
Inside Electrician

- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 127D - Apprenticeship / Advanced Electrical 14 Credit(s)
- APR 127E - Apprenticeship / Advanced Electrical II 4 Credit(s)
- APR 127F - Apprenticeship / Advanced Electrical III 4 Credit(s)
- APR 227A - Apprenticeship / National Electrical Code I 4 Credit(s)
- APR 227B - Apprenticeship / National Electrical Code II 4 Credit(s)
- APR 227C - Apprenticeship / National Electrical Code III 4 Credit(s)
- APR 227D - Apprenticeship / Oregon Electrical License Preparation 14 Credit(s)
- APR 227E - Apprenticeship / Oregon Electrical License Preparation II 4 Credit(s)
- APR 227F - Apprenticeship / Oregon Electrical License Preparation III 4 Credit(s)

Total Inside Electrician Credits: 48

## Manufacturing Plant Electrician

- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 127D - Apprenticeship / Advanced Electrical I 4 Credit(s)
- APR 127E - Apprenticeship / Advanced Electrical II 4 Credit(s)
- APR 227A - Apprenticeship / National Electrical Code I 4 Credit(s)
- APR 227B - Apprenticeship / National Electrical Code II 4 Credit(s)
- APR 227C - Apprenticeship / National Electrical Code III 4 Credit(s)
- APR 227D - Apprenticeship / Oregon Electrical License Preparation 14 Credit(s)
- APR 227E - Apprenticeship / Oregon Electrical License Preparation II 4 Credit(s)
- APR 227F - Apprenticeship / Oregon Electrical License Preparation III 4 Credit(s)

Total Manufacturing Plant Electrician Credits: 44

## Sign Assembler/Maker

- APR 116E - Apprenticeship / Millwright: Welding I 2 Credit(s)
- APR 116F - Apprenticeship / Millwright: Welding II 2 Credit(s)
- APR 118A - Apprenticeship / Introduction to Sheet Metal 3 Credit(s)
- APR 118B - Apprenticeship / Introduction to Duct Lay Out 3 Credit(s)
- APR 118C - Apprenticeship / Parallel Line Development 3 Credit(s)
- APR 127A - Apprenticeship / Electrical Theory I 4 Credit(s)
- APR 127B - Apprenticeship / Electrical Theory II 4 Credit(s)
- APR 127C - Apprenticeship / Electrical Theory III 4 Credit(s)
- APR 216C - Apprenticeship / Millwright: Drafting 4 Credit(s)
- APR 216F - Apprenticeship / Millwright: Rigging 4 Credit(s)
- APR 227E - Apprenticeship / Oregon Electrical License Preparation II 4 Credit(s)
- APR 227F - Apprenticeship / Oregon Electrical License Preparation III 4 Credit(s)

Total Sign Assembler/Maker Credits: 40

## Approved Program Electives

- Any college-level course (numbered 100 or above) to meet minimum degree requirement 2-41 Credit(s)


## Minimum Total Program Credits Required: 90

${ }^{1}$ Required for graduation.
${ }^{2}$ In lieu of WR 115 and WR 121Z, students may substitute BT 113 Business English I and BT 114 Business English II (7-8 credits total); or BT 113 Business English I (or WR 115 Introduction to Expository Writing) and three credits of speech (COMM $100 Z$ Introduction to Communication, COMM $111 Z$ Public Speaking, or COMM $218 Z$ Interpersonal Communication), 6-8 credits total.
${ }^{3}$ A maximum of 22 credits can be earned for documented work-based learning for registered apprentices and journey persons. Students must provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD certificate.

## For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

# Industrial Mechanics and Maintenance Technology Apprenticeship, Associate of Applied Science 


#### Abstract

About the Program

The Industrial Mechanics and Maintenance Technology Apprenticeship program is based on the Bureau of Labor and Industries (BOLI) Oregon State Apprenticeship Training Council and local Joint and Trades Apprenticeship Training Committee related training standards. It combines full-time, on-the-job work experience with trade-related theoretical instruction. The degree is available only to BOLI-registered apprentices. If you are interested in becoming a registered apprentice in an Oregon state apprenticeship program, contact the Apprenticeship office at ApprenticeshipInfo@roguecc.edu. RCC supports these BOLIATD trades: airframe/power plant technician and boiler operator ( 4,000 hours); and millwright ( 8,000 hours).

This AAS degree is a credential within Rogue Community College's Industrial Mechanics and Maintenance Technology Apprenticeship Pathway. The pathway model provides statewide transfer opportunities, laddertype certificates of completion, and an optional transfer path into a Bachelor of Science degree at Oregon Tech. If students intend to transfer to Southern Oregon University's Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an advisor for more information or visit www.sou.edu/degreecompletion.

The degree features general education courses prescribed by Rogue Community College, related training credits previously earned in the certificate of completion, college credit for an earned journey-level card, and some industry electives. It also provides additional access to related training courses across the state for registered apprentices with aligned program outcomes, assessments and courses.


## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for Industrial Mechanics and Maintenance Technology Apprenticeship Associate of Applied Science are:

Complete a minimum of 4,000 to 8,000 hours State of Oregon approved on-the-job training (OJT).
Repair, install and maintain industrial equipment using trade specific tools and techniques in compliance with state regulations.

Complete a minimum of 288 to 576 State of Oregon-approved related training hours in the classroom.
Complete required related training with a grade C - or better.

## Entry Requirements

Students are required to complete the 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 placement.

## Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and approval of the Department Chair. Credits earned in the successful completion of Career Pathways
certificates can be applied to other certificates and degrees in the Career Pathway. For more information, speak to a program advisor.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C-" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C-" or better grade. Students must also possess the appropriate Bureau of Labor and Industries Apprenticeship certificate and be recommended by the Joint Apprenticeship and Training Committee or Trades Apprenticeship and Training Committee. This degree does not guarantee licensure.

## General Education Requirements

- BT 101 - Human Relations in Organizations 3 Credit(s) or PSY 101
- CIS - Approved Computer Information Science or Computer Science course, 0-2 Credit(s) CIS 120 / CS120 or above, or documented computer proficiency within the past ten years ${ }^{1}$
- HE 112 - Emergency First Aid 1 Credit(s)
- MTH 60 - Fundamentals of Algebra 14 Credit(s) or MTH 63 or higher-level math
- WR 115 - Introduction to Expository Writing 3 Credit(s) ${ }^{2}$
- WR 121Z - Composition I 4 Credit(s) ${ }^{2}$

Total General Education Credits: 14-18

## Credit for Prior Certification (Work-based Learning)

See footnote 3

- APR 105 - Apprenticeship: Credit for Prior Learning Credit(s)
- Airframe and Power Plant Technician - $\mathbf{1 6}$ Credit(s)
- Boiler Operator - 11 Credit(s)
- Millwright - 22 Credit(s)


## Total Credit for Prior Certification: 11-22

## Airframe and Power Plant Technician

- APR 129A - Apprenticeship / Aviation Overview 6 Credit(s)
- APR 129B - Apprenticeship / Aircraft Systems I 6 Credit(s)
- APR 129C - Apprenticeship / Aircraft Systems II 6 Credit(s)
- APR 129F - Apprenticeship / Basic Electrical Theory 3 Credit(s)
- APR 229A - Apprenticeship / Power Plant Systems and Flight Controls 6 Credit(s)
- APR 229B - Apprenticeship / Structural Inspection and Repair 6 Credit(s)
- APR 229C - Apprenticeship / Avionics 4 Credit(s)

Total Program Credits Required: 37

## Boiler Operator \& Repairer

- APR 120A - Apprenticeship / Boiler Operator: Introduction to Boiler Operation 4 Credit(s)
- APR 120B - Apprenticeship / Boiler Operator: Mechanics of Steam Generated Power 4 Credit(s)
- APR 120C - Apprenticeship / Boiler Operator: Boiler Component Design and Operation 4 Credit(s)
- APR 120D - Apprenticeship / Boiler Operator: Steam Turbine Operation 4 Credit(s)
- APR 120E - Apprenticeship / Boiler Operator: Instrumentation and Control Devices 4 Credit(s)
- APR 120F - Apprenticeship / Boiler Operator: Installation and Operation of the Heating Boiler 4 Credit(s)


## Total Program Credits Required: 24

Millwright

- APR 116A - Apprenticeship / Millwright: Basic Electricity 4 Credit(s)
- APR 116B - Apprenticeship / Millwright: Carpentry 2 Credit(s)
- APR 116C - Apprenticeship / Millwright: Power Transmission 2 Credit(s)
- APR 116D - Apprenticeship / Millwrights: Boilers 4 Credit(s)
- APR 116E - Apprenticeship / Millwright: Welding I 2 Credit(s)
- APR 116F - Apprenticeship / Millwright: Welding II 2 Credit(s)
- APR 216A - Apprenticeship / Millwright: Machine Shop 12 Credit(s)
- APR 216B - Apprenticeship / Millwright: Machine Shop II 2 Credit(s)
- APR 216C - Apprenticeship / Millwright: Drafting 4 Credit(s)
- APR 216D - Apprenticeship / Millwrights: Hydraulics and Pneumatics I 2 Credit(s)
- APR 216E - Apprenticeship / Millwrights: Hydraulics and Pneumatics II 2 Credit(s)
- APR 216F - Apprenticeship / Millwright: Rigging 4 Credit(s)

Total Program Credits Required: 32

## Approved Program Electives

## 13-41 Credit(s)

- Any college-level course (numbered 100 or above) to meet minimum degree requirement


## Minimum Total Program Credits Required: 90

${ }^{1}$ Required for graduation.
${ }^{2}$ In lieu of WR 115 and WR 121Z, students may substitute BT 113 Business English I and BT 114 Business English II (8 credits total); or BT 113 Business English I (or WR 115 Introduction to Expository Writing) and three or four credits of speech (COMM 100Z Introduction to Communication, COMM 111Z Public Speaking, or COMM $218 Z$ Interpersonal Communication), 6-8 credits total.
${ }^{3}$ A maximum of 22 credits can be earned for documented work-based learning for registered apprentices and journey persons. Students must provide a State of Oregon Apprenticeship Training Journeyman card or BOLI-ATD certificate.

## For more information, contact the Apprenticeship Department:

Phone: 541-956-7500
Email: ApprenticeshipInfo@roguecc.edu
Web address: www.roguecc.edu/apprenticeship
TTY: Oregon Telecom Relay Service, 711

## Major Transfer Maps

A Major Transfer Map is a course plan for a 90-credit associate degree that, when completed, will allow students to receive junior standing at any Oregon Public University or Community College that offers a bachelor's degree in the student's completed degree program. Students can check with their advisors about the availability of any new Major Transfer Maps as they are developed.

Current Oregon Major Transfer Maps include:

- Biology - Associate of Science Transfer (AST)
- Business - Associate of Science Transfer (AST)
- Computer Science - Associate of Science Transfer (AST)
- Elementary Education - Associate of Arts Oregon Transfer
- English Literature - Associate of Arts Transfer (AAT)


## Continuing Education

www.roguecc.edu/ContinuingEducation
Continuing Education provides learning opportunities to enhance fulfillment and personal success of residents in the RCC service area. Learning events are in line with and focused on the community's needs in all areas of workforce/business, private/public organizations and personal enrichment.

Continuing Education classes and services include the following:

- American Heart Association CPR
- Arts \& Craft
- Certified Production Technician
- Commercial Truck Driver Training
- Community Health Worker
- Computer Training
- Culinary
- Driver Education
- Forklift Operator Safety Training
- Home \& Garden
- Language
- Massage Therapy CEUs
- Music \& Theater
- Nursing Assistant I
- Peer Support Specialist
- Personal Finance \& Retirement
- Property Management License Training
- Real Estate Broker License Training


## Community Education

www.roguecc.edu/CommunityEd
541-956-7303
Grants Pass: Redwood Campus, 3345 Redwood Hwy, A Bldg
Medford: Riverside Campus, Higher Ed Ctr, 101 S. Bartlett
White City: Table Rock Campus, 7800 Pacific Ave.

Community Education classes are short, non-credit classes. Many classes meet in evenings or Saturdays. All course listings are updated quarterly and viewable at above website.

## Commercial Truck Driver Training

www.roguecc.edu/truck
541-956-7303
RCC is one of the area's premier truck driving schools and our training provides a Non-Credit Training Certificate (NCTC), approved by the Oregon Higher Education Coordinating Commission (HECC). To apply visit the website above.

## American Heart Association Training Center

www.roguecc.edu/heart
541-956-7303

RCC Continuing Education is part of the American Heart Association Training Center Network serving Southern Oregon. As an AHA Training Center, we ensure that CPR classes are taught to American Heart Association standards and that each CPR class we offer meets or exceed the quality demanded by the nation's leading CPR training agency. Our Training Center promotes the mission of the AHA by offering quality training courses in basic life support to the community.

## Customized Training

www.roguecc.edu/Workforce
Jackson or Josephine counties. 541-956-7303

RCC Continuing Education can customize workforce training for local employers. Contact us for details.

## Driver Education

www.roguecc.edu/DriverEd
541-956-7116

- High School Driver Training
- Adult Driver Training


## Workforce Training

www.roguecc.edu/Workforce
541-956-7303
Workforce training focuses on vocational, professional development and training that meets industry-specific criteria to enhance job skills of incumbent workers.

Workforce development activities benefit job seekers, unemployed or displaced workers, youth, incumbent workers, new entrants to the workforce, veterans, persons with disabilities and employers.

Industry-specific certifications are offered in subject areas such as Certified Production Technician, Commercial Truck Driver Training, Forklift, and Nursing Assistant, Community Health Worker, and Peer Support Specialist. Training is held in a hands-on setting with state-of-the-art equipment and tradeexperienced instructors. Most trainings are offered as noncredit, certificate of completion status, but many also offer Continuing Education Units (CEUs).

Courses may be offered in a traditional classroom environment, online or in a blended format. Some shortterm trainings are composed of a course or series of courses mapped to an industry-recognized certification.

## Small Business Development Center

www.roguecc.edu/SBDC
541-956-7494
The Small Business Development Center (SBDC) is a community-based technical assistance resource available to both existing and prospective small businesses.

The RCC Small Business Development Center welcomes you to our new offices on the Rogue Community College Redwood Campus, Building B, located just off Redwood Highway/199, at the West Entrance.

Staffed by former small business owners and professionals, the SBDC offers:

- Free and confidential one-on-one advising.
- Business training courses.
- Industry and market research assistance.

Funded through a partnership with the U.S. Small Business Administration, Business Oregon, the City of Grants Pass, Josephine County and Rogue Community College, the SBDC has been offering business assistance in the Rogue Valley since 1984.

Typical areas of business advising and training include:

- Smart Start Your Business.
- Business Planning.
- Marketing Strategies.
- Social Media/Technology for Your Business.
- Personnel Management Issues.
- Business Loan Packaging.
- Financial Analysis.
- Bookkeeping and Recordkeeping.
- CCB and LCB Continuing Education.
- Construction/Contractor pre-licensing.
- Strategic Planning.


## Illinois Valley Business Entrepreneurial Center (IVBEC)

Kerby Belt Building, 24353 Redwood Hwy., Kerby, OR | 541-956-7400
The RCC SBDC provides an accessible rural outreach center located in the Kerby building training center. One-on-one advising services, business training opportunities, and support resources are available at this location for both existing and prospective business owners of the Illinois Valley. This center also features meeting space, a computer lab, and a commercial kitchen available to entrepreneurs.

## Small Business Management (SBM)

www.roguecc.edu/sbdc/small-business-management.asp
541-956-7494
The Small Business Management experience is designed to enable owners of established small businesses to be more successful in identifying and achieving their business goals. SBM is a highly effective training that has been offered in the Rogue Valley for over 25 years. It provides a client-tailored approach to business management practices that help business owners more effectively manage their operation and improve their bottom line.

The SBM nine-month curriculum is designed as an interactive classroom experience combined with one-onone advising sessions. The course provides information and analysis tools that business owners can apply to achieve streamlined operations and improved profitability. The following topics are typically covered:

- Fundamental Business Practices.
- Understanding Financial Management and Statements.
- Principles of Marketing and E-Marketing.
- Managing Cash Flow.
- Employee Management and Supervision.
- Strategic Management Principles.
- Customer Service and Relations Management.
- Leadership Principles and Managing Change.
- Process Improvement and Quality Control.


## Course Descriptions

## AH 22 - Healthcare Calculations

## 3 Credit(s)

Prerequisite(s): MTH 20 or designated placement.
Course Description: Teaches the calculations involved in the preparation and administration of pharmacological products. Topics include reading a prescription, converting measurements through dimensional analysis, dosage calculations, dilutions, concentrations, Total Parenteral Nutrition (TPN) milliliter-equivalents and industry related business math.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Read a prescription and define its meaning.
- CLO\#2: Identify and describe the components of dimensional analysis in unit conversion.
- CLO\#3: Use measurement techniques in various units to calculate proper medicine dosage.
- CLO\#4: Calculate accurate concentrations and dilutions. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Identify and describe the components of the revenue cycle. Explain co-payments and calculate (AWP) insurance pricing.


## AH 100-Medical Terminology: Introduction

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Provides a basic understanding of medical terminology using a word-building approach based on the systems of the human body. Prefixes, suffixes, word roots, combining forms, special endings, plural forms, abbreviations, and symbols are included in the content. Emphasis is placed on spelling, definition and usage.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define and spell medical terms.
- CLO\#2: Construct and analyze medical terms. (ILO: Critical Thinking)
- CLO\#3: Describe basic anatomical terms and functions.
- CLO\#4: Explain the meaning of various medical abbreviations.


## AH 101 - Medical Assistant I: Administrative

## 3 Credit(s)

Prerequisite(s): Admission to the Medical Assistant Certificate program.

Course Description: Covers a variety of topics including the role and scope of the medical assistant in a clinical front office environment. This includes an overview of recordkeeping, documentation and Electronic Health Records software. Students will be responsible for knowing insurance and billing, patient scheduling, and screening for patient check in are also included.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and describe the role and scope of the Medical Assistant.
- CLO\#2: Perform entry-level administrative functions of medical assisting including patient check-in, screening, and completion of relevant documents for appointments. (ILO: Information Literacy)
- CLO\#3: Demonstrate and describe key principles of managed care, insurance plans, and current procedural coding systems.
- CLO\#4: Demonstrate medical record management and documentation.
- CLO\#5: Perform entry-level billing functions in an electronic medical record.


## AH 102 - Medical Assistant II: Clinical

## 4 Credit(s)

Prerequisite(s): Admission to the Medical Assistant Certificate program.
Course Description: Covers clinical topics for medical assisting. Students will learn how to collect a patient's history, prepare them for their appointments, provide instruction on patient care, take vital sign measurements, and assist provider with patient care. Calculating, administering, and recording medication will be addressed. Specimen collection, processing procedures, the use of personal protective equipment and infection control, and OSHA policies and procedures will be taught and reinforced.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proficiency in written and verbal communication within the simulated healthcare setting. (ILO: Communication)
- CLO\#2: Identify and implement proper infection control and safety standards.
- CLO\#3: Demonstrate clinical techniques used to assist providers with patient care, including rooming.
- CLO\#4: Obtain and distinguish between normal and abnormal vital signs.
- CLO\#5: Demonstrate procedures for calculating, preparing, administering and documenting medications.
- CLO\#6: Recognize and respond appropriately to simulated medical emergencies.
- CLO\#7: Perform CLIA waived specimen testing and collection procedures.


## AH 103 - Medical Assistant III: Specialty

## 4 Credit(s)

Prerequisite(s): Acceptance into the Medical Assistant Certificate Program and successful completion of all prior program courses is required.

Course Description: Prepares students for medical assisting in specialty clinics. Students will learn how to perform specialty techniques and recognize the differences in treatment and diagnosis based on area of specialty. Students will demonstrate communication techniques that promote equity and diversity in each specialty area. Additionally, students will learn about clinical management and human resources in healthcare.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify differences between specialty clinics in the medical community.
- CLO\#2: Demonstrate written and verbal communication techniques and terminology within healthcare. (ILO: Communication)
- CLO\#3: Identify and demonstrate competency in the tests and techniques used in each specialty area.
- CLO\#4: Identify clinic management techniques and human resource procedures.


## AH 104 - Phlebotomy

## 3 Credit(s)

Prerequisite(s): Acceptance into the Phlebotomy Career Pathway Certificate or the Medical Assistant Certificate program.

Course Description: Introduces students to the concept of phlebotomy, including, but not limited to venipuncture procedures, specimen processing, and safety and compliance considerations. Additionally, the course prepares students to take the National Healthcareer Association (NHA), Certification Phlebotomy Technician (CPT) exam. Successful completion of this course, along with 30 unaided, successful venipunctures and 10 capillary collections on live individuals, will make students eligible to sit for the NHA CPT credential. This credential allows students to work as a nationally certified phlebotomist for 2 years, before certification renewal is required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply quality assurance and quality control to promote safety and patient confidentiality/HIPAA.
- CLO\#2: Describe the human circulatory system using correct terminology.
- CLO\#3: Perform specimen collection with correct volume, tube type, and additives. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Demonstrate effective verbal and nonverbal communication in the lab setting.


## AH 105 - Communication and Professional Behavior

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or designated placement (WR 91 substitutes for both RD 90 and WR 90).

Course Description: Prepares students for practicum experiences and employment in the healthcare
industry by understanding multicultural therapeutic communication and culturally competent communication and behavior. In addition, students will learn professional communication skills (oral and written), workplace ethics, and professional behavior.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Compare and contrast therapeutic and nontherapeutic communication.
- CLO\#2: Identify barriers to multicultural therapeutic communication.
- CLO\#3: Identify personal goals to improving culturally competent communication and behavioral skills. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#4: Analyze conflict in the workplace and provide solutions for resolution.
- CLO\#5: Perform motivational interviewing techniques and describe patient goal setting.


## AH 107 - Electrocardiograms (ECG) for Medical Assistants

## 2 Credit(s)

Prerequisite(s): Acceptance into the Medical Assistant Certificate program and successful completion of all prior program courses is required.

Course Description: This course focuses on how to perform and interpret an electrocardiogram (ECG) within a clinical setting. Students will learn how to prepare a patient, perform an ECG as well as identify and correct artifacts. In addition, this course includes an introduction and understanding of the human heart, and other cardiac procedures. Students will also learn basic electrophysiology and how to interpret various rhythms. This course certifies Medical Assistant students to sit for the NHA CET (Certified Electrocardiogram Technician) examination upon successful completion of the Medical Assistant Program.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe key principles of cardiac anatomy, physiology, and electrophysiology.
- CLO\#2: Identify key principles in electrocardiogram (ECG) interpretation.
- CLO\#3: Compare and contrast ECG rhythms. (ILO: Critical Thinking)
- CLO\#4: Accurately perform ECGs in a classroom setting.


## AH 108 - Introduction to Pharmacology for Medical Assistants

## 3 Credit(s)

Prerequisite(s): Acceptance into the Medical Assistant Certificate program or permission of Medical Assistant Advisor.

Course Description: Introduction of pharmacology, from safety and regulations, through medication preparation and dosages. This course will focus on patient conditions related to medications, interactions, and effects of medications on the human body.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe key principles of pharmacology, safety, and regulations.
- CLO\#2: Identify drugs by name and classification and describe effects on the human body.
- CLO\#3: Describe medication preparation, supplies, systems of measurement, and dosage calculations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Describe routes of drug administration.
- CLO\#5: Select and analyze drug information databases and communicate the results.


## AH 110 - Medical Terminology: Clinical

## 3 Credit(s)

Prerequisite(s): Admission to an Allied Health Occupations program and AH 100.
Course Description: Continues the study of medical terminology and medical records analysis. Focuses on the clinical aspects of terminology including pharmacology, medical specialties, medical records, diagnostic and treatment procedures, and laboratory testing.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define and spell medical terms.
- CLO\#2: Build and analyze medical terms.
- CLO\#3: Define medical terms through reading and writing.
- CLO\#4: Differentiate types of medical terms and the relationships among terms.
- CLO\#5: Analyze and interpret medical communications used to document health care. (ILO: Information Literacy)


## AH 120 - Medical Office Assistant I

## 4 Credit(s)

Prerequisite(s): Acceptance into the Medical Office Assistant Certificate program.
Course Description: The first of two courses that prepare students for careers as medical administrative assistants. Introduces the concepts and skills related to patient and facility scheduling, patient intake, office logistics, privacy, and basic workplace safety.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the roles and responsibilities of medical administrative assistants and how they collaborate with other members of the healthcare team.
- CLO\#2: Identify procedures for patient scheduling, facility scheduling, and protocols for no-show, missed, cancelled or follow-up appointments, and confirming future appointments.
- CLO\#3: Perform the patient intake process, including patient greeting, collection of appropriate information, confidentiality, and the issues of a diverse patient population.
- CLO\#4: Perform health information management such as filing medical records, collecting copayments, and managing health record. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Identify OSHA and HIPPA guidelines and specific practices for regulatory compliance in a medical setting.


## AH 121 - Medical Office Assistant II

## 4 Credit(s)

Prerequisite(s): Acceptance into the Medical Office Assistant Certificate program and successful completion of all prior program courses is required.

Course Description: Builds upon the themes and skills introduced in Medical Office Assistant I. Focuses on the integration of the skills for the medical office setting and covers more in-depth issues in office processes, patient privacy, patient rights and responsibilities, and safety in the workplace.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the five areas addressed in the American Association of Medical Assistants code of ethics.
- CLO\#2: Perform business operations and financial management within the scope of practice. (ILO: Information Literacy)
- CLO\#3: Communicate effectively and with respect and compassion.
- CLO\#4: Identify OSHA and HIPAA guidelines and describe how to implement best practices related to the medical settings.


## AH 123 - Legal and Ethical Issues for Medical Personnel

## 2 Credit(s)

Prerequisite(s): Acceptance into the Medical Office Assistant, Medical Assistant, or Pharmacy Technician cohort.

Course Description: Exposes students to a variety of legal and ethical dilemmas, helping students become more prudent and confident medical assistants or medical administrative assistants. 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.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define the major components of the American legal system, and the philosophies and differences between laws and ethics, focusing on medical professions.
- CLO\#2: Describe the legal framework that defines relationships in healthcare.
- CLO\#3: Define malpractice and discuss potential consequences of professional negligence and breaching a medical contract.
- CLO\#4: Define sexual harassment in the workplace and explain options for dealing with sexual harassment.
- CLO\#5: Define cultural competent healthcare and discuss the impact of diverse cultural backgrounds for medical staff. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#6: Describe the ethical principles that guide medical office staff and how those principles inform decisions. (ILO: Critical Thinking)
- CLO\#7: Describe the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and describe how it affects practices in medical offices.


## AH 130 - Concepts in Medical Insurance and Billing

## 4 Credit(s)

Prerequisite(s): Acceptance into an Allied Health Occupations program and successful completion of all prior program courses is required.

Course Description: Explores the fundamentals of health insurance, reimbursement processes and methodologies, billing cycles, payment systems, fee schedules, charge master, and internal audit processes. Includes an introduction to how health information technology is used in medical offices. Students will learn how to apply this information to enter patient charges and payments.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and describe the components of the revenue cycle.
- CLO\#2: Identify claims processing procedures. (ILO: Information Literacy)
- CLO\#3: Compare and contrast types of insurance plans.
- CLO\#4: Identify and correctly apply codes for billing purposes within different healthcare settings.


## AH 150 - Introduction to Practicum and Seminar

## 2 Credit(s)

Prerequisite(s): Acceptance into any Allied Health Certificate program.
Course Description: Provides students an extensive overview of the practicum experience and prepares students for the challenges of their role in the healthcare industry. Content includes program policies and procedures (safety, HIPAA, student conduct and competency documentation), phases of student development, role of the student intern, and expectations for communication and workplace behavior. In preparation for clinical placement students will identify technical and soft skills required for the position they are in training for.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify institutional expectations, policies and procedures for students and clinical sites including behavioral and safety issues.
- CLO\#2: Identify required skills and abilities for clinical roles and create documentation for clinical placement.
- CLO\#3: Describe and discuss the scope of student responsibilities and phases of development within the practicum.
- CLO\#4: Describe and demonstrate effective verbal, nonverbal, and written communication principles and skills required in the workplace and clinical setting.
- CLO\#5: Discuss issues surrounding diversity and equity in healthcare, how it impacts patient care, and describe best practices to promote equity and inclusion. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## AH 150MAP - Introduction to Practicum and Seminar for Medical Assistants

## 2 Credit(s)

Prerequisite(s): Acceptance into the Medical Assistant Certificate program.
Course Description: Provides students with an extensive overview of the practicum experience and prepares students for the challenges of the role as a Medical Assistant. Content includes phases of student development, role of the student intern, and expectations for communication and workplace behavior. In preparation for clinical placement, students will identify technical and soft skills required for the position they are in training for.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Produce industry specific pre-employment documents for Medical Assistants.
- CLO\#2: Identify required skills and abilities for Medical Assistants.
- CLO\#3: Describe and discuss the scope of Medical Assistant student responsibilities and phases of development within the practicum.
- CLO\#4: Describe and demonstrate effective verbal, nonverbal, and written communication principles and skills required in the workplace and clinical setting. (ILO: Communication)


## AH 165 - Introduction to Pharmacology for Pharmacy Technicians

## 2 Credit(s)

Prerequisite(s): Acceptance into the Pharmacy Technician Certificate program and successful completion of all prior program courses is required.

Course Description: Introduces the world of pharmacology as relevant to pharmacy technicians, including, medication preparations and dosages, patient conditions related to medications and the effects medications have on the patient's body. It also addresses the pharmacological issues of special populations such as pediatrics, neonatal, and geriatrics.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate accurate key principles in drug names and classifications, common sources of medication and their effects on the body.
- CLO\#2: Identify key principles in medication preparations and supplies, systems of measurement, and appropriate safe dosage calculations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Demonstrate industry standards of pharmacology related to special populations, including pediatrics, neonatal, and geriatrics.


## AH 170MAB - Medical Assistant Bridge Practicum

## 3 Credit(s)

Prerequisite(s): Acceptance into the Medical Assistant Bridge program, and successful completion of all prior program courses is required.

Course Description: Provides hands-on clinical experience. Students work each week at a host site as part of the patient care team and experience first-hand the various operations within primary, specialty and/or urgent care settings. Duties will be assigned according to students' skill level and the work needs of the host site. Students will participate in five seminars in which students discuss expectations and reflect on experiences. Students will be expected to expand their skill set during the sequence.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform the basic functions of a Medical Assistant in a primary, specialty, and/or urgent care setting.
- CLO\#2: Develop and evaluate goals based on Instructor and preceptor feedback. (ILO: Critical Thinking)
- CLO\#3: Develop professional skills to meet industry demands based on the Rogue Valley Employability Rubric standards.


## AH 170MAP - Medical Assistant Practicum

## 8 Credit(s)

Prerequisite(s): Acceptance into the Medical Assistant Certificate program, and successful completion of all prior program courses is required.

Course Description: Provides hands-on clinical experience. Students work each week in a host site as part of the patient care team and experience first-hand the various operations within primary, specialty and/or urgent care settings. Duties will be assigned according to students' skill level and the work needs of the host site. Students will participate in three seminars during the term - an orientation seminar to discuss expectations for the term; a mid-term seminar to discuss current activities and exchange details on experiences; and a concluding seminar to reflect on work experiences. Seminars are attended and moderated by an Instructor, who uses the feedback gained to evaluate current practicum experiences and improve future practicum experiences. Students will be expected to expand their skill set during the sequence.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform the basic functions of medical assistants in a primary, specialty, and/or urgent care setting.
- CLO\#2: Develop and evaluate goals based on Instructor and preceptor feedback. (ILO: Critical Thinking)
- CLO\#3: Develop professional skills to meet industry demands based on the Rogue Valley Employability Rubric standards.
- CLO\#4: Adhere to facility and medical assistant program policies.


## AH 170PHL - Phlebotomy Practicum

## 2 Credit(s)

Prerequisite(s): Acceptance into the Phlebotomy Career Pathway Certificate program.

Course Description: Provides hands-on clinical experience. Students work each week in a host site as part of the patient care team and experience first-hand the various operations within primary, specialty and/or urgent care settings. Duties will be assigned according to students' skill level and the work needs of the host site. Students will participate in three seminars during the term.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform the basic functions of phlebotomy in a primary, specialty, lab, and/or urgent care setting.
- CLO\#2: Develop and evaluate goals based on Instructor and preceptor feedback. (ILO: Critical Thinking)
- CLO\#3: Develop professional skills to meet industry demands based on the Rogue Valley Employability Rubric.
- CLO\#4: Adhere to facility and phlebotomy program policies.


## AH 170PRX - Pharmacy Technician Practicum

## 3 Credit(s)

Prerequisite(s): Acceptance into the Pharmacy Technician Certificate program and successful completion of all prior program courses is required.

Course Description: Provides hands-on clinical experience. Students work in a host site as part of the pharmacy team and experience first-hand the various operations within different pharmacy settings. Duties will be assigned according to students' skill level and the work needs of the host site. Students will participate in three seminars during the term. Seminars are attended and moderated by an Instructor, who uses the feedback gained to evaluate current practicum experiences and improve future practicum experiences.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform the basic functions of a pharmacy technician in a variety of pharmacy settings.
- CLO\#2: Develop and evaluate goals based on Instructor and preceptor feedback. (ILO: Critical Thinking)
- CLO\#3: Develop professional skills to meet industry demands based on the Rogue Valley Employability Rubric.
- CLO\#4: Adhere to facility and pharmacy technician program policies.


## AH 199 - Special Studies: Allied Health

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending on program and subject offerings.

Course Description: Selected topics of study in Allied health are offered on demand through seminars, lecture/lab and or web. This course is designed to:

- Provide the local medical community served by Rogue Community College with a variety of subject offerings designed to address educational needs for medical staff unique to the area.
- Provide flexibility in meeting competency or skill requirements in the changing medical environment.


## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, simulations and competency completion. The topics in this course are designed to provide variety and flexibility within the Allied Health Occupations curriculum by allowing the department to offer special courses of interest which would not otherwise be offered through the existing program. These special offerings will incorporate unique topics, interests, needs and desires as expressed by the local community, other RCC departments, as well as subject areas determined worthwhile by the Allied Health Occupations Department. These courses should be also visualized as a mechanism for improving the Allied Health Occupations Department curriculum since prototype courses can be tested and curriculum content amended before seeking formal approval of new courses.


## AH 202 - Infection Control for the Healthcare Professional

## 2 Credit(s)

Prerequisite(s): This is a limited-entry course that requires acceptance into an Allied Health Occupations program.

Course Description: Prepares students to utilize proper infection control protocols in the healthcare industry. Provides a comprehensive overview of infectious diseases and their relationships to patient safety and occupational risk, standard and universal precautions, prevention of disease transmission, prevention of cross contamination, maintaining aseptic conditions, performing sterilization procedures, environmental asepsis, and occupational safety.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe infectious diseases and relationships to patient safety and occupational risk. (ILO: Critical Thinking)
- CLO\#2: Demonstrate how to prevent cross-contamination and disease transmission and describe how to maintain aseptic conditions.
- CLO\#3: Describe standards and guidelines of occupational safety and infection control for healthcare personnel.


## ASL 101 - First Year American Sign Language I

## 4 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Introduces the development of expressive skills, receptive skills, and cultural awareness, with the primary focus on the student's active use of ASL. Course includes visual readiness skills, ASL vocabulary, deaf culture, and ASL grammar. The 100-level sequence focuses on everyday communication in a conversational environment where grammar is introduced in context with an emphasis on developing question and answering skills.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Employ basic ASL vocabulary and grammar. (ILO: Communication)
- CLO\#2: Compare cultural similarities and differences between deaf and hearing cultures.
- CLO\#3: Communicate with others using ASL.


## ASL 102 - First Year American Sign Language II

## 4 Credit(s)

## Prerequisite(s): ASL 101

Course Description: Continues the development of expressive skills, receptive skills, and cultural awareness, building on the work of ASL 101. The primary focus is on the student's active use of ASL. Course includes visual readiness skills, ASL vocabulary, deaf culture, and ASL grammar. The 100-level sequence focuses on everyday communication in a conversational environment where grammar is introduced in context with an emphasis on developing question and answering skills.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Employ basic ASL vocabulary and grammar. (ILO: Communication)
- CLO\#2: Compare cultural similarities and differences between deaf and hearing cultures.
- CLO\#3: Communicate with others using ASL.


## ASL 103 - First Year American Sign Language III

## 4 Credit(s)

Prerequisite(s): ASL 102

Course Description: Completes the year of ASL, building on ASL 101 and ASL 102 in the development of expressive skills, receptive skills, and cultural awareness. The primary focus is on the student's active use of ASL. Course includes visual readiness skills, ASL vocabulary, deaf culture, and ASL grammar. The 100level sequence focuses on everyday communication in a conversational environment where grammar is introduced in context with an emphasis on developing question and answering skills.

## Course Learning Outcomes:

- CLO\#1: Employ basic ASL vocabulary and grammar. (ILO: Communication)
- CLO\#2: Compare cultural similarities and differences between deaf and hearing cultures.
- CLO\#3: Communicate with others using ASL.


## ANTH 110 - Introduction to Cultural Anthropology

## 4 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement.

Course Description: Examines human social organizations, the meaning of culture and its diverse forms and structures, cultural growth and expansion, and the nature of cultural change. Explores various key anthropological topics that may include language, ritual, kinship, the arts, globalization, religion and political and economic structures. Examples are drawn from small scale societies and from industrialized societies. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate basic knowledge of fundamental anthropological concepts and theories.
- CLO\#2: Identify and describe cross-cultural patterns in economic, political, religious and kinship systems. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Analyze how social institutions and various elements of culture are integrated in any given society.
- CLO\#4: Analyze the social processes by which personal identity is negotiated and constructed.
- CLO\#5: Analyze the role of cultural ideologies and institutions in shaping human behavior and choices, including the impact of institutional inequities.
- CLO\#6: Describe basic causes and processes of social and cultural change.


## ANTH 150 - Introduction to Archaeology

## 4 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement.
Course Description: Provides an introduction to the science of archaeology: its history, methods, and theory. Citing examples from prehistoric world, it examines the nature of archaeological data, the application of techniques, and the extrapolation of culture from the archaeological record. In doing so, it illustrates the relationship of culture to environment, a variety of ideas regarding past culture change, and the role of modern archaeology in preserving the past for the future.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate basic knowledge of fundamental archaeological concepts and theories.
- CLO\#2: Demonstrate understanding of archaeological perspective, method and techniques by describing, identifying, analyzing and interpreting above-ground data. (ILO: Information Literacy)
- CLO\#3: Recognize the multiplicity of contexts where archaeology contributes to the understanding of prehistory, history, and current cultural practices.
- CLO\#4: Utilize critical thinking skills to demonstrate relationships between geography, culture, subsistence strategies, technology, craft specialization and social stratification.


## ANTH 199 - Special Studies: Anthropology

3 Credit(s)
Prerequisite(s): May vary depending on subject offerings.
Course Description: Selected topics of study in anthropology are offered on demand through workshops, seminars, lecture, lab, and/or independent study format. Prerequisite: May vary depending on subject offerings.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, and research papers.


## APR 105 - Apprenticeship: Credit for Prior Learning

## Course Level: Career/Tech Apprenticeship

## APR 107A - Apprenticeship / HVAC: Basics

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.

Course Description: The course provides an introduction of the fundamentals of refrigeration, common refrigeration tools and materials, as well as basic refrigeration systems, compression systems and compressors. The course also includes Basic First Aid.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Apply theory of heating and cooling as it relates to HVAC.
- CLO\#2: Demonstrate the proper care, use and storage of hand and power tools used in HVAC applications. (ILO: Critical Thinking)
- CLO\#3: Recognize and explain the features of basic refrigeration systems.
- CLO\#4: Recognize and explain the operations of compressors and compression systems.
- CLO\#5: Acquire a Basic First Aid Card.


## APR 107B - Apprenticeship / HVAC: Air Conditioning and Refrigeration

4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.
Course Description: Covers the introduction and fundamentals of refrigeration that includes: Refrigerant
controls; Domestic refrigerators and freezers; Service and installation of small hermetic systems; Commercial systems; Hazard communication and safe practices.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe working practices in hazard communication and installation.
- CLO\#2: Apply OSHA practices in relationship to the specific trades.
- CLO\#3: Explain the characteristics of refrigerant controls that include components and categories.
- CLO\#4: Identify and explain the distinguishing characteristics of operation and function within domestic and commercial refrigeration systems. (ILO: Critical Thinking)
- CLO\#5: Install and service small hermetic systems.


## APR 107C - Apprenticeship / HVAC: Safety and Environmental Controls

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.

Course Description: The course includes refrigerant composition, recovery requirements and Environmental Protection Agency (EPA) rules in HVAC. Students will gain the knowledge to successfully test for the required EPA Card. Topics include: Chlorofluorocarbon refrigerants (CFC) composition; Refrigerant recovery, recycling and reclaiming; Environmental Protection Agency (EPA) Rules; EPA regulations/air conditioning and refrigeration; Preparation for testing for the EPA Certification Card.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the chemical characteristics of chlorofluorocarbon refrigerants that results in heat/cooling exchange in HVAC applications.
- CLO\#2: Apply safe, EPA approved recovery, recycling and reclaiming of refrigerants.
- CLO\#3: Apply EPA rules as it relates to HVAC applications.
- CLO\#4: Demonstrate knowledge of EPA regulations and ability to locate rules for reference. (ILO: Critical Thinking)


## APR 107D - Apprenticeship / HVAC: Electrical Basics

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.

Course Description: The course includes basic electrical theory including OHM's Law, circuit schematics symbols, circuit characteristics, as it applies to DC and AC circuits in the HVAC industry. Topics include: Electrical Safety; Electrical Theory; Electrical schematics and component symbols; Electrical testing equipment/ meters; Electrical-magnetic fundamentals.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe working practices in accordance with state and federal regulations.
- CLO\#2: Apply OSHA practices in relationship to the specific trades.
- CLO\#3: Demonstrate the theory of OHM's Law as it applies to circuits in the HVAC industry. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Create sample electrical schematics that include HVAC components and symbols of electrical circuits.
- CLO\#5: Select and use electrical testing instruments and meters to gather information/data in required in assessing design requirements, installation and/or troubleshooting HVAC applications.
- CLO\#6: Explain electrical-magnetic fundaments specific to devices utilized in HVAC systems.


## APR 107E - Apprenticeship / HVAC: Electrical Circuit I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.
Course Description: The course includes components, symbols and circuitry of air conditioning wiring diagrams, alternating current power distribution, and voltage systems as it pertains to installation of heating, cooling and refrigeration systems. Components and operation of the basic electrical motor will be included.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Interpret and create schematic diagrams of HVAC equipment and systems using recognized symbols.
- CLO\#2: Explain characteristics of alternating current production and application specifically to devices utilized in HVAC systems.
- CLO\#3: Apply electrical and system requirements in selection and installation of heating, cooling and refrigeration systems. (ILO: Critical Thinking)
- CLO\#4: Explain basic electric motor theory in HVAC applications. Systems.
- CLO\#5: Identify differences and similarities between motor types and considerations in application. Systems.


## APR 107F - Apprenticeship / HVAC: Electrical Circuit II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.

Course Description: This course covers common control components found in HVAC systems. Specific devices include contactors, relays and overloads, thermostats, pressure switches and other electric control devices, and heating control devices.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the purpose and features of contactors, relays and overloads in their sequence of operation in HVAC applications. (ILO: Communication)
- CLO\#2: Describe the operation of a thermostat in heating and cooling applications.
- CLO\#3: Explain the purpose of pressure switches and their application in HVAC systems. Include safety considerations.
- CLO\#4: Troubleshoot electrical thermostats and control devices using testing equipment, schematics, and factory information and equipment limitations.


## APR 109A - Success and Leadership in the Construction Industry

## 2 Credit(s)

Prerequisite(s): Acceptance into a BOLI registered Apprenticeship program.

Course Description: Introduces employment opportunities in the construction industry as well as the roles and responsibility of the employee. Focuses on teamwork, leadership, and career success.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the employee's role and responsibilities in the construction industry and how individual success is achieved.
- CLO\#2: Create individualized budget and time management plans addressing the time commitment and costs for training. (ILO: Critical Thinking)
- CLO\#3: Exhibit the ability to achieve goals by working in teams.
- CLO\#4: Describe the importance of safety, the causes of workplace incidents, and the process of hazard recognition and control.


## APR 111A - Apprenticeship / Introduction to Plumbing Skills

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.

Course Description: Introduces plumbing materials and tools encountered in the plumbing trade, and their safe usage. On successful completion students will be able to identify common tools and materials and explain their use. Apprentices will know how to use MSDS as a tool read and create simple blueprints, and locate ORS and OARs that impact plumbing applications and licensed plumbers.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify plumbing materials and applications in completing plumbing tasks.
- CLO\#2: Explain the purpose and safe usage of tools required in the plumbing trade. (ILO: Communication)
- CLO\#3: Use critical safety information to create a plan of action in an emergency situation.
- CLO\#4: Render accurate basic drawings showing layout and plumbing systems.
- CLO\#5: Explain the purpose of ORS and OARs in governance of licensure and plumbing regulations.
- CLO\#6: Identify relevant plumbing definitions found in the UPC.
- CLO\#7: Recognize and classify code-defined General Regulations in the OPSC.


## APR 111B - Apprenticeship / Plumbing Principles I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.

Course Description: Provides the plumbing apprentice with knowledge to combine appropriate tools with
materials required for the job. Students will use math and science principles in completion of plumbing tasks. Intermediate blueprint reading skills will be included in the course. An overview of fixture types, operation of water heaters and other hot water systems along with characteristics of water in pressure piping will be included.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Select appropriate tools and demonstrate techniques most effectively used on various plumbing materials in common plumbing installations.
- CLO\#2: Demonstrate competence in using basic math concepts in on-the-job plumbing situations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Apply the principles of science to applications in plumbing.
- CLO\#4: Demonstrate ability to read and create detailed blueprints containing plumbing symbols and specifications related to installation of plumbing.
- CLO\#5: Select plumbing fixtures, water heaters, and hot water systems based on desired results and related Code.


## APR 111C - Apprenticeship / Plumbing Principles II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.

Course Description: Upon satisfactory completion the student will be able to safely and efficiently use hand and power tools in the plumbing trade, render isometric drawings from blueprints, define the characteristics of water, select proper water pipe size, and explain the principle of backflow prevention and hot water heaters.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Operate hand and power tools using safe, industry approved techniques.
- CLO\#2: Accurately render isometric drawings from blueprints.
- CLO\#3: Uses the principles of applied isometrics in plumbing. (ILO: Critical Thinking)
- CLO\#4: Explain the characteristics of water.
- CLO\#5: Select proper water pipe sizing based on specification.
- CLO\#6: Explain the characteristics and importance of backflow prevention.
- CLO\#7: Explain how hot water heaters function.


## APR 111D - Apprenticeship / Mathematics of Plumbing and Commercial Drawing

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.
Course Description: Reviews methods for finding angles using the Pythagorean Theorem. Students will interpret and use civil, architectural, structural, mechanical plumbing and electrical drawings when installing plumbing systems. Techniques to create isometric drawings, material takeoffs and approved submittal data will be included. Methods are introduced for attaching and running DWV and water supply piping in relation to structural elements and code requirements.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Calculate $221 / 2-, 45-, 60$ degree offsets, parallel offsets and determine square of a corner.
- CLO\#2: Draw simple and rolling offsets, as well as offsets on parallel runs of pipe.
- CLO\#3: Interpret information from site plans. (ILO: Critical Thinking)
- CLO\#4: Prepare a materials list for a drainage waste and vent system using approved submittal data.
- CLO\#5: Explain applications for installation of hangers, supports, and fire stopping for plumbing systems.


## APR 111E - Apprenticeship / Water Piping and Fixture Installation

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.
Course Description: Includes techniques for installation and testing of water supply piping, installation of basic plumbing fixtures and an introduction to the principles of electricity common to plumbing-related electrical applications. Code requirements will be included for each section.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Prepare take offs from plans, locate fixture route pipe, locate and size water meters for installation of a water system.
- CLO\#2: Explain requirements and techniques necessary to modify structural members in plumbing installation. (ILO: Critical Thinking)
- CLO\#3: Explain sizing and installation of a water service line, including back flow prevention, and proper testing of a water supply system.
- CLO\#4: Describe procedures required in safely installing and repairing bathtubs, shower stalls, valves, faucets, water closets, sinks, lavatories and urinals.
- CLO\#5: Identify circuit, voltage and ohms when using electrical testing equipment on electrical components found in plumbing.


## APR 111F - Apprenticeship / Installation of DWV Systems and Water Heaters

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.
Course Description: Gives the apprentice the knowledge to install a complete drain, waste and vent (DWV) system, techniques for installing common drains according to code and review of types of valves and their applications. Identification, troubleshooting and repair of water heaters, fixtures and valves will also be included. The course is designed to provide the knowledge required to pass the Oregon Plumber Licensing Examination.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Layout a building site including fixtures through building sewers including building the stack location.
- CLO\#2: Demonstrate installation of DWV systems with appropriate hangers and correct grade or slope without weakening structure.
- CLO\#3: Explain the procedure for testing DWV system.
- CLO\#4: Use proper techniques and equipment for locating, installing and connecting roof, floor and area drains according to code.
- CLO\#5: Select valves, install and service basic types of valves.
- CLO\#6: Demonstrate proper water heater installation, safety considerations, and servicing to state and federal code. (ILO: Critical Thinking)


## APR 116A - Apprenticeship / Millwright: Basic Electricity

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.
Course Description: A one-term course intended to supplement on-the-job training with technical training required for trade comprehension, applications, and practices. The apprentices will have a basic understanding of electrical theory, safety procedures when working with electrical equipment and installation, features of an electrical schematic, electricity measurements and industrial applications of AC and DC motors.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Describe basic electrical safety considerations on the work site.
- CLO\#2: Explain electron theory and flow of magnetic fields and forces and their use in electric generation, transformers and motor operation.
- CLO\#3: Identify and explain basic electrical symbols found in schematics.
- CLO\#4: Describe and troubleshoot basic motor control circuits.
- CLO\#5: Conduct basic electrical measurements using standard measuring equipment.
- CLO\#6: Describe electric motor principals and industrial applications of AC and DC motors as well as the advantages of variable frequency drives for AC motors. (ILO: Quantitative Literacy and Reasoning)


## APR 116B - Apprenticeship / Millwright: Carpentry

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.

Course Description: Provides an overview of carpentry skills needed by the journeyman millwright. Topics include shop safety, hand, stationary and pneumatic tool operation, and construction methods.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify hazards and explain safety practices in the shop and on the worksite.
- CLO\#2: Demonstrate safe operation (purpose and limitations) and maintenance of manual, electric, pneumatic and stationary tools used in building and repair on the worksite.
- CLO\#3: Accurately use measurement equipment, surveying tools, blueprints and mathematical calculations in the construction process. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Select appropriate materials for desired outcomes based on material characteristics and restraints.
- CLO\#5: Accurately lay out a building project that includes blueprint interpretation, structural factors, framing, tool selection, materials selection, mathematical calculation, finish techniques and safety considerations.


## APR 116C - Apprenticeship / Millwright: Power Transmission

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.
Course Description: Provides an overview of carpentry skills needed by the journeyman millwright. Topics include shop safety, hand, stationary and pneumatic tool operation, and construction methods.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate general and specific power transmission applications.
- CLO\#2: Describe and demonstrate basic system principals and characteristics. (ILO: Critical Thinking)
- CLO\#3: Demonstrate power transmission troubleshooting and design.
- CLO\#4: Describe the functioning of gearboxes, roller chain, flat belt, V-belt and continuous belt drives and related components
- CLO\#5: Explain the design and function of power transmission as it applies to the duties of a millwright.


## APR 116D - Apprenticeship / Millwrights: Boilers

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.
Course Description: The course provides the apprentice with technical training required for trade-specific comprehension, application, and practice in the operation and maintenance of boilers. The course supplements the skills and experience in required on-the-job training.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify and describe design of basic boiler types, function and common maintenance.
- CLO\#2: Describe general safety practices associated with boilers and steam systems.
- CLO\#3: Explain thermodynamic principles of heat transfer and steam generation in manufacturing and electrical generation.
- CLO\#4: Describe the features and purpose of boiler auxiliaries, fittings, values, piping and safety devices.
- CLO\#5: Explain proper water treatment for boiler and feed systems in typical boiler operation.
- CLO\#6: Describe boiler flu gas and wastewater discharge process; include monitoring procedures and possible effects on the environment. (ILO: Critical Thinking)


## APR 116E - Apprenticeship / Millwright: Welding I

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.

Course Description: This course is intended to supplement on-the-job welding experience by enhancing the apprentice's knowledge, understanding, and views of commonly used cutting and welding processes encountered as a journeyman Millwright. Special emphasis will be placed on safety, maintenance of equipment, and fabrication on the worksite.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: List and explain general safety practices and equipment associated with cutting and welding. (ILO: Communication)
- CLO\#2: Demonstrate proper cutting techniques using oxygen acetylene.
- CLO\#3: Demonstrate proper arc welding techniques on $1 / 4$ " plate all positions E6011 AC DC+.
- CLO\#4: Demonstrate proper arc welding techniques on $3 / 8$ " plate all positions E601 or E6010 root passes AC or DC+ E7018 covers DC+.
- CLO\#5: Demonstrate proper plasma torch cutting techniques.
- CLO\#6: Demonstrate the proper use, maintenance and safety practices of a stationary band saw.


## APR 116F - Apprenticeship / Millwright: Welding II

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Southern Oregon Millwright JATC, and APR 116E.
Course Description: Welding II is a comprehensive one term training for advanced apprentices who have completed Welding I and have on-the-job welding experience. It will enhance the apprentice's knowledge and ability to complete cutting and welding processes requiring more knowledge and skill. This class will meet the safety, maintenance and fabrication needs of a journeyman millwright.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate general safety practices and equipment associated with cutting and welding. (ILO: Communication)
- CLO\#2: Perform proper cutting using oxygen-acetylene on mild steel.
- CLO\#3: Demonstrate advanced arc welding techniques on $1 / 4$ " plate all positions E6011 AC and 6010 DC+.
- CLO\#4: Demonstrate advanced arc welding techniques on $1 / 4$ " and $3 / 8$ " plate all positions E6011 or E6010 root passes AC or DC+ E7018 covers DC+.
- CLO\#5: Demonstrate TIG welding techniques that meet standards of the industry.
- CLO\#6: Demonstrate Pipe welding 6G +.


## APR 118A - Apprenticeship / Introduction to Sheet Metal

## 3 Credit(s)

## Prerequisite(s): Registered Apprentice with the South-Central Oregon Sheet Metal JATC.

Course Description: Apprentices will properly apply job site safety practices and show competence in the use of basic drafting equipment and fabricating equipment to lay out and fabricate basic sheet metal projects in the classroom on paper and in the shop in metal.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Practice safety in the sheet metal fabrication shop.
- CLO\#2: Lay out basic sheet metal seams, edges, locks and connectors using simple blueprint designs. (ILO: Information Literacy)
- CLO\#3: Create blueprints showing lay out of sheet metal fittings.
- CLO\#4: Operate hand tools and power equipment required in the fabrication and assembly of sheet metal.


## APR 118B - Apprenticeship / Introduction to Duct Lay Out

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South-Central Oregon Sheet Metal JATC.
Course Description: The course topics include measurement of materials, lay out and fabrication of basic duck work using the parallel line method and mathematical formulas.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Lay out and fabricate basic duct fittings and sheet metal using the parallel line method.
- CLO\#2: Select and utilize drafting instruments in creating lay out blue prints of duct fittings.
- CLO\#3: Apply basic math and geometry when calculating layout of sheet metal. (ILO: Quantitative Literacy and Reasoning)


## APR 118C - Apprenticeship / Parallel Line Development

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South-Central Oregon Sheet Metal JATC.

Course Description: This is an advanced course in lay out and fabrication of sheet metal projects using the parallel line method. Fittings will first be drawn on paper that includes all dimensions and specifications. The layout will be used as a pattern in fabrication the fitting.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Lay out advanced fittings that require the parallel line method of lay out on paper using drafting equipment. (ILO: Critical Thinking)
- CLO\#2: Fabricate advanced fittings that require the parallel line method of lay out, according to dimensions and specifications.


## APR 118D - Apprenticeship / Applied Field Practices

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.
Course Description: The apprentice will select appropriate screws, bolts, rivets and other fasteners or hangers for specific sheet metal installation or fabrication applications. Special attention will be given to common filed installation practices.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Select appropriate screws, bolts, rivets and other fasteners for specific sheet metal installation or fabrication applications.
- CLO\#2: Select appropriate hangers and supports for specific sheet metal installations according to type and application. (ILO: Critical Thinking)
- CLO\#3: Conduct field practice common to the installation of heating and air conditioning systems.


## APR 118E - Apprenticeship / Architectural Sheet Metal

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.
Course Description: The apprentice will fabricate sheet metal gutter, flashings and roofing according to design specifications so that water will properly drain off of a structure without penetration. Instruction will include copper soldering techniques using copper soldering irons and bar solder.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Select appropriate flashing profiles and application in building construction. (ILO: Critical Thinking)
- CLO\#2: Fabricate sheet metal roofing, gutters, downspouts and roofing flashing components based on individual characteristics and required application specifications.
- CLO\#3: Use appropriate fittings and tools when making sheet metal installations.
- CLO\#4: Fabricate sheet metal projects using copper soldering irons and bar solder.


## APR 118F - Apprenticeship / Round Fittings

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.
Course Description: The apprentice will lay out and fabricate round fittings using the following development methods: Radial line, Parallel line, and Triangulation.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Draft round fittings using radial line development and parallel line development.
- CLO\#2: Describe safety practices in the use of fabrication of round fittings. (ILO: Communication)
- CLO\#3: Lay out round fittings using the triangulation method of lay out.
- CLO\#4: Fabricate round fittings using shop forming equipment.


## APR 120A - Apprenticeship / Boiler Operator: Introduction to Boiler Operation

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Boiler Operators JATC.

Course Description: Provides an introduction to the safety considerations, theory, tools, machinery, mathematics, blueprint reading and their applications in energy generation.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Summarize the general and specific safety considerations in a boiler plant required to prevent on the job injury.
- CLO\#2: Utilize basic mathematical principles to perform common boiler and engineering calculations.
- CLO\#3: Read and utilize simple blueprints and drawings found in a boiler plant to create sketches.
- CLO\#4: Recognize and explains operation and basic mechanics of machines utilized in the boiler plant. (ILO: Communication)
- CLO\#5: Explain thermodynamics and heat transfer in relationship to boilers.
- CLO\#6: Recognize advantages and uses of various boilers.
- CLO\#7: Identify proper valves, piping and fittings used to safely transfer and direct fluids by design.
- CLO\#8: Recognize materials used in boiler construction, piping and boiler auxiliary equipment.
- CLO\#9: Determine testing and inspection methods to insure material integrity and quality of assembly of pressure parts.


## APR 120B - Apprenticeship / Boiler Operator: Mechanics of Steam Generated Power

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Boiler Operators JATC.
Course Description: Provides the apprentice with an understanding of the thermodynamics of steam and the theory of combustion. Factors including air flow, gas removal, fuel characteristics, equipment design, and water chemistry will be included.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate the understanding of the thermodynamics of steam and the basic concepts about matter.
- CLO\#2: Demonstrate the understanding of air and gas removal equipment found in a boiler plant.
- CLO\#3: Use the theory of combustion in the explaining the characteristics of various fuels.
- CLO\#4: Explain application of various burner and grate designs for various fuels. (ILO: Communication)
- CLO\#5: Recognize and explain the advantages and disadvantages of various boiler designs based on assembly requirements and repair. (ILO: Critical Thinking)
- CLO\#6: Recognize and explain the importance of water chemistry, treatment methods and testing methods for raw water, condensate and feed water.
- CLO\#7: Recognizes the effects of improper water chemistry on loosed efficiency and boiler casualties associated with water treatment.


## APR 120C - Apprenticeship / Boiler Operator: Boiler Component Design and Operation

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Boiler Operators JATC.
Course Description: Prepares the apprentice to conduct tests for water chemistry, proper installation of valves, steam traps, soot blowers, boiler startup and documentation of procedures and operation to assure efficient steam generation safely.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Determine chemical composition of water used in boiler operation.
- CLO\#2: Recognize piping and tubing used to connect controls, gages and instrumentation common to boiler operation.
- CLO\#3: Identify valve operation by design characteristics. (ILO: Critical Thinking)
- CLO\#4: Demonstrate considerations when sizing and maintaining steam traps.
- CLO\#5: Recognize installation, pressure and alignment characteristics of soot blower design.
- CLO\#6: Simulate the process of boiler warm up.
- CLO\#7: List and explain the duties of the boiler operator.
- CLO\#8: Explain procedures to prevent boiler casualty and emergency shut down when boilers fail.


## APR 120D - Apprenticeship / Boiler Operator: Steam Turbine Operation

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Boiler Operators JATC.
Course Description: Provides an overview of steam turbine design, applications and maintenance. The principles of basic electricity and motor control theory pertinent to power generation and transmission will be included.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate and explain the operating principles of steam turbine operation.
- CLO\#2: Explain the necessity of a schedule for turbine lubrication. (ILO: Communication)
- CLO\#3: Explain basic electrical theory as it pertains to electric motor theory, motor controls, drives and operation. (ILO: Critical Thinking)
- CLO\#4: Identify types and features of engines used as prime movers.
- CLO\#5: Explain the functions and maintenance of equipment required for power transmission fuel conveyance.
- CLO\#6: Determine size of reciprocating and centrifugal pumps to meet desired outcomes.
- CLO\#7: Recognize and select proper pump protections equipment.
- CLO\#8: Explain air compressor theory as it applied to reciprocating, screw, centrifugal and lobe compressors.


## APR 120E - Apprenticeship / Boiler Operator: Instrumentation and Control Devices

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Boiler Operators JATC.
Course Description: Introduces the apprentice to instrumentation and control devices used with various input/output mediums. Instruments required to take measurements in assessing the status of boiler operations will be introduced with detailed instruction of proper usage. Safety and efficient operation of the boiler will be a consideration in all discussions of control devices.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify examples of open and closed loops.
- CLO\#2: Use appropriate instrument and control components for measuring and sensing control parameters. (ILO: Critical Thinking)
- CLO\#3: Identify and explain instrumentation and control devices used with various input and output mediums. (ILO: Communication)
- CLO\#4: Recognizes the usage and general location of panel instrumentation and recording devices common to the boiler control room.
- CLO\#5: Identify/explain draft and water level systems and the control components including control devices used to protect equipment and operating personnel.
- CLO\#6: Apply the function of pneumatic control valves to plant operation.
- CLO\#7: Use ASME Code to determine requirements for low water fuel cutoffs.
- CLO\#8: Recognizes process computer applications and the equipment used to control boiler plant operation.


## APR 120F - Apprenticeship / Boiler Operator: Installation and Operation of the Heating Boiler

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Boiler Operators JATC.
Course Description: Provides detailed construction, installation and maintenance information for heating, hot water, water tube, tubular and cast-iron sectional boilers. Topics will include refractors, insulation, fittings, controls, basic refrigeration and security in the plant.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Describe types of refractor and insulation. Include Blanket, castable, poundable, brick and spray on refractory.
- CLO\#2: Recognize design, construction and assembly of heating and hot water boilers.
- CLO\#3: Identify the design differences of a fire tube heating boiler.
- CLO\#4: Distinguish the types of fittings required for low pressure and heating boilers.
- CLO\#5: Identify common controls and operation of heating boilers. Include proper warm up and automatic cut in of standby boilers.
- CLO\#6: Explain the procedure for heating a boiler including maintenance, layup and water treatment.
- CLO\#7: Recognize the equipment used to move and mix air within the boiler plant. Equipment will include exchanger control and vacuum pump assisted condensate systems. (ILO: Critical Thinking)
- CLO\#8: Explain the importance of conditioned air/water use in the plant, the basic refrigeration cycle and components including safe use and handling of refrigerants.
- CLO\#9: Apply standard procedures for safety and to secure the boiler plant from unauthorized personnel.


## APR 127A - Apprenticeship / Electrical Theory I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.

Course Description: Familiarizes the beginning electrical apprentice with both practical and theoretical aspects of electricity and electrical circuits.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate basic math, algebra, scientific notation, and scientific calculator functions in simple electrical calculations and basic applications. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Demonstrate Electrical Safety and Safe Work Practices basic to all electricians.
- CLO\#3: Explain, atomic structure and the theory of electricity, how electricity is produced, how electricity is measured, and the effects of electrical current flow. (ILO: Critical Thinking)
- CLO\#4: Define terminology common to the electrical trade.
- CLO\#5: Define characteristics of series circuits, parallel circuits and capacitors.
- CLO\#6: Explain the importance of the Oregon State Statutes and Administrative rules and how they apply to the Electrical Trade, the current NFPA National Electrical Code and various indexes and electrical references.


## APR 127B - Apprenticeship / Electrical Theory II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.
Course Description: Familiarizes the beginning electrical apprentice with more advanced aspects of electrical theory and math.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain DC series, parallel, and combination circuits.
- CLO\#2: Utilize various types of electrical measuring instruments and tables to determine conductor sizing.
- CLO\#3: Explain the function and characteristics of electrical conduction, batteries, magnetic induction and alternating current. Circuits.
- CLO\#4: Explain the inductance in alternating current circuits.
- CLO\#5: Select and apply Ohm's law formulas from tables and charts.
- CLO\#6: Perform basic Trigonometry for solving problems using sines, cosines and tangents. (ILO: Quantitative Literacy and Reasoning)


## APR 127C - Apprenticeship / Electrical Theory III

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.
Course Description: Familiarizes the beginning electrical apprentice with advanced aspects of electrical theory, math, and power distribution.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the characteristics and function of AC Resistive-Inductive Series and Parallel Circuits.
- CLO\#2: List the factors that determine the capacity of Capacitors and Capacitance in AC Electrical Circuits.
- CLO\#3: Explain operation of AC Resistive-Capacitive Series and Parallel circuits.
- CLO\#4: Explain characteristics of AC Resistive-Inductive Capacitive Series, Parallel, and Combination circuits.
- CLO\#5: Explain Inductive Capacitive Filter Networks and their uses.
- CLO\#6: Calculate the values of voltage, current, resistance, apparent power, true power, reactive power, impedance, capacitive reactance and power factor in both series and parallel circuits. (ILO: Quantitative Literacy and Reasoning)


## APR 127D - Apprenticeship / Advanced Electrical I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.

Course Description: Expands electrical theory to three phase circuits, function and operation of single and three phase transformers, DC motors and generators, one and three phase motors and alternators, and calculations required for operation of circuits and transformers.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Calculate three-phase power circuits. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Explain the function and purpose of single-phase and three-phase transformers.
- CLO\#3: Calculate transformer size.
- CLO\#4: Explain purpose and features of DC motors and generators.
- CLO\#5: Explain purpose and features of three-phase alternators and motors.
- CLO\#6: Explain the operation of a single-phase motor.


## APR 127E - Apprenticeship / Advanced Electrical II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.
Course Description: This course is designed for the Inside Wireman Electrical Apprentice. Instruction includes Residential code calculations, motors, generators, transformers, blueprint reading, branch circuits, ampacity, and conduit fill.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Perform inside wiring calculations using code requirements for: Branch Circuits, Motor Control Circuits, Ampacities, Branch Circuits, Motors, Feeder Taps, Box Fill, Conductor Sizing, Dwelling Unit Services Calculations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Explain motor circuits, motor control circuits, motor connections and steps in motor troubleshooting.
- CLO\#3: Explain generator circuits, generator connections, and steps in troubleshooting generator power problems.
- CLO\#4: Explain transformer purpose and operation.
- CLO\#5: Transpose blueprints to functional circuitry that include electrical symbols and electrical schematics.


## APR 127F - Apprenticeship / Advanced Electrical III

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.
Course Description: Increase understanding of formulas and tables used in calculating sizing of conductors, branch circuits, breakers and junction boxes. Applications will apply to single phase and threephase loads. A variety of motor control circuit functions including two and three wire control, peripheral devices, interlocks, and Programmable Logic Controllers (PLC's) will be covered.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Determine proper conductor size by calculating current carrying limit (ampacity). (ILO: Information Literacy)
- CLO\#2: Explain branch circuits and calculate branch circuits requirements.
- CLO\#3: Size branch circuits, conductors, and over-current protection for three-phase and singlephase loads.
- CLO\#4: Size circuit breakers and feeder conductors for three-phase and single-phase motors.
- CLO\#5: Calculate tap conductor size for three-phase and single- phase loads.
- CLO\#6: Operate motor control circuits, using two and three wire control, peripheral devices, interlocks, and Programmable Logic Controllers (PLC's).
- CLO\#7: Size junction and pull boxes for conduit and wire.


## APR 129A - Apprenticeship / Aviation Overview

## 6 Credit(s)

Prerequisite(s): Registered Apprentices with Southern Oregon Aviation JATC.

Course Description: Serves as an overview of the aviation industry, regulations and technology. Four segments of the aviation industry will be targeted including: Aviation as a Career, FARS and Technical Publications, Basic Physics and Basic Aerodynamics, Weight and Balance, Ground Handling, Human Factors and Risk Management, Blueprints, Drawings and Geometric and Tolerances.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain roles and functions of the Federal Aviation Authority (FAA) including licensing and skill/hiring requirements within aviation industries.
- CLO\#2: List and define basic physical science applications associated with aviation.
- CLO\#3: Explain the basic theory of flight in relation to aerodynamic forces on fixed wing and rotary wing aircraft including basic theory of flight, gyroscopic procession and control surfaces.
- CLO\#4: Define aircraft functions, operations and components using industry terminology. (ILO: Information Literacy)
- CLO\#5: Identify human errors, reason for error and methods for reducing or removing risk.
- CLO\#6: Navigate Federal Aviation Regulations (FARS) and complimentary Codified Federal Regulations to ensure compliance with regulations when performing required duties.
- CLO\#7: Identify the basic symbols used in aircraft drawings, differentiating types of drawings, views and projections used in aircraft maintenance.
- CLO\#8: Explain why and when weight and balance is critical to maintain the safety of the aircraft flight characteristics and integrity of the structure.
- CLO\#9: Demonstrate proper procedures for moving aircraft on the ground by towing or taxiing. Aircraft fueling procedures (over wing or pressure fueling). Fuel system contamination testing.


## APR 129B - Apprenticeship / Aircraft Systems I

## 6 Credit(s)

Prerequisite(s): Registered Apprentices with Southern Oregon Aviation JATC.
Course Description: Provides a detailed understanding of electronics with aviation applications. Six segments will be included: Aircraft Electrical Circuits test equipment and Fault Isolation, Repair/Identification Damage and Broken Aircraft Electrical Wires, Cables and Connectors, Aircraft Hydraulic Systems, Landing Gear Systems, Aircraft Brake Systems and Aircraft Flotation Systems.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify and operate equipment used for particular applications, identify types of fixtures (breakout boxes, control boxes, and generic TMDE), types of electrical systems used and the difference between static and dynamic testing, electrical layout, physical layout, functions, safe practices and troubleshooting techniques.
- CLO\#2: Demonstrate troubleshooting applications to diagnose wiring limitations.
- CLO\#3: Repair and perform terminations of damaged aircraft electrical wires, cables and connectors.
- CLO\#4: Identify all system components including reservoirs, pumps, check valves, control valves, sequence valves, shuttle valves, accumulators, restrictors, synchronizing circuits and actuating cylinders.
- CLO\#5: Describe pressure regulation methods used on hydraulics systems.
- CLO\#6: Identify different types of landing gear associated with aircraft, major subcomponents and their basic system operation.
- CLO\#7: Identify operations systems and associated subcomponents of aircraft brake systems.
- CLO\#8: Demonstrate basic maintenance practices of aircraft brake systems. (ILO: Information Literacy)
- CLO\#9: Identify flotation systems, basic operation, maintenance procedures, tools for maintenance and transition process from water to flight for aircraft flotation systems and helicopter emergency flotation systems.


## APR 129C - Apprenticeship / Aircraft Systems II

## 6 Credit(s)

Prerequisite(s): Registered Apprentices with Southern Oregon Aviation JATC.

Course Description: Provides a basic understanding of fixed wing and rotary wing systems and drive train. Seven segments will be included: Propellers and Propeller Systems, Helicopter Power Train Systems, Aircraft Fuel Systems, Aircraft Fire Detection and Fire Protection Systems, Environmental Control Systems, Anti-ice/De-ice Systems and Structural Material Identification.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Differentiate qualities of propeller types, propeller control/operation and maintenance/care procedures.
- CLO\#2: Identify the components of a rotary wing power train system, the main gear box section and oil system components, rotor head components and their function.
- CLO\#3: Identify types and features of fuel storage systems, their operation components including pump systems, valves, miscellaneous components and characteristics of fuel types.
- CLO\#4: Select appropriate aircraft fire protection based on the qualities of various fire detection systems, fire zones, qualities of extinguishing agents and extinguisher delivery layout/function. (ILO: Information Literacy)
- CLO\#5: Identify types of environmental systems, the components of aircraft environmental systems, pressurized systems and the maintenance of these components within these systems.
- CLO\#6: Explain anti-ice/De-ice systems types and differences, components and maintenance including windshield and rain protection systems.
- CLO\#7: Identify the different materials associated with aircraft structures. Become familiar with aircraft part numbering systems, part specifications and the use of illustrated parts catalog.


## APR 129F - Apprenticeship / Basic Electrical Theory

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Aviation JATC, or properly registered student taking additional aviation related training.

Course Description: Introduces basics of electricity up through electrical systems in regards to aviation and aircraft. Special emphasis will be given to: Introduction to basic electricity, Chemical Energy, Aircraft Batteries, Magnetism, Types of electricity, Production of electricity, Electrical relationships, Ohms law, Direct Current electricity, Alternating Current electricity, Circuits and components, Electrical Motors, Generators and Aircraft Circuits. This course is designed to prepare for the FAA licensing examination.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the electrical relationships in regard to Ohms Law.
- CLO\#2: Identify different types of electricity and the power source that creates it.
- CLO\#3: Explain different components associated with an electrical circuit.
- CLO\#4: Identify the different types of chemical energy sources and batteries used in aircraft as well as the service and maintenance of aircraft batteries.
- CLO\#5: Explain the role of magnetism in regard to electricity. (ILO: Information Literacy)
- CLO\#6: Identify different types of electrical motors and their associated internal components including the types of power associated with driving electrical motors.
- CLO\#7: Explain different types of electrical generators and their associated internal components including the types of power associated with electrical generator output.
- CLO\#8: Identify and explain the many different aircraft electrical systems (circuits) associated with aircraft. (i.e. landing gear retraction, internal and external lighting etc.).


## APR 207A - Apprenticeship / HVAC: Systems I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.
Course Description: Develops the ability to perform residential/commercial heat-loss calculations for heating systems and size system components. Additional system topics will include: Recharging a refrigeration system; Service estimates; Absorption and compression refrigeration systems; Physical principles of air movement and humidity.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify the characteristics of the commercial refrigeration system and applications.
- CLO\#2: Calculate heat gain and loss to determine load. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Explain the process of recharging a refrigeration system.
- CLO\#4: Size system components based on design requirements and heat/cooling calculations.
- CLO\#5: Explain the operation of absorption and compression systems.
- CLO\#6: Identify systems that exhibit the physical principles of air movement and humidity using the principle of psychometrics.


## APR 207B - Apprenticeship / HVAC: Systems II

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.

Course Description: Provides an understanding of special refrigeration systems and their applications, the fundamentals of air conditioning, basic heating and air conditioning systems and heating and humidification systems.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Apply the fundamentals of air conditioning in HVAC comfort systems.
- CLO\#2: Explain the operation of a basic heating and air conditioning system.
- CLO\#3: Use the understanding of the operation of a heating and humidification system to select equipment for simulated installations. *Green training. (ILO: Critical Thinking)
- CLO\#4: Explain the applications and installation requirements of special refrigeration systems. *Green training.


## APR 207C - Apprenticeship / HVAC: Systems III

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.

Course Description: The course is a continuation of the systems series and includes cooling and dehumidifying systems, central air conditioning and heat pumps, solar energy systems, advanced air conditioning-heating systems, and automotive air conditioning.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Apply operational theory as it relates cooling and dehumidification systems.
- CLO\#2: Draw simple and rolling offsets, as well as offsets on parallel runs of pipe.
- CLO\#3: Use the characteristics and installation requirements of current Solar Energy systems when selecting a system for any of the following: heat generation, hot water generation and/or energy generation.
- CLO\#4: Calculate air conditioning heating and cooling loads based on space envelope. (ILO: Qualitative Literacy and Reasoning)
- CLO\#5: Utilize principles of heating and cooling to perform installation, troubleshooting and repair of automotive air conditioning.


## APR 207D - Apprenticeship / HVAC: Airflow and Systems Controls I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.
Course Description: Provides a review of basic refrigeration and $A / C$ controls in preparation for determining ventilation requirements, calculating duct size, utilization of instruments in checking airflow and draft control. Control systems, control circuit diagrams and architectural blueprints will be used to make calculations.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Determine ventilation requirements for HVAC applications.
- CLO\#2: Calculate sizing of ducts for HVAC applications. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Gather data utilizing selected instruments in checking airflow and draft control for HVAC applications.
- CLO\#4: Identify symbols and installation requirements of control systems by using control circuit diagrams.
- CLO\#5: Interpret architectural blueprints when determining HVAC features of the building envelope.


## APR 207E - Apprenticeship / HVAC: Airflow and Systems Controls II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.
Course Description: Introduces the primary concepts that lead to building controls systems including thermostats, pneumatic controls and microprocessor based/ Direct Digital Control (DDC) systems. Servicing, troubleshooting and troubleshooting procedures will be included.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the characteristics of current A/C Heating Control Systems technology.
- CLO\#2: Select appropriate control system using blueprints, schematics, building envelop use and human factor. (ILO: Information Literacy)
- CLO\#3: Design a functional $A / C$ heating control system using thermostats and/or pneumatic controls.
- CLO\#4: Design a functional DDC system including controllers, communications devices and operational software
- CLO\#5: Compare and contrast the servicing requirements for thermostats, pneumatic controls and DDC systems.
- CLO\#6: Demonstrate troubleshooting procedures including tools and measurement equipment used for assessment and repair.


## APR 207F - Apprenticeship / HVAC: Operation and Systems Review

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Rogue Valley HVAC/R JATC.
Course Description: Provides review of basic air conditioning, refrigeration, schematics, electrical components, building codes, service and troubleshooting fundamentals covered the during previous eleven terms in preparation for the HVAC-JATC Journeyman's test.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the characteristics of current A/C Heating Control Systems technology.
- CLO\#2: Recognize and apply standard building codes guidelines.
- CLO\#3: Successfully pass the Oregon HVAC and R Journeyman Test. (ILO: Critical Thinking)


## APR 211A - Apprenticeship / Water Supply Systems

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.

Course Description: Provides applied math concepts that include geometry, instruction on how to size water piping in all applications and treatment of potable water for private and public water systems.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Weigh and measure water using both the English and metric system.
- CLO\#2: Calculate area and volume in practical plumbing applications.
- CLO\#3: Use the concepts of temperature and pressure to assess effects on plumbing installations.
- CLO\#4: Explain the function and application of six simple machines: inclined plane, lever, pulley, wedge, screw, wheel and axle in relation to plumbing.
- CLO\#5: Size water systems for differing flow rates using the four factors that affect a potable water supply.
- CLO\#6: Determine system installation based on the difference between a continuous-flow system and an intermittent-flow system.
- CLO\#7: Calculate flow rates for high-flow-rate fixtures and identify high-flow-rate fixtures. (ILO: Quantitative Literacy and Reasoning)
- CLO\#8: Estimate the affect friction and flow have on water supply systems.
- CLO\#9: Lay out a water supply system efficiently by calculating delivery lengths and pressure drops.
- CLO\#10: Flush and disinfect a visible contaminate from a potable water system.
- CLO\#11: Identify common water problems and the basic techniques and equipment to solve problems.
- CLO\#12: Test water to determine conditioning required.
- CLO\#13: Select and install water conditioning equipment that treats water characteristics.


## APR 211B - Apprenticeship / Plumbing DWV and Compressed Air Systems

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.

Course Description: Covers sizing Drain, Waste, and Vent (DWV) piping as well as sizing storm drains, roof drains and roof storage and drainage systems. There will be coverage of sewage pumps and sump pumps which includes sizing, installations, troubleshooting and repair. The course will also cover compressed air line installation, sizing and troubleshooting.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Calculate drainage fixture units for waste system, building drain size, sewers and vent systems.
- CLO\#2: Calculate fixture size of roof drainage systems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Identify and explain sizing requirements of special kinds of waste and vent systems.
- CLO\#4: Explain the functions, components, and operation of sewage and sump pumps and calculate sizing of storm water sump and sewage pump.
- CLO\#5: Install, adjust sensors, troubleshoot and repair switches and alarms in sewage and sump pumps.
- CLO\#6: Using a detailed drawing identify system components, code requirements and installation requirements of sump pumps.
- CLO\#7: Explain compressed air systems, their components and accessories, procedure for installation and considerations in selection.
- CLO\#8: Identify the types, functions, and capacities of different air compressor systems including the safety issues related to each type.
- CLO\#9: Install a basic compressed air system.


## APR 211C - Apprenticeship / Plumbing Backflow Prevention

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.
Course Description: Introduces the principles and hazards of backflow prevention, and reviews different types of vents that can be installed in a drain, waste and vent system. It also covers corrosive waste and reviews the safety issues and hazard communications.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the principle of backflow due to back siphon age or back pressure, the hazards of backflow and the importance of backflow presenters. (ILO: Critical Thinking)
- CLO\#2: Identify and explain the applications of the six basic backflow prevention devices.
- CLO\#3: Explain installation of common types of backflow devices.
- CLO\#4: Explain how a vent system works and the applications of each type of vent required for different drains, waste and vent systems.
- CLO\#5: Design vent systems according to local code requirements and sketch the different types of vents.
- CLO\#6: Identify corrosive waste and explain where they are found.
- CLO\#7: Explain types of materials used for corrosive-resistant waste piping and methods of joining corrosive-resistant waste piping. (ILO: Critical Thinking)
- CLO\#8: Identify and use HazCom labels and material safety data sheets when handling corrosive materials and installing corrosive waste piping.


## APR 211D - Apprenticeship / Review of Oregon Plumbing Code

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.
Course Description: Provides a review of all Oregon state plumbing codes, OSHA rules and the use of mathematics in plumbing in preparation for taking the Oregon Plumber Licensing Examination (OPLE).

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Use mathematical principles to perform advanced plumbing calculations.
- CLO\#2: Locate and use current code in application of specific plumbing practices.
- CLO\#3: Recognize general and specific safety considerations in plumbing to prevent injuries and damages. (ILO: Information Literacy)
- CLO\#4: Explain the differences in plumbing protocol between service and repair work.
- CLO\#5: Locate and use current code in applications in plumbing practices.


## APR 211E - Apprenticeship / Test Preparation I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.

Course Description: Serves as the first of two designed to review all preceding plumbing apprenticeship classes to prepare for successful passage of the Oregon Plumbing Licensing Exam (OPLE).

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Locate and use current code in applications in plumbing practices.
- CLO\#2: Select correct piping and fittings, waste sizing, joints, clean-outs and drainage requirements using the basic principles of sanitary drainage. (ILO: Critical Thinking)
- CLO\#3: Explain basic principles of indirect waste.
- CLO\#4: Explain basic principles of vents.
- CLO\#5: Explain basic principles of traps and interceptors.
- CLO\#6: Explain the theory and process of installation of medical gasses.
- CLO\#7: Differentiate between plumbing codes related to installation of plumbing in various areas of a hospital.
- CLO\#8: Install fittings, valves and gauges in compliance with certification for installation of medical gases.


## APR 211F - Apprenticeship / Test Preparation II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with Area V Plumbers JATC.
Course Description: The second in a series designed to prepare the fourth-year apprentice for taking the Oregon Plumber Licensing Examination (OPLE).

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Recognize and use current code situations appearing in recent applications of plumbing practices. (ILO: Communication)
- CLO\#2: Pass the OPLE.


## APR 216A - Apprenticeship / Millwright: Machine Shop I

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.

Course Description: Provides an overview of carpentry skills needed by the journeyman millwright. Topics include shop safety, hand, stationary and pneumatic tool operation, and construction methods.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Accurately use ruler, micrometer, dial calipers and protractor as required in the machine shop.
- CLO\#2: Read blueprints to accurately determine layout and metal removal. (ILO: Critical Thinking)
- CLO\#3: Demonstrate shop safety at all times in the machine shop.
- CLO\#4: Operate common machine tools including troubleshooting and maintenance.
- CLO\#5: Operate the engine lathe to complete sample components.
- CLO\#6: Operate the vertical mill to complete sample components.
- CLO\#7: Operate the horizontal mill to complete a sample component.


## APR 216B - Apprenticeship / Millwright: Machine Shop II

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC, and APR 216A .
Course Description: Provides an overview of carpentry skills needed by the journeyman millwright. Topics include shop safety, hand, stationary and pneumatic tool operation, and construction methods.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Accurately uses measuring instruments to determine accuracy of machined parts.
- CLO\#2: Draft parts specification and lay out material using the hand drafted plan.
- CLO\#3: Select required shop equipment and prioritize the machining process given simulation. (ILO: Critical Thinking)
- CLO\#4: Operate common machine tools including troubleshooting and maintenance.
- CLO\#5: Operate the engine lathe to complete sample components.
- CLO\#6: Operate the vertical mill to complete sample components.
- CLO\#7: Operate the horizontal mill to complete a sample component.


## APR 216C - Apprenticeship / Millwright: Drafting

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.
Course Description: A one-term course that will supplement on-the-job training with technical training required for trade comprehension, applications, and practices. The course introduces the apprentices to basic mechanical drafting techniques. Topics include mathematical calculations used to determine circular, linear, area and volume measurements, drafting terminology, characteristics of various types of drawings, drafting symbols and blueprint interpretation.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Operate a calculator using standard operating procedures.
- CLO\#2: Calculate circular, linear, area and volume measurements in inches and metric. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Explain differing characteristics of drawing types using drawing terms and blueprints.
- CLO\#4: Explain the meaning and purpose of basic symbols found on schematics and blue prints when replicating part fabrication and troubleshooting.
- CLO\#5: Locate faults/errors in schematic drawings, give examples and make revisions to allow troubleshooting to proceed.


## APR 216D - Apprenticeship / Millwrights: Hydraulics and Pneumatics I

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.

Course Description: Supplements on-the-job training with technical training required for trade comprehensive, application, and practices. A Vickers hydraulic training power unit is used to demonstrate different aspects of fluid power, which includes pumps, motors, cylinders, manually and electrically-operated directional valves, flow controls, pressure reducing devices, fittings, and various types of piping, hoses, etc.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify basic hydraulic components and explain the function of these components.
- CLO\#2: Map the evolution of fluid power, show understanding of basic system principals and characteristics of the hydraulic components. (ILO: Critical Thinking)
- CLO\#3: Explain the theoretical aspects of hydraulic \& pneumatic control.
- CLO\#4: Perform related mathematic functions to support the theory of hydraulics and pneumatics.
- CLO\#5: Practice safety and industry standards in all applications including lock-out, tag-out, equipment function, maintenance procedures and human error.


## APR 216E - Apprenticeship / Millwrights: Hydraulics and Pneumatics II

## 2 Credit(s)

Prerequisite(s): Registered Apprentice with the Southern Oregon Millwright JATC; and APR 216D.
Course Description: The advanced Hydraulics-Pneumatics course is the second in a series designed to supplement on-the-job training with technical training required for trade comprehensive, application, and practices. A Vickers hydraulic training power unit is used to demonstrate advanced aspects of fluid power, which includes pumps, motors, cylinders, manually and electrically-operated directional valves, flow controls, pressure reducing devices, fittings, and various types of piping, hoses, etc.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Explain the operation and mechanics of hydraulic components the 4th year apprentice may encounter on the job.
- CLO\#2: Evaluate Hydraulic and Pneumatic designs using mathematic formulas to calculate expected outcomes, maintenance procedures and installation requirements. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Read and create Hydraulic and Pneumatic Schematics.
- CLO\#4: Troubleshoot hydraulic and pneumatic operations/functions using system design, schematics, system process and component characteristics.
- CLO\#5: Practice safety and industry standards in all applications involving equipment function, maintenance procedures and human error.


## APR 216F - Apprenticeship / Millwright: Rigging

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with the Jackson County Millwrights JATC.

Course Description: Prepares the apprentice to apply general and specific rigging applications on the work site that may include lifting and positioning equipment; using ropes, cables, hoists and cranes. Topics include: Evolution of rigging systems; Mathematics of rigging; Basic system principles; Rope tying techniques; Real work situations; and Mobile and stationary crane operation.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Use mathematical formulas to determine rigging specifications, design, components and component fabrication. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Explain rope characteristics, selection criterion, strength, safety considerations and demonstrate tying techniques.
- CLO\#3: Explain wire rope characteristics, selection criterion, strength, safety considerations and demonstrate tying techniques.
- CLO\#4: Explain slings, tags, chains and hook characteristics, selection criterion, necessary service checks, and safety considerations.
- CLO\#5: Select force-multiplying devices including block and tackle and hoists that use force for distance.
- CLO\#6: Calculate load ratings from crane lifting charts and formula to boom height and ratings.
- CLO\#7: Operate a lift crane safely.


## APR 218A - Apprenticeship / Duct Design

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.

Course Description: The course will assist the apprentices to design duct systems to carry the air volume needed while maintaining static pressure and velocities while minimizing air turbulence. Topics included: Calculating cubic footage; Calculating area; Calculating air flow; Duct design.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Measure and calculate the cubic footage of an area to be conditioned.
- CLO\#2: Calculate areas of a structure.
- CLO\#3: Calculate the cubic feet per minute of air necessary to condition the area based on cubic footage, heat gain/loss and desired air exchanges per hour.
- CLO\#4: Design a duct system to carry the air volume needed while maintaining static pressures and velocities minimizing air turbulence. (ILO: Information Literacy)


## APR 218B - Apprenticeship / Field Math

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.

Course Description: The course will assist the apprentices in making geometric and trigonometric computations used in designing and fabricating sheet metal. Many of the practice calculations will be made in simulated field installations.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Perform geometric and trigonometric computations used in the sheet metal industry.
- CLO\#2: Apply geometric and trigonometric computations to field installation. (ILO: Quantitative Literacy and Reasoning)


## APR 218C - Apprenticeship / Triangulation

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.

Course Description: The course assists the apprentice to lay out advanced sheet metal fittings using the triangulation method. Sample sheet metal fittings will be fabricated using metal forming equipment. Field installation scenarios will be used to practice computations.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Lay out advanced sheet metal fittings using the triangulation method with drafting tools. (ILO: Critical Thinking)
- CLO\#2: Safely operate metal forming equipment.
- CLO\#3: Fabricate advanced sheet metal fittings using metal forming equipment.


## APR 218D - Apprenticeship / Industry Standards

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.

Course Description: The course assists the apprentice to read blueprints and interpret architectural specifications regarding specific tasks, installation, equipment, accessory and material. Letter designations and symbols will be explained and used to perform duct and flashing take-offs. Abbreviations, scheduling
from blueprints and dimensional scale will be used to create a mechanical plan for a small residence.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Interpret architectural specifications by using letter designation and symbols on a blueprint.
- CLO\#2: Record a list of duct per blueprint.
- CLO\#3: Understands blueprint abbreviations and understand their common features.
- CLO\#4: Understand blueprint schedules and interpret dimensions. (ILO: Critical Thinking)
- CLO\#5: Perform Duct and flashing take-offs from blueprints.
- CLO\#6: Interpret architectural specifications.
- CLO\#7: Draft the mechanical plan for a small residence.


## APR 218E - Apprenticeship / Specialty Items

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.

Course Description: Assists the apprentice in performing layout and fabrication of: Fiberglass duct and fittings; Equipment Cabinets; Duct accessories; Specialty duct fittings. Instruction and practice using oxyacetylene and plasma cutting equipment and soldering iron techniques will be conducted in the lab.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Layout and fabricate fiberglass duct and fittings.
- CLO\#2: Fabricate equipment cabinets, duct accessories and specialty duct fittings.
- CLO\#3: Performs basic cutting tasks using oxy-acetylene and plasma cutting equipment.
- CLO\#4: Demonstrate proper soldering techniques using electric soldering iron and bar solder. (ILO: Critical Thinking)


## APR 218F - Apprenticeship / Advanced Sheet Metal

## 3 Credit(s)

Prerequisite(s): Registered Apprentice with the South Central Oregon Sheet Metal JATC.
Course Description: Provides the apprentice with the skills necessary to fabricate using MIG, TIG, ARC and Oxy-acetylene techniques. Practice in fabrication of projects using steel and aluminum requiring cutting and welding will be given. The final apprentice project will require design and fabrication of an individual project.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Demonstrate welding technique specific to MIG welding.
- CLO\#2: Demonstrate basic welding techniques specific to TIG welding.
- CLO\#3: Demonstrate basic welding techniques specific to ARC welding.
- CLO\#4: Fabricate steel and aluminum products using proper welding and cutting equipment. (ILO: Critical Thinking)


## APR 227A - Apprenticeship / National Electrical Code I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.

Course Description: The first in a three-part series designed to familiarize the Electrical Apprentice with the current National Electrical Code (NEC) edition. Emphasis will include motor calculations, wire sizing, transformers and trade safety. All topics will include technical applications and NEC implications.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify types of conductors based on NEC requirements (i.e., grounded conductors, ungrounded conductors, grounding conductors) and their use in circuits.
- CLO\#2: Select proper wire type and size based on desired outcome requirements.
- CLO\#3: Calculate branch circuit, feeder, and service demand for cooking appliances.
- CLO\#4: Calculate dwelling and commercial service and feeder loads. Calculation disconnecting means size for each. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Explain the characteristics of grounding and bonding and the determinations involved in the selection of grounding vs. bonding in electrical applications.


## APR 227B - Apprenticeship / National Electrical Code II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.
Course Description: The second in a three-part series designed to familiarize the Electrical Apprentice with the current National Electrical Code (NEC) edition. Emphasis within this course will include box and conduit fill, voltage drops, feeders, branch circuits and service calculations for commercial and residential installations. All topics will include technical applications and NEC implications.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Size wire to accommodate distance, conduit fill, box size.
- CLO\#2: Determine proper box size based on calculated conductor requirements based on the current NEC codebook.
- CLO\#3: Discuss and explain the installation of receptacles, switches, panelboards, and the application of cords as wiring methods.
- CLO\#4: Determine the application of specific wiring methods defined in the NEC, their restrictions and limitations. Relate this to Article 300, wiring methods. (ILO: Critical Thinking)
- CLO\#5: Calculate motor loads, conductor sizing for motor branch circuit and feeders, size motor disconnecting means and adjustable speed drives.


## APR 227C - Apprenticeship / National Electrical Code III

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.

Course Description: The third in a three-part series designed to familiarize the Electrical Apprentice with the current National Electrical Code (NEC) edition. Emphasis within this course will include NEC lay-out, and grounding vs. bonding systems. All topics will include technical applications and NEC implications.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Calculate transformer loads and proper application of wiring techniques for transformers. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Determine branch circuit and feeder sizing for heating and air conditioning loads.
- CLO\#3: Be able to design the construction of an above- ground fueling facility as defined in Article 500.
- CLO\#4: Explain the application of rules concerning hazardous locations and the classifications of explosive and flammable materials.
- CLO\#5: Demonstrate the application of wiring methods for swimming pools, fountains, and spas.
- CLO\#6: Apply rules related to wiring methods for solar powered systems and their installation requirements.


## APR 227D - Apprenticeship / Oregon Electrical License Preparation I

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.
Course Description: The first of three courses in a series designed to familiarize Apprentice Electricians with advanced test taking skills and increase their knowledge of the current electrical code. Emphasis will be on reviewing current code, calculations and formulas, practical electrical application and workplace safety.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Locate various indexes and references from the National Electrical Code Handbook. (ILO: Critical Thinking)
- CLO\#2: Explain and apply changes and updates included in the current National Electrical Code to the task.
- CLO\#3: Apply Arc Fault and Safety Practices involved with work practices and personal protective equipment.
- CLO\#4: Demonstrate safety and technical applications of Fall Protection and Safe Workplace Practices.


## APR 227E - Apprenticeship / Oregon Electrical License Preparation II

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.
Course Description: The second of three courses designed to prepare the Apprentice Electrician to pass the Oregon Electrical licensing exam. Course serves as a review of current electrical code calculations using standard and optional methods, practical electrical applications and workplace safety practices. All testing will simulate the Oregon Electrical Licensing Examination.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Locate various indexes and references for the National Code Handbook.
- CLO\#2: Calculate Ampacities of Branch Circuits, Motors, Motor Control Circuits, Branch Circuit and Feeder Taps, Box Fill and Conductor Sizing, Cooking Equipment, Dwelling Unit Service Calculations and Commercial Service. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Select Code Articles used in determining proper installation of electrical systems.


## APR 227F - Apprenticeship / Oregon Electrical License Preparation III

## 4 Credit(s)

Prerequisite(s): Registered Apprentice.

Course Description: The third of three courses in a series designed to familiarize the Apprentice Electrician with advanced test taking skills and increase their knowledge of the current electrical code, with a major focus on Oregon Revised Statutes, Oregon Administrative Rules and the Oregon Addendums. The course will interpret NEC code article content, review electrical components and application characteristics, and clarify terminology including industry jargon.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Locate specified indexes and references from the National Electrical Code Handbook to determine proper component applications. (ILO: Information Literacy)
- CLO\#2: Define terminology common to the electrical industry.
- CLO\#3: Locate Oregon State Statutes and Administrative Rules that apply to specific electrical applications.
- CLO\#4: Pass the Oregon Electrical Licensing Exam.


## APR 229A - Apprenticeship / Power Plant Systems and Flight Controls

## 6 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Aviation JATC.
Course Description: Provides an understanding of power plant construction and systems including the basic reciprocating engine, its major sections, the axial and centrifugal flow compressors, and accessory section components. Instruction will concentrate on the characteristics and service requirements. Engine Component replacement and tools/techniques for aircraft pressurization will be discussed. This course is in preparation for passing the FAA licensing examination and includes: Basic Engine major sections, Engine Component Replacement, Common hand tool usage, Precision measuring equipment, Safety locking devices, Safety equipment and procedures, Seal installation, Hardware Installation, Corrosion inspection and preventive maintenance of reciprocating engines. The course also includes: Basic Engine major sections, Axial and centrifugal flow compressors, Accessory section component, Distinguishing characteristics of the Turboprop, turbo shaft, turbofan engine and Auxiliary power plants of Turbine Engines. Engine replacement will be discussed including: Common hand tool usage, Precision measuring equipment, Safety locking devices, Safety equipment and procedures, Seal installation, Hardware installation, Corrosion inspection and preventive maintenance. Other topics include: Aircraft pressurization components and operation, Aircraft pressurization equipment maintenance and safety, Engine Electrical / Electronic Controls and Flight Control Systems.

## Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Define the functions of the engine's major sections as it applies to the aircraft power plant. (ILO: Communication)
- CLO\#2: Compare and contrast the distinguishing characteristics of the turboprop, turbo shaft and turbo fan engines.
- CLO\#3: List common tools, measuring equipment and safety procedures used in engine component replacement.
- CLO\#4: Demonstrate installation procedures and considerations for replacement of seals and installing hardware.
- CLO\#5: Identify aircraft pressurization components, their operation, maintenance and safety.
- CLO\#6: Demonstrate knowledge of all of the functions of the flight controls of fixed wing and rotary wing aircraft.


## APR 229B - Apprenticeship / Structural Inspection and Repair

## 6 Credit(s)

Prerequisite(s): Registered Apprentice with Southern Oregon Aviation JATC.
Course Description: Guides the student through the inspection and identification of a variety of aircraft structural damage while assessing the type of repair that is required to assure an airworthy repair. Special emphasis will be given to: Types and characteristics of materials in the metallic aircraft structure, Repair procedures and required documentation as per the FAR's, General techniques of sheet metal repair, to include forming characteristics, rivet layout and installation, Proper drilling techniques, use of sealants, specialized tools and precision instruments, Cable identification, inspection and fabrication, Composite material repairs, Non- destructive testing, Basics of welding theory, Vibration analysis and balance theory. This course is designed to prepare for the FAA licensing examination.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Assess structural damage based on the characteristics of metal and determined stress of the aircraft structure.
- CLO\#2: Locate proper repair procedures in AC 43.13.1b. Attain knowledge in the proper application of the FAA regulations in regard to inspections.
- CLO\#3: Laying out repair patterns on sheet metal to make repairs.
- CLO\#4: Form material into a repair piece identical to the original part.
- CLO\#5: Apply proper techniques for drilling detail, appropriate hardware selection for repair, and removal/installation of rivets. (ILO: Critical Thinking)
- CLO\#6: Determine the best nondestructive testing technique to use with ferrous and nonferrous materials
- CLO\#7: Use dye-penetrant inspection to identify failure and repair requirements.
- CLO\#8: Explain the basic theory and purpose of ultra-sonic inspection.
- CLO\#9: Complete the calibration process within a nondestructive testing system.
- CLO\#10: Demonstrate the basic welding methods used in structural repair.
- CLO\#11: Gain knowledge of the purpose of vibration analysis and the need for balancing.


## APR 229C - Apprenticeship / Avionics

## 4 Credit(s)

Prerequisite(s): Registered Apprentice with the Southern Oregon Aviation Joint Apprenticeship and Training Committee (JATC).

Course Description: Introduces aviation electronics. Electronic systems designed for designed for use on an aircraft will be the main topic with special attention to electrical operation in communications, navigation and the display and management of multiple systems.

Course Level: Career/Tech Apprenticeship

## Course Learning Outcomes:

- CLO\#1: Identify individual avionics systems generally found in aircraft, discuss impact as related to FAR's and specifically operation.
- CLO\#2: Bundle or group these to individual flight operations in an integrated environment.
- CLO\#3: Identify and simulate general troubleshooting methods for faulty system identification from the viewpoint of a Aircraft Mechanic.
- CLO\#4: Explain the difference between analog and digital avionics systems, and how it effects troubleshooting.
- CLO\#5: List and explain installation consideration of avionics systems as they relate to operational concerns. (ILO: Communication)
- CLO\#6: List avionics systems, systems identification characteristics, including troubleshooting and air worthiness considerations.


## ART 115 - Basic Design (Composition)

## 3 Credit(s)

Course Description: Provides instruction in the basic concepts, vocabulary, and practice of design, emphasizing essential elements and principles of composition. Assignments will deal with processes of creativity, ideation, aesthetic analysis, process style and meaning. Students work primarily in black and white media, addressing the foundations of both objective and non-objective modes of visual art. Skills and experiences acquired in this studio course are applicable to fine arts, crafts and commercial design. Satisfies foundation core requirements for art and graphic design; recommended as a prerequisite for all studio courses.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Acquire the ability to freely imagine a range of possible solutions to a design problem.
- CLO\#2: Acquire technical competency in a variety of wet and dry mediums to use a full complement of design elements to fulfill compositional ideas, exploring those solutions in black, white, and value ranges. (ILO: Communication)
- CLO\#3: Recognize, discuss, and analyze other artists' styles and design approaches using professional terminology.
- CLO\#4: Express ideas in non-objective form using symmetrical, asymmetrical, radial, and biomorphic design principles.


## ART 116 - Basic Design (Color Theory)

## 3 Credit(s)

Course Description: Provides instruction in the basic theories and practice of using color qualities and relationships in art, including hue, value, and saturation in essential and experimental color design, providing a foundation in the vocabulary and practice of color theory in visual art. Assignments exploring both objective and non-objective form address color mixing, spatial and volumetric effects, basic color relationships, color in image development, and the effect of color on human emotion and perception. Students will work primarily with opaque painting mediums such as gouache. Analyze composition with a focus on the use of color and its effect to meet individually determined designs in a variety of contexts. This course satisfies foundation core requirements for students pursuing fine art, design, and commercial applications.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to explore a range of color compositional methods with an awareness of the color qualities of hue, value, and saturation.
- CLO\#2: Demonstrate the use of a full range of theoretical color relationships, including complements, triads, analogous, and more complex configurations, using them imaginatively in a variety of possible compositional solutions, and be able to accurately mix opaque paints. (ILO: Communication)
- CLO\#3: Recognize, discuss, and analyze other artists' styles and design approaches using professional nomenclature.
- CLO\#4: Design works of art fluently with non-objective form as an underlying structural component of all works of art.


## ART 120 - Introduction to Digital Art

## 3 Credit(s)

Course Description: Provides experiential instruction in basic modalities, techniques, and software programs in digital design, and their use in contemporary art making processes. Students work in both the computer lab and a traditional studio art setting to explore significant individual concepts and exercise their ability to communicate those concepts visually. Programs such as those in the Adobe suite and other freely available software will be used as both a platform for creative ideation and a finished visual medium. Skills acquired in this class are applicable to both fine art and more commercially based design disciplines.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to competently engage with digital mediums. (ILO: Communication)
- CLO\#2: Create and explore individually formed concepts in the creation of visual art.
- CLO\#3: Engage fully in critical thinking processes.
- CLO\#4: Use non-objective form in digital media as part of a creative process using both objective and non-objective subjects.


## ART 131 - Introduction to Drawing (Value)

## 3 Credit(s)

Course Description: Explores basic art processes, techniques and media usage, and provides the foundation for the development of observation and visual analysis, culminating in the development of personal visual language, creative thinking, and self-expression. This course introduces basic principles, methods and media with an emphasis on value drawing. Students work extensively through direct
observation of real objects, forms, and spaces, augmented by project-appropriate use of photographic source material. Through a combination of mini-lectures, demonstrations, studio work, and group discussions, the concepts of light, form, pictorial space, depth, conceptualization and composition are explored.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Render a variety of objects, forms, and spaces using principles involving primarily value, including chiaroscuro, atmospheric perspective, and positive/negative space. (ILO: Communication)
- CLO\#2: Demonstrate technical skill in a variety of wet and dry mediums to fulfill design concepts, producing effective and well-crafted works of art large and small scale drawings.
- CLO\#3: Recognize, discuss, and analyze other artists' styles and design approaches.
- CLO\#4: Create drawings in a variety of styles and modes, including both objective and nonobjective modes.


## ART 132 - Introduction to Drawing (Line)

## 3 Credit(s)

Course Description: Basic drawing principles, techniques and media usage are introduced through a combination of mini-lectures, demonstrations, studio work and group discussions. Designed to expand aesthetic awareness, this course assists students in developing a personal visual language by presenting skills to communicate in today's art world. The concepts of line, form, spatial depth and composition are explored with an emphasis on line drawing.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Render a variety of objects, forms, and spaces using principles involving primarily line, including contour, cross-hatching, gesture, and vanishing-point perspective in a variety of compositional strategies. (ILO: Communication)
- CLO\#2: Demonstrate technical skill in a variety of dry and possibly wet mediums to fulfill design concepts, producing effective and well-crafted works of art large and small scale drawings.
- CLO\#3: Recognize, discuss, and analyze other artists' styles and approaches to drawing.
- CLO\#4: Create pictorial space on a two-dimensional surface using a variety of sources, including/but not limited to still life, photographs, the live model, imagination, abstraction and works of other artists.


## ART 133 - Introduction to Drawing (Mixed Media)

## 3 Credit(s)

Course Description: Stimulates creative experimentation with drawing processes through the use of a variety of wet and dry media, collage, transfer and others. This course provides a framework for the development of self-expression and creative thinking skills needed to communicate in today's art world. Introduces the experience of working in a multi-media drawing format through a combination of lectures, studio work and group discussions.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use a variety of materials and techniques, demonstrating mixed-media approach to developing personal imagery and symbols in the context of historical and contemporary art. (ILO: Communication)
- CLO\#2: Address basic compositional problems dealing with spatial depth, negative/positive space, and the design of the picture plane.
- CLO\#3: Analyze and critique one's own work and the work of other students.


## ART 197 - Gallery Design and Management

## 3 Credit(s)

Course Description: Explores the inner workings of a gallery from the perspectives of artist and gallery director. Training includes installation of exhibits, communication with artists, recordkeeping, shipping, and all phases of gallery clerical work and promotion. Discussion focuses on exhibition design and installation as well as contemporary and historical perspectives and critiques.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Experience the installation and preparation of artwork and operation of a gallery including receiving work, installing, lighting, and shipping of artwork. (ILO: Communication)
- CLO\#2: Participate in preparation work for exhibits including promotion, artist contact, contracts and other paperwork, and assess needs for the exhibit.
- CLO\#3: Research historical and contemporary theories of galleries and museums and the role they play in the arts.


## ART 198 - Independent Study: Art (Portfolio)

## Var. (1-3) Credit(s)

Prerequisite(s): WR 122Z, at least 15 credits of studio art classes, and at least one of the classes in the History of Art sequence (ART 204, ART 205 or ART 206).

Course Description: Develops the knowledge, requirements, and materials needed for creating professional portfolios of creative work for exhibition proposals and admission into art schools.
Recommended for art majors.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Produce writing for the profession, including resumes, artist statements, and other forms of exhibition text. (ILO: Communication)
- CLO\#2: Research and reflect on personal artistic work.
- CLO\#3: Develop presentation materials, including photographing artwork, framing and matting and the understanding and creation of a body of work.


## ART 199 - Special Studies: Art

## Var. (1-3) Credit(s)

## Prerequisite(s): RD 90 or WR 91

Course Description: An introduction and overview of specific topic areas of interest, including media, history, and practice.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate skills in the basics of a given area of artistic study.
- CLO\#2: Demonstrate technical skills to achieve creative ends. (ILO: Communication)
- CLO\#3: Locate and identify the skill area in an historical and cultural context.


## ART 204 - History of Art I

## 4 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement

Course Description: This three-term sequence is designed for both art and non-art majors. The intent of this study is to gain skills in appreciating, understanding, and evaluating the beauty and meaning in art and life in the context of culture, and evolving needs and belief systems. For art majors, a necessary foundation is laid for advanced study in studio art and art history. Students study the history of art in the context of the cultures producing them, by studying selected works of painting, sculpture, architecture, and other fine arts, from prehistoric to Gothic periods (ART204), Renaissance to Baroque periods (ART 205), and the 18th century to contemporary times (ART 206). Students study the development of art in the Western tradition with reference to major periods and styles of art from the non-Western world, including art from Asia, Africa, the Americas, and the Pacific Islands. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Recognize the major historical periods of art in terms of aesthetic, artist and stylistic trends in cultures from Pre-history though the European Gothic.
- CLO\#2: Identify significant cultural inequalities and visual symbolic language of art in a given time period. (ILO: Communication)
- CLO\#3: Recognize various art processes and techniques used by artists to express ideas, emotions, cultural values and activities, through two- and three-dimensional art forms.
- CLO\#4: Analyze historical and cultural issues in a wide variety of works of art, approximately at least 30 different works of art per course.


## ART 205 - History of Art II

## 4 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement

Course Description: This three-term sequence is designed for both art and non-art majors. The intent of this study is to gain skills in appreciating, understanding, and evaluating the beauty and meaning in art and life in the context of culture, and evolving needs and belief systems. For art majors, a necessary foundation
is laid for advanced study in studio art and art history. Students study the history of art in the context of the cultures producing them, by studying selected works of painting, sculpture, architecture, and other fine arts, from prehistoric to Gothic periods (ART 204), Renaissance to Baroque periods (ART205), and the 18th century to contemporary times (ART 206). Students study the development of art in the Western tradition with reference to major periods and styles of art from the non-Western world, including art from Asia, Africa, the Americas, and the Pacific Islands. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Recognize the major historical periods of art in terms of aesthetic, artist and stylistic trends in the European Renaissance to Baroque periods, and early India, Southeast Asia, China, Korea, Japan, the Americas, and Early Africa.
- CLO\#2: Identify significant cultural needs and beliefs that effect the qualities and visual symbolic language of art in a given time period. (ILO: Communication)
- CLO\#3: Recognize various art processes and techniques used by artists to express ideas, emotions, cultural values and activities, through two- and three-dimensional art forms.
- CLO\#4: Analyze historical and cultural issues in a wide variety of works of art, approximately at least 30 different works of art per course.


## ART 206 - History of Art III

## 4 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement

Course Description: This three-term sequence is designed for both art and non-art majors. The intent of this study is to gain skills in appreciating, understanding, and evaluating the beauty and meaning in art and life in the context of culture, and evolving needs and belief systems. For art majors, a necessary foundation is laid for advanced study in studio art and art history. Students study the history of art in the context of the cultures producing them, by studying selected works of painting, sculpture, architecture, and other fine arts, from prehistoric to Gothic periods (ART 204), Renaissance to Baroque periods (ART 205), and the 18th century to contemporary times (ART206). Students study the development of art in the Western tradition with reference to major periods and styles of art from the non-Western world, including art from Asia, Africa, the Americas, and the Pacific Islands. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Recognize the major historical periods of art in terms of aesthetic, artist and stylistic trends in the European Rococo through the contemporary world in Europe and the United States, and later India, Southeast Asia, China, Korea, Japan, the Americas, Africa, and the Pacific.
- CLO\#2: Identify significant cultural needs and beliefs that effect the qualities and visual symbolic language of art in a given time period. (ILO: Communication)
- CLO\#3: Recognize various art processes and techniques used by artists to express ideas, emotions, cultural values and activities, through two- and three-dimensional art forms.
- CLO\#4: Analyze historical and cultural issues in a wide variety of works of art, approximately at least 30 different works of art per course.

ART 222 - Graphic Design (Typography)

## 3 Credit(s)

Course Description: Acquaints students with the basic concepts needed for entry-level graphics positions. Increases understanding of letterforms, font usage, and changes from media to media, and the effects on viewers. Includes concept design from thumbnail to finished product, skill development as applied to logo, trademarks and business packages, and covers current standards of design.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Design lettering for logos, trademarks and corporate identities.
- CLO\#2: Demonstrate the skills and identify appropriate technology to use different media in achieving various outcomes. (ILO: Communication)
- CLO\#3: Demonstrate a usable vocabulary to analyze and communicate good layout and design for each assignment.


## ART 234 - Figure Drawing I

## 3 Credit(s)

Course Description: Introduces techniques and process in drawing the figure from life. This course provides a framework for the development of self-expression for beginning students, and presents advanced students with problem-solving experiences appropriate to issues in contemporary art. Students draw almost exclusively from live models, both nude and draped, using a range of materials and formats. Through direct observation, anatomical study, historical information and media experimentation, students develop their drawing skills and increase their ability to utilize the figurative form in creative works in an historical and contemporary context.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Accurately describe the proportions of the human figure.
- CLO\#2: Utilize a variety of drawing methods successfully, (gestural, structural, and volumetric) in a variety of mediums, to describe the figure in a variety of pose type and duration. (ILO: Communication)
- CLO\#3: Recognize, discuss, and analyze the use of the human form in contemporary and historical visual art.
- CLO\#4: Render the figurative image as a design component, exploring compositional and conceptual possibilities beyond simple transcription and realistic presentation.


## ART 235 - Figure Drawing II

## 3 Credit(s)

Prerequisite(s): ART 234
Course Description: Expands upon foundational techniques and processes in drawing the figure from life. This course provides a framework for the continuing development of self-expression and personal artistic style for advanced students in the use of the human figure in contemporary art. Students draw almost exclusively from live models, both nude and draped, using a range of materials and formats. Through direct observation, anatomical study, historical context, and media experimentation, students continue the development of their technical and conceptual skills in figurative modes.

## Course Learning Outcomes:

- CLO\#1: Accurately describe the proportions and complex anatomy of the figure.
- CLO\#2: Utilize various drawing methods successfully in an individual manner, in a variety of mediums, describing the figure in a variety of pose type and duration. (ILO: Communication)
- CLO\#3: Recognize, discuss, and analyze the use of the human form in contemporary and historical visual art based on personal interest.
- CLO\#4: Demonstrate the use of the figurative image as a design component, exploring compositional and conceptual possibilities beyond simple transcription and realistic presentation.


## ART 236 - Figure Drawing III

## 3 Credit(s)

## Prerequisite(s): ART 235

Course Description: Challenges experienced students in the development of personal techniques and processes in drawing the figure from life. Students draw almost exclusively from live models, both nude and draped, using a range of materials and formats, developing individual approaches to the creation of finished works of art, emphasizing increased sophistication of anatomy, composition, and conceptualization.
Students develop their ability to work in a self-identified series format through direct observation, anatomical study, historical context and media experimentation creating a personal body of figurative work.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and explore personal challenges in proportion and stylization.
- CLO\#2: Analyze and explore personal media usage. (ILO: Communication)
- CLO\#3: Recognize, discuss, and analyze the use of the human form in contemporary and historical visual art.
- CLO\#4: Use the figurative image as a design component, exploring compositional and conceptual possibilities beyond simple transcription and realistic presentation.


## ART 237 - Illustration (Black and White Media)

## 3 Credit(s)

Course Description: Introduces traditional (non-computerized) illustration techniques, concepts and practices, allowing students to develop an understanding of how to create an illustration both physically as well as conceptually. The course focuses on black and white media and is designed to increase basic art skills, provide the tools and knowledge for students to successfully complete assigned projects, and develop an understanding of commercial illustration applications.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Render forms and spaces with sufficient understanding and precision for the rendering of objects, surfaces, and spaces.
- CLO\#2: Utilize a variety of common two-dimensional, black and white media to fulfill varied illustration outcomes. (ILO: Communication)
- CLO\#3: Quickly create sketches which explore a variety of options in concept and design for illustration outcomes.


## ART 238 - Illustration (Color Media)

## 3 Credit(s)

Course Description: Introduces traditional (non-digital) illustration techniques, concepts and practices, allowing students to develop an understanding of how to create an illustration both physically as well as conceptually. The course focuses on color and color media and is designed to increase basic art skills, provide the tools and knowledge for students to successfully complete assigned projects, and develop an understanding of commercial illustration applications.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Render objects, surfaces, and spaces in color media.
- CLO\#2: Complete illustrations with defined parameters in a variety of color media. (ILO: Communication)
- CLO\#3: Execute sketches which explore possible illustration goals quickly and accurately.


## ART 239 - Illustration (Perspective)

## 3 Credit(s)

Course Description: A hands-on course designed to develop knowledge and understanding of measured linear perspective drawing. Increases skills and understanding of the principles of one-point, two-point, and three-point rendering in art. Further work on additional skill development as needed for student progress will be included. The knowledge gained is applicable to both commercial and fine art purposes.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate skill in using essential concepts of linear perspective drawing, including the layout of horizon line, station point, and vanishing points in one-, two-, three-, and oblique-point renderings. (ILO: Communication)
- CLO\#2: Apply knowledge of one- and two-point perspective methods illustrating architectural motifs in exterior and interior views through the delineation of, ground plan and perspective elevation views.
- CLO\#3: Design individual concepts of each project by rough drafts, comps and finals to create and use their imagination to accurately, visually communicate and describe their designs on a split-level home with landscaping.


## ART 240 - Advanced Figure Drawing

3 Credit(s)
Prerequisite(s): ART 236

Course Description: Students create drawings exploring figurative working primarily from live models using an individually selected range of materials and formats. Through direct observation, anatomical study,
historical research, creative ideation, and media experimentation, students develop their drawing skills and increase their knowledge of the human figure in art. In a studio environment, traditional and contemporary drawing techniques are applied to the interpretation of the nude and draped figure. This course provides a framework for the development of self-expression for advanced students, encouraging them to develop a personal style, theory, and approach to the figurative image in a contemporary context.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate fluency in the expressive use of proportion and structure. Using primarily from the model as well as imagination, and other source material in a self-directed manner. (ILO: Communication)
- CLO\#2: Critically analyze and evaluate their own work and the work of others.
- CLO\#3: Conceptualize and execute drawings demonstrating a personal and imaginative use of the figurative image.


## ART 245 - Drawing for Graphic Design

## 3 Credit(s)

Prerequisite(s): ART 237 or ART 238
Course Description: Emphasizes conceptualization process through drawing, including the development of thumbnails, brainstorming, research, layout, overlays, and typography, including strategies used in the creation of a graphic design presentation. Students will explore the use of drawing as a tool for visual problem solving, idea generation, visual diagramming and storyboarding, as well as a design/illustration medium for final production work. Projects explore visual languages, storytelling, storyboards and the visual essay.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Utilize media appropriate to a variety of design challenges.
- CLO\#2: Evolve research sketches delineating and exploring design ideas.
- CLO\#3: Evolve concepts of each project through the steps of completing thumbnail sketches, rough drafts and comps to the final designs. (ILO: Communication)


## ART 253 - Ceramics I

## 3 Credit(s)

Course Description: Introduces students to the history, technology, design and art of pottery, relating traditional and contemporary methods in contemporary art practice. This course will channel students towards creative thinking, self-expression and self-evaluation. Introduces materials, tools, and techniques in producing ceramic pottery and sculptural forms including hand-building, wheel throwing, glaze application, firing, and other finishes for clay.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Execute a significant variety of hand-building and wheel-throwing techniques. (ILO: Communication)
- CLO\#2: Demonstrate hands-on ability in basic firing technology, including safe and effective glaze formulation and handling.
- CLO\#3: Identify and use a variety of aesthetic, symbolic, and decorative language qualities that constitute wholeness or integrity of visual form.


## ART 254 - Ceramics II

## 3 Credit(s)

Prerequisite(s): ART 253
Course Description: Continues ART 253, and further explores the history, technology, design, and art of pottery. Reinforces expectations for students to achieve their goals, and to understand the continuing change of contemporary ceramic art techniques. Introduces materials, tools, and techniques in producing ceramic pottery and sculptural forms, and includes hand building, wheel throwing, glaze formulation and application, firing, and other finishes for clay.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Utilize basic glazes and chemistry, as well as a working knowledge of kiln loading and firing. Be able to analyze and communicate this to others.
- CLO\#2: Build ceramic works of art exemplifying advanced understanding of clay building techniques.
- CLO\#3: Locate and discuss personal ceramic work in relation to contemporary ceramics practice and symbolic language in the art world. (ILO: Communication)


## ART 255 - Ceramics III

## 3 Credit(s)

## Prerequisite(s): ART 254

Course Description: Continues ART 254 and further explores the history, science, design, and art of pottery. Reinforces the expectations of students to achieve their goals and to understand the continuing change of contemporary ceramic art. Introduces students to advanced materials, tools, and techniques in producing ceramic pottery and sculptural forms. Includes hand-building, wheel throwing, glaze formulation and application, firing, and other finishes for clay.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Create advanced ceramic works of art that demonstrate mastery of wheel and handbuilding and alternative methods.
- CLO\#2: Demonstrate greater sophistication of technical skills, including formulating personal glaze and fire a gas reduction kiln.
- CLO\#3: Create and literately discuss a series of original ceramic art. (ILO: Communication)


## ART 256 - Ceramics IV

## 3 Credit(s)

Recommended Prerequisite(s): ART 255

Course Description: Emphasizes study of contemporary ceramic disciplines to fulfill educational goals specific to each student. The course is set up as an open studio with individualized critiques and assigned research activities. Each student works on developing personal imagery, style, and art philosophy while learning to make the transition from art student to working artist.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Conceptualize and execute an advanced personalized plan of study and approach to working. Identify a personal perspective regarding style, techniques, color, theory, and imagery. (ILO: Communication)
- CLO\#2: Create personal finish styles including glazes.
- CLO\#3: Create ceramic works demonstrating a mastery of hand building and/or alternative methods.


## ART 257 - Jewelry and Metalsmithing I

## 3 Credit(s)

Course Description: Explores basic metalsmithing processes, including piercing, riveting, lost wax casting and silver soldering and provides a foundation for the development of creative thinking and self-expression. Course is designed for students with limited or no previous jewelry/metalsmithing experience. Introduces tools and techniques used in working with nonferrous metals through a combination of demonstrations, studio work and group discussions. Furthers design awareness and explores three-dimensional form as functional or wearable art.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Consistently follow rules and regulations regarding safety while using all jewelry and metalsmithing equipment and materials, including but not limited to torches, soldering tools, saws, files, flexible shaft, hammers, drill press, rolling mill, polishing machines and chemicals.
- CLO\#2: Incorporate demonstrated techniques into personal skill sets, leading to opportunities for experimentation. (ILO: Communication)
- CLO\#3: Demonstrate the development of original and esthetically compelling ideas.
- CLO\#4: Relate two dimensional drawings into three dimensional form, employing the demonstrated techniques.
- CLO\#5: Relate personal work to artistic practice and theory of contemporary artists working in jewelry and metalsmithing.


## ART 258 - Jewelry and Metalsmithing II

## 3 Credit(s)

Prerequisite(s): ART 257

Course Description: Continues developing technical vocabulary through content that varies by term including the exploration of a variety of surface embellishments, metal forming methods, mold making, stone
setting and 3D printing. Explores historical and contemporary artists and continues development of design and aesthetic awareness of three-dimensional small scale works of art with the goal of creating a personal visual language.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Consistently follow rules and regulations regarding safety while using all jewelry and metalsmithing equipment and materials, including but not limited to torches, soldering tools, saws, files, flexible shaft, hammers, drill press, rolling mill, polishing machines and chemicals.
- CLO\#2: Demonstrate a working knowledge of new techniques covered while showing refinement of previously experienced methods, and principles behind each technique, leading to opportunities for experimentation. (ILO: Communication)
- CLO\#3: Develop original and esthetically compelling ideas while demonstrating a clear understanding of the qualities specific to small scale work.
- CLO\#4: Demonstrate the ability to take a creative idea from a concept in the imagination into a three-dimensional form, using the techniques demonstrated.
- CLO\#5: Research metalwork produced in other cultures and other periods in history and evaluate metalwork as a means of creative expression.


## ART 259 - Jewelry and Metalsmithing III

## 3 Credit(s)

Prerequisite(s): ART 258
Course Description: Along with further technical development and awareness of the versatility of metalwork, students explore concepts and issues of self-expression and personal imagery related to wearable art, small functional objects and small sculpture. Content varies by term and includes etching, enameling, die forming, chasing and repousse, mold making, 3D printing and stone setting.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Follow and assist others with rules and regulations regarding safety while using all jewelry and metalsmithing equipment and materials, including but not limited to torches, soldering tools, saws, files, flexible shaft, hammers, drill press, rolling mill, polishing machines and chemicals.
- CLO\#2: Demonstrate a working knowledge of new techniques covered while showing refinement of previously experienced methods, experimentation, and application of the principles behind each technique. (ILO: Communication)
- CLO\#3: Explore a variety of ideas through studies and sketches, emphasizing the development of a personal style.
- CLO\#4: Conceptualize and create three-dimensional art through a complete process of imagination and production emulating demonstrated techniques.
- CLO\#5: Present personal art work in metals in context of work produced in other cultures and other periods in history, demonstrating the broad potential of metalwork as a means of creative expression.


## ART 260 - Jewelry and Metalsmithing IV

## 3 Credit(s)

## Prerequisite(s): ART 259

Course Description: Gives students an opportunity to take responsibility of their continued growth in jewelry and metalsmithing. They choose the tools and techniques to explore in depth during the term, and they design their own assignments and choose projects (in keeping with the previous classes) that they will explore through a combination of demonstrations, studio work, and group discussions. A series of pieces will be created to exhibit/sell in the fall/Christmas sale, winter/Valentine's Day sale, or the spring/student exhibit. The course continues to prepare students to create jewelry/metal objects to exhibit/sell by furthering their design awareness; develop step-by-step metals techniques and craftsmanship skills, and explore threedimensional form as functional or wearable art.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Consistently adhere to rules and regulations regarding safety while using all common techniques and equipment of professional jewelry and metalsmithing.
- CLO\#2: Conceptualize and execute creative ideas from an ideation to finished three-dimensional form. (ILO: Communication)
- CLO\#3: Envision and outline self-established goals and objectives in the continuing exploration of jewelry and metalsmithing techniques.


## ART 276 - Sculpture I

## 3 Credit(s)

Course Description: Encourages students to develop critical as well as creative thinking through the exploration of materials, processes, concepts and imagery in three-dimensional art forms. Students will explore a range of sculptural materials and techniques, including an introduction to ZBrush digital modeling software and three-dimensional printing.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Create three-dimensional sculptural works of art through a variety sculptural and finish processes. Utilize the appropriate tool and technique associated with the process, including additive, subtractive, and constructive methods in traditional digital means. (ILO: Communication)
- CLO\#2: Freely envision sculptural ideas through a sketch process. Using a developmental process, employing sketches, maquettes, and finished work, and using research of master artists to help envision possibilities for sculpture through a range of media.
- CLO\#3: Envision and execute unique and expressive works of art in three-dimensional Engage in a rich creative ideation process involving personal investigation of processes, ideas, and materials, from initial sketch to class critique.
- CLO\#4: Create sculpture in both objective and non-objective modes.


## ART 277 - Sculpture II

## 3 Credit(s)

## Prerequisite(s): ART 276

Course Description: Continues study of sculptural materials, techniques, and concepts. Project exercises provide experience in modeling, casting, carving and fabrication processes with a special emphasis on self-
expression and concepts. Assignments establish a conceptual format within which to explore creative ideas - the course emphasizes hands-on working experience in a variety of media. Projects are short-term in duration with work in greater complexity, size, and more demanding materials reserved for more advanced coursework. The emphasis is on accomplishment of a diversified experience. Lectures and films provide historical and technical information and students are expected to do outside research.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Undertake greater complexity of sculptural technique in a variety of materials. (ILO: Communication)
- CLO\#2: Develop personal concepts through individual forms of three-dimensional visual expression.
- CLO\#3: Communicate the purpose and goals of specific sculptural projects.


## ART 278 - Sculpture III

## 3 Credit(s)

## Prerequisite(s): ART 277

Course Description: Encourages students to develop critical as well as creative thinking through the exploration of materials, processes, concepts, and imagery. Exposure to a wide range of ideas enables students to develop their own sense of direction. Emphasis is on the exploration and manipulation of form and space in a variety of materials to investigate sculptural expression.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Discover unique expressive characteristics of processes and materials, and the underlying relationships between them.
- CLO\#2: Explore ideas for individual expression through research of other artists' work and through preparatory studies. (ILO: Communication)
- CLO\#3: Create and discuss an integrated approach to unique personal sculptural work.


## ART 280 - Cooperative Work Experience/Art

## Var. (1-3) Credit(s)

Prerequisite(s): Prior arrangement with CWE instructor or Department Chair.
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job.
- CLO\#2: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while fulfilling employer goals. (ILO: Communication)
- CLO\#3: Make contacts which will help in obtaining employment.


## ART 281 - Painting I

## 3 Credit(s)

Course Description: Encourages students to develop critical as well as creative thinking through the exploration of materials, processes, concepts, and imagery. Through exposure to a wide range of ideas, students are enabled to develop an individual sense of direction. This course introduces opaque painting techniques using acrylic paints.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Utilize fundamental knowledge of color mixing and various color schemes/relationships with acrylic paint with a variety of application techniques. (ILO: Communication)
- CLO\#2: Imagine creative solutions to subject matter, non-objective concepts, design, and expression within specific project.
- CLO\#3: Successfully explore individual solutions to problem-solving opportunities.


## ART 282 - Painting II

## 3 Credit(s)

## Prerequisite(s): ART 281

Course Description: Continues concepts and techniques introduced in ART 281. Explores a variety of techniques and concepts of various stylistic developments in painting. By focusing on conceptual differences and connections between stylistic periods, students are able to explore techniques developing a broad foundation of ideas and skills as well as facilitating the pursuit of individuality and creative thinking.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Utilize and explore a variety of historical styles of painting. (ILO: Communication)
- CLO\#2: Explore possibilities of personal style and visual language.
- CLO\#3: Relate personal artistic work to art theory, history, and practice.


## ART 283 - Painting III

## 3 Credit(s)

Prerequisite(s): ART 282
Course Description: Continues the methods of instruction introduced in ART 281 and ART 282, with emphasis on techniques and concepts of realism, consideration of value structure, sophistication of color scheme, and illusion of imagery.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop unique, personal work through creative use of advanced techniques.
- CLO\#2: Create and execute creative and sophisticated compositional strategies.
- CLO\#3: Identify and execute works of art in a distinct personal style. (ILO: Communication)


## ART 284 - Painting IV

## 3 Credit(s)

Prerequisite(s): ART 283
Course Description: Encourages students in developing critical as well as creative thinking through the exploration of materials, processes, concepts, and imagery; through exposure to a wide range of ideas, students develop their own sense of direction. Introduces advanced principles, methods and processes of painting through mini lectures, research, studio work and critique. Concepts based on contemporary ideas and images relating to painting are explored. Credits taken may be applied to the Oregon Transfer Degree, the Associate of General Studies degree, toward fulfilling the humanities requirement or elective requirement, or may be taken to pursue a personal educational track, whether towards a career in art, or for aesthetic and psychological enrichment.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply advanced concepts and techniques, including color technique, representational accuracy and imagination in a series of paintings. (ILO: Communication)
- CLO\#2: Develop sophisticated compositional strategies.
- CLO\#3: Realize personal artistic style in a body of work through a process of conceptualization, research, and sketches.


## ART 287 - Aqueous Media/Airbrush I

## 3 Credit(s)

Course Description: Introduces airbrush painting as applied to the commercial art field of illustration. The operation and care of airbrush equipment are covered, and students gain hands-on experience working in a variety of exercises to give them a basic knowledge of airbrush techniques. Students will learn about the use of airbrush in commercial art and the different techniques that develop artwork used in advertising and fine art.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the essential knowledge of airbrush painting, basic materials, and concepts.
- CLO\#2: Create finished illustrations with airbrush. (ILO: Communication)
- CLO\#3: Evolve and communicate design concepts for each project through the execution of rough drafts, comps and finals, for the purpose of presentation to clients.


## ART 288 - Aqueous Media/Airbrush II

## 3 Credit(s)

## Prerequisite(s): ART 287

Course Description: Continues techniques and methods used in ART 287 and develops more talent and interest in illustration by using the airbrush. Textures, patterns and color, with the added use of lettering, are used to develop camera-ready art work in four different projects. Continues work with students in developing portfolios that can be shown at any job interview.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Work fluently in advanced techniques in airbrush to fulfill design objectives.
- CLO\#2: Combine the application of tools and techniques of airbrush with various design processes and other media. (ILO: Communication)
- CLO\#3: Evolve design concepts through a process of rough drafts, comps and finals, and communicate these concepts to clients.


## ART 294 - Watercolor I

## 3 Credit(s)

Course Description: Introduces basic transparent watercolor and basic painting processes and techniques. Students expand their awareness of historical and contemporary practice in water-based media and explore a full range of essential techniques using both stretched and un-stretched paper surfaces. A combination of mini-lectures, demonstrations, studio work and group discussions emphasize the characteristics of the materials, color theory, creative thinking, self-expression, and a variety of painting styles and imagery.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate fluency in a wide-range basic watercolor painting techniques, including but not limited to, graded washes, wet-into wet, resist, hard-edged wash, warm and cool color layering on both stretched and unstretched paper surfaces. (ILO: Communication)
- CLO\#2: Engage formal issues of color theory, composition, and spatial construction in the context of watercolor painting.
- CLO\#3: Critically analyze and evaluate own work and the work of others.


## ART 295 - Watercolor II

## 3 Credit(s)

Prerequisite(s): ART 294

Course Description: Continues the exploration of basic transparent watercolor techniques along with the introduction of more experimental approaches to expand aesthetic awareness and develop a personal visual language in an historical and contemporary context. Students are required to demonstrate mastery of basic painting processes and techniques that make the development of creative thinking and self-expression possible. This course is a combination of lectures, demonstrations, studio work and group discussions that emphasize the characteristics of the materials, color theory, conceptualization, and a variety of painting styles and imagery.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Expand mastery in the usage of primarily translucent watercolor technique, begin to develop personal approaches to the medium. (ILO: Communication)
- CLO\#2: Demonstrate awareness of design and spatial issues in increasingly self-directed choices of subject matter.
- CLO\#3: Critically analyze and evaluate own work and the work of others.


## ART 296 - Watercolor III

## 3 Credit(s)

## Prerequisite(s): ART 295

Course Description: Students work in a semi-independent format, allowing them to develop a creative thinking and self-expression approach to painting style and imagery to expand aesthetic awareness and develop a personal visual language in an historical and contemporary context. Course assignments explore the practice of series development, media experimentation and mastering techniques, including the use of alternate painting surfaces such as Yupo and watercolor board. The emphasis is on individual development of imagery and style. A combination of mini-lectures, demonstrations, studio work and group discussions focus on the materials, theory, and philosophies of watercolor painting.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Conceptualize and execute paintings in a series, with a personal approach to style, technique, color, theory, and imagery. (ILO: Communication)
- CLO\#2: Create paintings independently.
- CLO\#3: Communicate ideas using written and graphic concepts introduced in lectures, projects and group discussions.


## ART 297 - Watercolor IV

## 3 Credit(s)

Prerequisite(s): ART 296
Course Description: Emphasizes study in a variety of water-based medium and approaches to fulfill educational goals specific to each student. It is set up as an open studio with individualized critiques and assigned research activities. Each student works on developing personal imagery, style, and art theory in a contemporary context. Students conceptualize and execute unique personal watercolor paintings based on individual research and interests.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Conceptualize and execute advanced, theoretically informed personal plan of study and studio practice.
- CLO\#2: Work independently to solve personally-identified issues of pictorial and symbolic language. (ILO: Communication)
- CLO\#3: Critically analyze and evaluate their own work and the work, symbol and pictures.


## ART 299 - Special Studies:Art

## Var. (1-6) Credit(s)

Prerequisite(s): Level III of a specific media area, (permission of Instructor).
Course Description: This course encourages the student to develop critical as well as creative thinking, through the exploration of materials, processes, concepts, and imagery; through exposure to a wide range of ideas, the student is enabled to develop his or her own sense of direction. This course introduces advanced principles, methods and processes of painting through mini lectures, research, studio work and critique. Concepts based on contemporary ideas and images relating to topic area are explored.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply advanced concepts and techniques. Includes color technique, representational accuracy and imagination in a series of paintings. (ILO: Communication)
- CLO\#2: Create a public mural in collaboration with other artists.
- CLO\#3: Realize artistic vision in collaborative work.


## AM 111 - Electricity for Automotive Technicians

## 2 Credit(s)

Prerequisite(s): AM 120 or AM 122. Must be an Automotive Technology or Diesel Technology student, and enrolled as a declared major in the program.

Course Description: Introduces the fundamentals of basic electricity and the use of electrical service and testing equipment. Provides instruction in all phases of starting and charging systems. Emphasis is on handheld instruments and basic troubleshooting techniques. Course is required for all entering Automotive Technology students, or waiver for equivalent work experience and ASE Electrical Systems certification.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate departmental policies and shop safety practices.
- CLO\#2: Discuss entry-level knowledge of electrical systems and electrical tools and test equipment.
- CLO\#3: Identify electrical circuits and components.
- CLO\#4: Interpret wiring diagrams. (ILO: Critical Thinking)
- CLO\#5: Troubleshoot diagnostics to starting and charging systems.


## AM 111L - Electricity for Automotive Technicians Lab

## 4 Credit(s)

Prerequisite(s): AM 120 or AM 122. Must be an Automotive Technology or Diesel Technology student enrolled as a declared major in the program.

Course Description: Introduces the fundamentals of basic electricity and the use of electrical service and testing equipment. Provides instruction in all phases of starting and charging systems. Emphasis is on hand-
held instruments and basic troubleshooting techniques. Course required for all entering Automotive Technology students or waiver for equivalent work experience and ASE Electrical Systems certification.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate departmental policies and shop safety practices.
- CLO\#2: Demonstrate general knowledge of electrical systems and electrical tools and test equipment.
- CLO\#3: Identify and test electrical circuits and components.
- CLO\#4: Prepare wiring diagrams and perform basic electrical repairs. (ILO: Critical Thinking)
- CLO\#5: Perform troubleshooting diagnostics to starting and charging systems.


## AM 120 - Automotive Maintenance and Practices

## 2 Credit(s)

Prerequisite(s): Must be an Automotive Technology or Diesel Technology student enrolled as a declared major in the program.

Corequisite(s): MTH 20 and BT 113 or WR 115, or designated placement.

Course Description: Introduces basic mechanical shop safety and industrial practices, professionalism and ethics, shop tools and equipment use, and basic automotive maintenance. Course or equivalent work experience required of all entering Automotive Technology students.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss safe working habits as practiced within the mechanical trades.
- CLO\#2: Research and develop a working knowledge of the care and use of common mechanical trades tools
- CLO\#3: Demonstrate competency in the use of information systems to locate procedures, prices, labor time and parts. (ILO: Information Literacy)
- CLO\#4: Research and study basic mechanical maintenance operations.
- CLO\#5: Demonstrate a professional attitude, research and describe proper ethics expected by the industry and discuss the skills of how to work effectively in a team environment.
- CLO\#6: Demonstrate knowledge of hazardous materials found in the mechanical trades and how to handle them.


## AM 120L - Automotive Maintenance and Practices Lab

## 4 Credit(s)

Prerequisite(s): Must be an Automotive Technology or Diesel Technology student enrolled as a declared major in the program.

Corequisite(s): MTH 20 and BT 113 or WR 115, or designated placement.
Course Description: Practice basic mechanical shop safety and industrial practices, professionalism and ethics, shop tools and equipment use, and basic automotive maintenance. Course or equivalent work
experience required of all entering Automotive Technology students.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe working habits as practiced within the mechanical trades.
- CLO\#2: Demonstrate a working knowledge of the care and use of common mechanical trades tools.
- CLO\#3: Demonstrate competency in the use of information systems to locate procedures, prices, labor time and parts. (ILO: Information Literacy)
- CLO\#4: Perform basic mechanical maintenance operations.
- CLO\#5: Demonstrate a professional attitude, practice ethics expected by the industry, and work effectively in a team environment.
- CLO\#6: Demonstrate knowledge of hazardous materials found in the mechanical trades and how to handle them.


## AM 122 - Gasoline Engines Rebuild

## 3 Credit(s)

Prerequisite(s): MTH 20, WR 115 or BT 113 or designated placement.

## Corequisite(s): AM 122L

Course Description: Introduces theory and construction of various gasoline internal combustion engines and how to rebuild, service, inspect, and repair them.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate departmental policies and shop safety practices. Cite and demonstrate safe working practices related to engines.
- CLO\#2: Identify the major parts of a typical automotive engine, describe the four-stroke cycle. Explain the basic function of the major parts of an automotive engine. (ILO: Information Literacy)
- CLO\#3: Define common industry standard engine terms. Describe basic automotive engine classifications.
- CLO\#4: Correctly answer ASE certification test questions that require knowledge of the basic operation of piston engines.


## AM 122L - Gasoline Engines Rebuild Lab

## 4 Credit(s)

Corequisite(s): MTH 20 or designated placement, and BT 113 or WR 115 or designated placement, and AM 122.

Course Description: A practical application of the theory taught in AM122. Identify major automotive engine types and designs. Disassemble an engine to measure, inspect, and determine functionality of engine components. Correctly reassemble an engine and confirm by operating the engine. This lab is taken concurrently with AM122.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate departmental policies and shop safety practices
- CLO\#2: Research and use specifications to inspect, diagnose, and measure engine parts to determine causes of wear or failure. (ILO: Information Literacy)
- CLO\#3: Use specifications for inspection and procedures necessary for parts ordering.
- CLO\#4: Assemble the components of the engine to operating condition.


## AM 131 - Engine Dynamics and Diagnosis

## 3 Credit(s)

Prerequisite(s): AM 120 or AM 122
Course Description: Provides students with basic engine performance skills. Topics covered are basic and electronic ignition systems, basic fuel systems, oscilloscope diagnosis, emissions systems, infrared diagnosis, and mechanical diagnosis.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the basic principles of operation of modern automotive ignition and fuel systems.
- CLO\#2: Apply basic principles of operation to advanced diagnostic techniques of modern ignition and fuel system malfunctions.
- CLO\#3: Read and interpret oscilloscope patterns, and scan tool diagnostic data streams to identify malfunctioning ignition and fuel system components. (ILO: Critical Thinking)


## AM 131L - Engine Dynamics and Diagnosis Lab

## 4 Credit(s)

Prerequisite(s): AM 120 or AM 122
Course Description: Provides student with basic engine performance skills. Topics covered are the repair of basic electronic ignition systems, basic fuel systems, emission systems and engine mechanical components based on scan tool diagnosis, oscilloscope diagnosis, infrared diagnosis, and mechanical diagnosis.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the basic principles of operation of modern automotive ignition and fuel systems.
- CLO\#2: Apply basic principles of operation to advanced diagnostic techniques of modern ignition and fuel system malfunctions.
- CLO\#3: Professionally perform necessary repairs, as per industry standard, to malfunctioning ignition and fuel systems. (ILO: Critical Thinking)


## AM 141 - Manual Transmissions and Transaxles

Prerequisite(s): AM 111 and AM 120
Course Description: Covers theory of operation, maintenance, diagnosis, and repair of manual transmissions and transaxles, clutches, drive axles, and four-wheel and all-wheel drive systems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the basic principles of operation and service techniques of a manual transmission.
- CLO\#2: Describe service techniques to perform inspections, tests and component diagnosis.
- CLO\#3: Research and develop a proper strategy to professionally perform necessary repairs as per industry standards. (ILO: Critical Thinking)


## AM 141L - Manual Transmissions and Axles Lab

## 3 Credit(s)

Prerequisite(s): AM 111 and AM 120
Course Description: Covers theory of operation, maintenance, diagnosis, and repair of manual transmissions and transaxles, clutches, drive axles and four-wheel and all-wheel drive systems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the basic principles of operation and service techniques of a manual transmission.
- CLO\#2: Apply service techniques to perform inspections, tests and component diagnosis.
- CLO\#3: Professionally perform necessary repairs as per industry standards. (ILO: Critical Thinking)


## AM 151 - Automotive Brake Systems

## 2 Credit(s)

Prerequisite(s): AM 111 and AM 120

Course Description: Covers the principles of brake operation, function, and design as well as troubleshooting, overhauling, repairing, and servicing of automotive brake systems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain basic principles of operation and service techniques of the automobile brake systems.
- CLO\#2: Determine service techniques to perform safety inspections, system tests, and diagnosis of possible problem areas related to the automotive brake system.
- CLO\#3: Develop a strategy to perform the necessary adjustments and repairs to meet industry / NATEF standards. (ILO: Critical Thinking)

AM 151L - Automotive Brake Systems Lab

## 4 Credit(s)

Prerequisite(s): AM 111 and AM 120

Course Description: Covers the principles of brake operation, function, and design as well as troubleshooting, overhauling, repairing, and servicing of automotive brake systems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the basic principles of the automotive brake system operation in action, and perform service repairs of the automobile brake systems.
- CLO\#2: Apply service techniques to perform safety inspections, system tests, and diagnosis of automotive brake systems.
- CLO\#3: Professionally perform the necessary adjustments and repairs to meet industry / NATEF standards after determining the proper repair required with proper diagnostic procedures. (ILO: Critical Thinking)


## AM 160 - Auto Suspension and Steering Systems

## 2 Credit(s)

Prerequisite(s): AM 111 and AM 120

Course Description: Focuses on the diagnosis and repair of major under-car components and wheel alignment. Topics covered are suspension and steering systems as well as front- and rear wheel alignment.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the principles of alignment and geometry.
- CLO\#2: Explain how to prevent uneven tire wear.
- CLO\#3: Describe how to repair problems of alignment and geometry as it relates to the automotive industry. (ILO: Critical Thinking)
- CLO\#4: Explain the proper techniques of a complete under-car inspection.


## AM 160L - Auto Suspension and Steering Systems Lab

## 4 Credit(s)

Prerequisite(s): AM 111 and AM 120

Course Description: Focuses on the diagnosis and repair of major under-car components and wheel alignment. Topics covered are suspension and steering systems as well as front and rear wheel alignment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize the principles of alignment and geometry.
- CLO\#2: Identify how to prevent uneven tire wear.
- CLO\#3: Troubleshoot problems of alignment and geometry. (ILO: Critical Thinking)
- CLO\#4: Demonstrate how to operate the equipment pertaining to alignment and geometry.
- CLO\#5: Perform a complete under-car inspection.


## AM 190 - Automotive Repair Lab I

## 4 Credit(s)

Prerequisite(s): AM 111 and AM 120
Course Description: Provides live work experience in all aspects of repair expected of entry-level line technicians. Includes basic engine performance, diagnosis and repair of engines, chassis, power trains, and basic electrical systems. Primarily designed for first-year students or those with appropriate skill levels.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform advanced diagnosing and testing of the various automotive systems.
- CLO\#2: Perform advanced overhauling and repairing the various automotive system components. (ILO: Critical Thinking)
- CLO\#3: Demonstrate professional work habits, attitudes and safety practices as required by industry.
- CLO\#4: Students will effectively document all repairs performed on vehicles.


## AM 199-Special Studies: Automotive

Variable (1-3) Credit(s)
Prerequisite(s): AM 111 and AM 120
Course Description: Focuses study in a variety of mechanical technology topics to fulfill specific educational goals.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identifies need for data, obtains it from existing sources or creates it, and evaluates its relevance and accuracy.
- CLO\#2: Organizes, processes, and maintains written or computerized records and other forms of information in a systematic fashion.
- CLO\#3: Selects and analyzes information and communicates the results to others using oral, written, graphic, pictorial, or multimedia methods. (ILO: Communication)
- CLO\#4: Employs computers to acquire, organize, analyze, and communicate information.


## AM 210 - Mechanical Careers Development

## 1 Credit(s)

Prerequisite(s): AM 111 and AM 120

Course Description: Introduces students with industry expectations related to professionalism. Includes communication in the workplace, effective employee/employer relations, and job search skills. Course is for
second-year students only.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the industry standard for professionalism
- CLO\#2: Develop the tools and strategies needed for a successful employment search including cover letters, resumes, and interviewing skills. (ILO: Communication)


## AM 232 - Computerized Engine Management Systems

## 3 Credit(s)

## Prerequisite(s): AM 131

Course Description: Provides students with computer-managed engine performance skills. Topics covered are computer engine control systems, fuel injection, turbo-charging, and the use of sophisticated electronic test equipment to diagnose problems in these systems.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain basic principles of operation and diagnostic procedures in the automotive DI and El Ignition systems.
- CLO\#2: Compare and explain basic principles of operation concerning automotive computer input and output devices.
- CLO\#3: Apply basic principles of operation and perform diagnostics on electronic fuel injection systems.
- CLO\#4: Discuss and develop accepted procedures for system diagnosis and repair. (ILO: Critical Thinking)


## AM 232L - Computerized Engine Management Systems Lab

## 4 Credit(s)

Prerequisite(s): AM 131

Course Description: Provides students with computer-managed engine performance skills. Topics covered are computer engine control systems, fuel injection, turbo-charging, and the use of sophisticated electronic test equipment to diagnose problems in these systems.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply basic principles of operation and perform diagnostics DI and El Ignition systems.
- CLO\#2: Apply basic principles of operation and perform diagnostics on computer input and output devices.
- CLO\#3: Apply basic principles of operation and perform diagnostics on electronic fuel injection systems.
- CLO\#4: Demonstrate accepted industry procedures for system diagnosis and repair. (ILO: Critical Thinking)


## AM 233 - Advanced Automotive Computer Systems

## 4 Credit(s)

Prerequisite(s): AM 232

Course Description: Topics include On-Board Diagnostics II (OBDII) systems, network computer systems, airbag system diagnosis, anti-lock brake diagnosis, electronic instrument clusters, security systems, and various other automotive computer systems.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Research and utilize the automotive lab scope as a diagnostic tool. (ILO: Critical Thinking)
- CLO\#2: Explain the principles of operation and service techniques of OBDII diagnostics.
- CLO\#3: Evaluate advanced diagnostic strategies, and advanced tools used in the diagnosis and repair of a modern automotive microprocessor system.
- CLO\#4: Research and document service techniques to perform inspections, tests and component diagnosis of automotive air bag systems. Discuss the proper operation and service procedures of automotive network communication systems.


## AM 233L - Advanced Automotive Computer Systems Lab

## 3 Credit(s)

Prerequisite(s): AM 232

Course Description: Topics include On-Board Diagnostics II (OBDII) systems, network computer systems, airbag system diagnosis, anti-lock brake diagnosis, electronic instrument clusters, security systems, and various other automotive computer systems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Practice using the automotive lab scope as a diagnostic tool. (ILO: Critical Thinking)
- CLO\#2: Explain and apply the principles of operation and service techniques of OBDII diagnostics.
- CLO\#3: Apply advanced principles, advanced tools, and knowledge in the diagnosis and repair of a modern automotive microprocessor system.
- CLO\#4: Apply service techniques to perform inspections, tests and component diagnosis automotive air bag system operation and service procedures.


## AM 242 - Automatic Transmissions and Transaxles

## 3 Credit(s)

Prerequisite(s): AM 141

Course Description: Covers theory of operation, diagnosis, maintenance, and repair of automotive automatic transmissions and transaxles.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the basic principles of operation and service techniques of an automatic transmission. (ILO: Critical Thinking)
- CLO\#2: Research and report proper service techniques to perform inspections, tests and component diagnosis.
- CLO\#3: Describe the proper techniques to perform necessary repairs as per industry standards.


## AM 242L - Automatic Transmissions and Transaxles Lab

4 Credit(s)
Prerequisite(s): AM 141

Course Description: Covers theory of operation, diagnosis, maintenance, and repair of automotive automatic transmissions and transaxles.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the basic principles of operation and service techniques of an automatic transmission. (ILO: Critical Thinking)
- CLO\#2: Apply service techniques to perform inspections, tests and component diagnosis.
- CLO\#3: Demonstrate diagnostics and related repairs as per industry standards.


## AM 270 - Air Conditioning for Automotive Technicians

## 2 Credit(s)

Prerequisite(s): AM 111 and AM 120
Course Description: Covers vehicle automotive air conditioning systems theory and operation. Uses industry identified skills for diagnosis, repair, and servicing of R12 and R134A systems. Also covers government regulations in the safe handling of refrigerants.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the basic principles of operation and service of various automobile air conditioning systems.
- CLO\#2: Describe the service techniques to perform inspections, tests, and component diagnosis. (ILO: Critical Thinking)
- CLO\#3: Describe the proper methods of how to operate refrigerant recovery, recycling and charging equipment.
- CLO\#4: Describe the proper handling and storage of different types of refrigerant as per industry standards.


## AM 270L - Air Conditioning for Automotive Technicians Lab

Course Description: Covers vehicle automotive air conditioning systems theory and operation. Uses industry identified skills for diagnosis, repair, and servicing of R12 and R134A systems. Also covers government regulations in the safe handling of refrigerants.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the basic components and describe the operation of various automobile air conditioning systems.
- CLO\#2: Apply the service techniques to perform inspections, tests, and component diagnosis. (ILO: Critical Thinking)
- CLO\#3: Demonstrate proper operation of refrigerant recovery, recycling and charging equipment.
- CLO\#4: Demonstrate necessary repairs as per industry standards.


## AM 280-Cooperative Work Experience/Automotive

## 3 Credit(s)

Prerequisite(s): Permission of CWE Instructor or Department Chair
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a career-related experience for students working for an approved employer. As a capstone course, students should complete this course within the last 2 terms of their certificate or degree.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Successfully complete the interview process.
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines. (ILO: Communication)
- CLO\#3: Apply program knowledge, theories, principles, methods and technology while gaining new knowledge, skills and experience while on the jobsite.
- CLO\#4: Establish contacts which will help in obtaining employment.


## AM 290 - Automotive Repair Lab II

## 4 Credit(s)

Prerequisite(s): AM 190
Course Description: Continues building skills, knowledge, and work habits related to all types of automotive repair work performed in the industry. Course is for second-year students, or can be taken in place of cooperative work experience.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform advanced diagnosing and testing of the various automotive systems.
- CLO\#2: Perform advanced overhauling and repairing the various automotive system components. (ILO: Critical Thinking)
- CLO\#3: Identify the expectations in a professional work environment.
- CLO\#4: Exhibit professional work habits, attitudes and safety practices as required by industry.


## BA 101 - Introduction to Business

## 4 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Introduces the history of business and economic systems in America. Covers the structure of business organizations by taking students through each of the functional areas of business: management, marketing, finance and accounting. The purpose of the class is to familiarize students with basic business principles and concepts through the use of terminology and examples. Students will also become familiar with the major sections of a basic business plan and the key elements found in each section.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare and contrast the features of the three basic types of economic systems.
- CLO\#2: Explain the role of business ethics and social responsibility in the current business climate.
- CLO\#3: Explain the pros and cons of the sole proprietorship, partnership, and corporate forms of ownership.
- CLO\#4: Distinguish among the five functions of management (planning, organizing, staffing, directing, and controlling).
- CLO\#5: Recognize the role of labor unions in business and compare the various tools used to achieve their objectives.
- CLO\#6: Explain the role of marketing in business and differentiate between product, place, price, and promotion strategies.
- CLO\#7: Identify the various institutions which comprise the U. S. monetary system.
- CLO\#8: Differentiate among the various types of stocks and bonds available on the market.
- CLO\#9: Explain the role of the Federal Reserve System.
- CLO\#10: Compare the use of debt financing vs. equity financing.
- CLO\#11: Using a worksheet provided by the Instructor, list (in order) the major sections of a basic business plan and the key elements found in each section. (ILO: Critical Thinking)


## BA 109 - Ready, Set, Work: Techniques for Landing A Job

## 2 Credit(s)

Prerequisite(s): BA 131 or CIS 120 (formerly offered as CS120), and BT 113 or WR 115, or designated placement.

Course Description: Ready, Set, Work: Techniques for Landing a Job prepares students for employment by focusing on resume, cover letter, and application preparation; interview presentation; job search
techniques; work ethic and professional image; interpersonal relationships; and business etiquette in the workplace. Students are expected to have completed most of their coursework toward a certificate or degree program before taking this class. All students, both in-class and online, must complete an in-person interview to pass the class (while video-conferencing is not a substitute, there may be times in which this is accepted).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Research job market and opportunities via the web and via networking. (ILO: Information Literacy)
- CLO\#2: Develop and prepare a resume. (ILO: Communication)
- CLO\#3: Develop and prepare a cover letter and thank-you letter.
- CLO\#4: Complete a job employment application and reference list.
- CLO\#5: Prepare and participate in a mock employment interview.


## BA 131 - Introduction to Business Computing

## 4 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement and MTH 20 or designated placement.

Corequisite(s): (BT 113 or WR 115) or designated placement
Course Description: Covers basic computer applications for business. Students will gain hands-on experience with Microsoft Office 365/2021 applications using file management, word processing, spreadsheet,and media presentation software to create a variety of business documents, spreadsheets, and slide shows. Students must have access to the following Microsoft applications: Word 2021, Excel 2021, and PowerPoint 2021. Students should plan on using a Windows PC for this course.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Utilize Microsoft Office applications as professional management tools.
- CLO\#2: Develop a working knowledge of the following functions in Microsoft Word which include but are not limited to: creating, editing and formatting business documents, text emphasis, document collaboration, citations, headers, footers, tables and graphics. (ILO: Critical Thinking)
- CLO\#3: Develop a working knowledge of the following functions in Microsoft PowerPoint which include but are not limited to: crediting, editing and formatting a presentation, adding illustrations and charts, and navigating a presentation. (ILO: Critical Thinking)
- CLO\#4: Develop a working knowledge of the following functions in Microsoft Excel which include but are not limited to: creating, editing and formatting spreadsheets, creating mathematical formulas, understanding mathematical and statistical functions, using absolute and relative addressing, using datasets, tables, Pivot tables and charts. (ILO: Critical Thinking)
- CLO\#5: Demonstrate how Microsoft PowerPoint can be used as a tool for communication.
- CLO\#6: Integrated Final Project, containing files from Microsoft Word, PowerPoint, and Excel.


## BA 177 - Payroll and Tax Procedures

## 3 Credit(s)

Prerequisite(s): BA 131 and BA 211

Recommended Prerequisite(s): BA 285 or CIS 125SS
Course Description: Emphasizes understanding of the federal and state payroll laws and regulations, calculating earnings and deductions, preparing payroll records, understanding and preparation of federal and state payroll tax deposits and tax returns, and accounting for payroll.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the duties and responsibilities of the payroll professional, defining payroll accounting and the steps involved in the payroll accounting process.
- CLO\#2: Describe United States employment and tax law regarding payroll including record-keeping requirements.
- CLO\#3: Manually calculate gross pay and correct hours including regular, overtime, and holiday considerations for employees. Determine before and after tax deductions including salary reduction and cafeteria plans.
- CLO\#4: Calculation of FICA taxes and Federal, State, and local income tax withholdings. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Prepare Payroll Register and Employee Earnings Records manually and on Excel. Record Payroll Journal entries.
- CLO\#6: Apply the Federal Tax Deposit Rules for 940 and 941 taxes and the state deposit rules and filing requirements. Prepare form 940 and understand the purpose and filing requirements.
- CLO\#7: Calculate state and federal unemployment liabilities.
- CLO\#8: Understand what worker's compensation insurance looks for and calculate worker's compensation.
- CLO\#9: Preparing year-end reports including W-2 and W-3 forms and other year-end State reports.
- CLO\#10: Analyze and discuss payroll related word problems; and respond to the comments of others.


## BA 199-Special Studies: Business

Var. (1-3) Credit(s)
Prerequisite(s): Permission of Instructor. Other prerequisites may vary depending on subject offerings.
Course Description: Selected topics of study in business are offered on demand through workshops, seminars, lecture, lab, and/or independent study format.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, and research papers.


## BA 206 - Management Fundamentals

## 3 Credit(s)

Prerequisite(s): BA 101

Recommended Prerequisite(s): BT 101 and BT 102
Course Description: Teaches fundamental management principles and is designed to build on the information contained in BT 101 Human Relations in Organizations, BA 101 Introduction to Business, and BT 102 Introduction to Supervision. The emphasis of the course is designed to cover the four functions of management (planning, organization, directing, and controlling) from a socially responsible and ethical view. Students will be able to distinguish among different types of plans, develop mission statements, set goals and objectives, design an organizational structure, and recognize staffing and training issues. They will also be exposed to motivation and leadership theories, managing human resources, working in teams, and evaluation (controlling) of the planning process.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the history and framework of management theories/thought.
- CLO\#2: Define and give examples of the five functions of management (planning, organizing, staffing, directing, and controlling).
- CLO\#3: Give examples of when each of the four leadership styles (autocratic, democratic, laissez faire, and participatory) is appropriate.
- CLO\#4: Explain the difference between tactical, operational, strategic, and contingency planning and when each would be used in an organization.
- CLO\#5: Recognize the key elements of major pieces of legislation that impact human relations policies within an organization.
- CLO\#6: Explain why the "control" function of management closes the loop in the planning process.
- CLO\#7: Identify and discuss the steps in establishing teams, comparing the roles of team members and team leaders.
- CLO\#8: Identify the sources of conflict in an organization and describe the manager's role in developing strategies to manage conflict. (ILO: Critical Thinking)


## BA 211 - Financial Accounting I

## 4 Credit(s)

Prerequisite(s): BA 131 or CIS 120 (formerly offered as CS120) and BT 160 or higher-level math.
Course Description: 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). Includes accounting for cash, receivables, long-term assets; inventory, internal controls, current and long-term liabilities; corportation accounting and the preparation of cash flows.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use accounting vocabulary; apply accounting concepts and principles; use the accounting equation; analyze business transactions; prepare financial statements; and evaluate business performance.
- CLO\#2: Use accounting terms; apply the rules of debit and credit; record transactions in the journal; post from the journal to the ledger; and prepare and use a trial balance.
- CLO\#3: Distinguish accrual accounting from cash-basis accounting; apply the revenue and matching principles; make adjusting entries; prepare an adjusted trial balance; and prepare the financial statements from the adjusting trial balance.
- CLO\#4: Prepare an accounting work sheet; use the work sheet; close the revenue, expense, and dividend accounts; classify assets and liabilities as current or long-term.
- CLO\#5: Account for the purchase of inventory; account for the sale of inventory; adjust and close the accounts of a merchandising business; prepare a merchandiser's financial statements; use gross profit percentage and inventory turnover to evaluate a business; and compute cost of goods sold in a periodic inventory system.
- CLO\#6: Account for inventory by the FIFO, LIFO, and average-cost methods in the perpetual and periodic inventory systems; compare the effects of FIFO, LIFO, and average cost; apply the lower-of-cost-or-market rule to inventory; measure the effects of inventory errors; and estimate ending inventory by the gross profit method.
- CLO\#7: Define internal control; describe good internal control procedures; prepare bank reconciliation and the related journal entries; apply internal controls to cash receipts; apply internal controls to cash payments; and make ethical business judgments.
- CLO\#8: Design internal controls for receivables; use the allowance method to account for receivables; understand the direct write-off method for receivables; account for notes receivable and discount a notes receivable; report receivables on the balance sheet; and use the acid-test ratio and days' sales in receivables to evaluate a company.
- CLO\#9: Measure the cost of a plant asset; account for depreciation; select the best depreciation method for tax purposes; account for the disposal of a plant asset; account for natural resources; and account for intangible assets.
- CLO\#10: Account for current liabilities of known amount; account for current liabilities that must be estimated; compute payroll amounts; record basic payroll transactions; use a payroll system; account for bonds payable; measure interest expense by the straight-line amortization method; account for retirement and conversion of bonds payable; report liabilities on the balance sheet; and apply the time value of money concepts for bond purchases.
- CLO\#11: Identify the characteristics of a corporation; record the issuance of stock; prepare the stockholders' equity section of a corporation balance sheet; account for cash dividends; use different stock values in decision making; evaluate return on assets and return on stockholders' equity; and account for the income tax of a corporation.
- CLO\#12: Account for stock dividends; distinguish stock splits from stock dividends; account for treasury stock; report restrictions on retained earnings; and analyze a corporate income statement.
- CLO\#13: Indicate the usefulness of the statement of cash flows; distinguish among operating, investing, and financing activities; prepare a statement of cash flows using the indirect and direct methods; and analyze the statement. (ILO: Quantitative Literacy and Reasoning)


## BA 212 - Financial Accounting II

## 4 Credit(s)

## Prerequisite(s): BA 211

Course Description: Continues the study of financial accounting theory with more in-depth study of asset, liability, and equity accounting in accordance with generally accepted accounting principles (GAAP). Includes accounting for receivables; plant assets, natural resources, and intangibles; current and long-term liabilities; investments; payroll; stockholders' equity; the preparation of the statement of cash flows; and financial statement analysis.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use accounting terms; apply the rules of debit and credit; record transactions in the journal; post from the journal to the ledger; and prepare and use a trial balance. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Design internal controls for receivables; use the allowance method to account for receivables; understand the direct write-off method for receivables; account for notes receivable and discount a notes receivable; report receivables on the balance sheet; and use the acid-test ratio and days' sales in receivables to evaluate a company.
- CLO\#3: Measure the cost of a plant asset; account for depreciation; select the best depreciation method for tax purposes; account for the disposal of a plant asset; account for natural resources; and account for intangible assets.
- CLO\#4: Account for current liabilities of known amount; account for current liabilities that must be estimated; compute payroll amounts; record basic payroll transactions; use a payroll system; account for bonds payable; measure interest expense by the straight-line amortization method; account for retirement and conversion of bonds payable; report liabilities on the balance sheet; and apply the time value of money concepts for bond purchases.
- CLO\#5: Identify the characteristics of a corporation; record the issuance of stock; prepare the stockholders' equity section of a corporation balance sheet; account for cash dividends; use different stock values in decision making; evaluate return on assets and return on stockholders' equity; and account for the income tax of a corporation.
- CLO\#6: Account for stock dividends; distinguish stock splits from stock dividends; account for treasury stock; report restrictions on retained earnings; and analyze a corporate income statement.
- CLO\#7: Indicate the usefulness of the statement of cash flows; distinguish among operating, investing, and financing activities; prepare a statement of cash flows using the indirect and direct methods; and analyze the statement.
- CLO\#8: Discuss the need for and tools for comparative and financial statement analysis; explain and apply horizontal and vertical analysis; identify and compute ratios and describe their purpose and use in analyzing a firm's liquidity, profitability, and solvency; and identify the limitations of statement analysis.
- CLO\#9: Examine and interpret ethical dilemmas in the field of accounting and make ethical business judgements based on codes of conduct, laws, and generally accepted accounting principles.


## BA 213 - Managerial Accounting

## 4 Credit(s)

Prerequisite(s): BA 211 or BA 212
Course Description: Covers the foundations of management accounting, including various types of business enterprise cost accounting systems, analyzing cost/volume/profit relationships, management planning and budgeting, accounting ethics, evaluating performance, and capital investment decisions. Uses word processing, spreadsheet, and general ledger software when applicable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain features of managerial accounting and identify the functions of management; define the three classes of manufacturing costs; distinguish between product and period costs; calculate the cost of goods manufactured; and explain the difference between a merchandising and manufacturing income statement and balance sheet.
- CLO\#2: Explain characteristics and purposes of cost accounting; describe the flow of costs in a job order cost accounting system; explain nature and importance of a job order cost sheet; indicate how predetermined overhead costs are determined and used; prepare entries for jobs completed \& sold; \& distinguish between under- \& over applied manufacturing overhead.
- CLO\#3: Describe the uses of the process cost system; explain the similarities and differences between job order cost and process cost systems; explain the flow of costs in a process cost system; prepare the journal entries to assign manufacturing costs in a process cost system; compute equivalent units; prepare a production cost report. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Explain activity-based (ABC) costing; just-in-time (JIT) processing; and quality management systems.
- CLO\#5: Distinguish between variable, fixed, and mixed costs; explain the significance of relevant range; list the components of cost-volume-profit analysis; define contribution margin and how it can be expressed; calculate the break-even point, margin of safety, and sales needed to reach a target net income; and describe the essential feature of a cost volume-profit income statement.
- CLO\#6: Indicate the benefits of and essentials of effective budgeting; identify the budgets that comprise the master budget; describe the sources of preparing the budgeted income statement; explain the principal sections of a cash budget; and indicate the applicability of budgeting in nonmanufacturing companies.
- CLO\#7: Describe the concept of budgetary control; evaluate the usefulness of static budget reports; explain the development of flexible budgets and the usefulness of flexible budgets and the usefulness of flexible budget reports.
- CLO\#8: Identify the features of a standard cost accounting system, the advantages of standard costs and how standards are set; state the formulas for determining direct materials, direct labor, and manufacturing overhead variances; and describe the reporting of variances.
- CLO\#9: Describe the concept of responsibility accounting and identify the content of responsibility reports for cost and profit centers; and explain the basis and formula used in evaluating performance in investment centers.
- CLO\#10: Identify the steps in management's decision-making process; describe the concept of incremental analysis; identify the relevant costs in accepting an order at a special price, product \& sales mix, make-or-buy decisions, and sell or process materials further.
- CLO\#11: Identify the relevant factors to be considered in retaining or replacing equipment and in deciding whether to eliminate an unprofitable segment; and compare and contrast the capital budgeting techniques of annual rate of return, cash payback, net present value, and internal rate of return.


## BA 214 - Business Communications

## 4 Credit(s)

Prerequisite(s): BA 131 or CIS 120 (formerly offered as CS120), and BT 114 or WR $121 Z$

## Recommended Prerequisite(s): CIS 125WW

Course Description: Focuses on planning, creating, writing, and revising typical business documents such as letters, memos, reports, and presentations using current communication technologies (word processing, spreadsheets, graphical presentations, email, and the Internet). Understanding the purpose of communication in business is also covered. Use of word processing software for in-class/online assignments and examinations is required.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Utilize the basic theories of communication.
- CLO\#2: Utilize effective formatting for quality business documents, such as letters, memos, and informal reports to address a variety of business situations.
- CLO\#3: Utilize appropriate software to format documents.
- CLO\#4: Write letters and memos on various topics, using tactics suitable to the case under consideration.
- CLO\#5: Produce a formal report integrating data from various sources. (ILO: Communication)
- CLO\#6: Present using appropriate visual support materials.
- CLO\#7: Research online resources for communication.


## BA 218 - Personal Finance

## 3 Credit(s)

Prerequisite(s): BT 160 and WR 90 or WR 91 or designated placement
Course Description: Personal Finance is designed to acquaint the student with finance principles, terminology, and practical concepts of sound financial planning. Students will be introduced to such topics as managing cash and savings; consumer purchasing strategies; renting versus home-ownership; shopping for health, life, home, disability, and automobile insurance; preparing a personal financial plan; wise use of credit; financial institutions; identity theft; bankruptcy; fundamentals of investing; retirement planning; and estate planning.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define the key terms used in the field of personal financial planning.
- CLO\#2: List and explain the major employment and credit legislation covered in the course.
- CLO\#3: Discuss the pros and cons of development good credit practices and using credit wisely. (ILO: Critical Thinking)
- CLO\#4: Distinguish among the various types of life, health, and property insurance plans and relate this information to your own personal needs.
- CLO\#5: Analyze the advantages and disadvantages of various investment options in light of personal needs, resources, and retirement goals.
- CLO\#6: Identify two major methods of computing interest and use each method to compute the cost of loans.
- CLO\#7: Differentiate among various types of stocks, bonds, and mutual funds.
- CLO\#8: Compare various estate planning options and choose one to meet your personal needs.
- CLO\#9: Compare and contrast renting versus home ownership.
- CLO\#10: Explore a personal finance topic of interest in depth and determine how it applies in your life. (ILO: Information Literacy)


## BA 223 - Principles of Marketing

## 3 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement.
Recommended Prerequisite(s): BA 101

Course Description: This course is designed to acquaint the student with basic marketing principles, terminology, and applied marketing concepts. Introduces students to the marketing concept, promotional and pricing strategies, consumerism, product and distribution strategies, governmental influence on marketing, marketing research, market segmentation, and consumer/industrial/ government buying behavior.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the relationship of the 4-Ps of the marketing mix and their effect on marketing strategy.
- CLO\#2: Use the Internet as a market segmentation tool to determine the target market for a specific product/service. (ILO: Information Literacy)
- CLO\#3: Cite several pieces of consumer legislation covered in the text and their impact on marketing.
- CLO\#4: Evaluate the major parts of a questionnaire and cover letter using principles of marketing research covered in class.
- CLO\#5: Define and explain the relationship between selling price, variable costs, fixed costs, contribution margin, break-even point in dollars, and break-even point in units.
- CLO\#6: List (in order) and describe the steps in the marketing research process.
- CLO\#7: Differentiate among various advertising mediums and give an example of when to use each medium.
- CLO\#8: Differentiate among various pricing strategies and give an example of when to use each strategy.
- CLO\#9: Define and give examples of various categories of wholesalers.
- CLO\#10: Define and give examples of institutional, comparative, product, information, persuasive, and subliminal advertising.
- CLO\#11: Define and give examples of various classifications of retailers.


## BA 224 - Human Resource Management

## 3 Credit(s)

Prerequisite(s): BT 113 or BA 101 and WR 115 or designated placement.

## Recommended Prerequisite(s): BT 102 and BA 206

Course Description: Designed to build on the information contained in human relations and introductory management classes. Students will be introduced to functions, principles, practices, and techniques of human resources management. Topics covered include the role of HRM, developing and implementing strategic HRM plans, diversity and multiculturalism, recruitment, selection, compensation and benefits, retention and motivation, training and development, managing employee performance, employee assessment, working with labor unions, safety and health at work, and international HRM.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Discuss the role and activities of the human resource management function in an organization.
- CLO\#2: Describe the federal and state laws that govern employment.
- CLO\#3: Explain workplace health and safety protections including the major provisions of the Occupational Safety and Health Act (OSHA).
- CLO\#4: Develop a job analysis, description, and specification.
- CLO\#5: Propose a plan to recruit, selection, orient, train, and evaluate employees within legal guidelines. (ILO: Communication)
- CLO\#6: Analyze key issues related to employee retention such as job design, motivation, compensation and benefits, diversity and inclusion, and career development. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## BA 226 - Business Law

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: This course presents a brief introduction to the American legal system, structure of state and federal court systems, pertinent business legislation, Uniform Commercial Code, and obligations arising from tort law. Emphasis on formation, performance, discharge, and interpretation of contracts. Third party contracts, warranties, and product liability issues are also covered.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the structure of the United States judicial system.
- CLO\#2: Distinguish between civil and criminal law.
- CLO\#3: Explain the requirements for a tort and define several types of torts.
- CLO\#4: Differentiate among the various types of contracts (formal, informal, unilateral, bilateral, executory, executed, express, implied, quasi, void, valid, voidable, and third-party).
- CLO\#5: Analyze specific business law cases by stating the facts, applying the law, and resolving the issues. (ILO: Critical Thinking)
- CLO\#6: List and explain what parties lack the capacity to legally enter into contracts.
- CLO\#7: List and describe the elements necessary for a valid contract.
- CLO\#8: List the ways a contract can be legally discharged/ terminated.
- CLO\#9: Discuss the various remedies available for breach of contract.
- CLO\#10: Explain what contracts must be in writing based on the Statutes of Fraud.
- CLO\#11: Differentiate between express and implied warranties.
- CLO\#12: Cite the major pieces of legislation enacted in the past 40 years that impact business today.


## BA 228 - Computer Accounting Applications

## 2 Credit(s)

Prerequisite(s): BA 131 and BA 211
Course Description: Covers the application of integrated software (QuickBooks) as an accounting tool in service and merchandising companies. Includes general ledger, accounts receivable, accounts payable, inventory, and payroll. Emphasis is on incorporating knowledge of manual accounting into a computerized system.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Set up a company using computer accounting software.
- CLO\#2: Establish and maintain a standard chart of accounts.
- CLO\#3: Set up and maintain customer, employee, and vendor lists.
- CLO\#4: Set up and maintain inventory lists.
- CLO\#5: Use computer accounting software to record the sale of products/services and receipt of payment from customers.
- CLO\#6: Use computer accounting software to make purchases and pay bills.
- CLO\#7: Develop ability to work with bank accounts and credit card accounts.
- CLO\#8: Demonstrate ability to make basic end-of-the-month adjusting entries.
- CLO\#9: Use the payroll module to add employees/enter payroll information.
- CLO\#10: Research current computer accounting programs used in business, comparing and contrasting the key points with QuickBooks. (ILO: Information Literacy)


## BA 238-The Art of Selling

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Corequisite(s): BA 131
Course Description: What does it take to be a highly successful professional salesperson? This course answers this question and guides the student to explore and understand successful sales and sales management behaviors. The student will have also developed competency in professional selling approaches, conversations and presentations, and sales management techniques. Course topics include creating value in the buyer-seller relationships, prospecting, sales call planning, communicating the message, negotiating for win-win solutions, closing the sale, as well as how to motivate, compensate and train sales people.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the process of selling and the relationship between marketing and sales.
- CLO\#2: Articulate, refine and use a Unique Selling Proposition.
- CLO\#3: Describe a sales quota assignment, customer relationship management and sales force structures common to the industry today.
- CLO\#4: Define and explain the uses of technology in modern sales practice and explain how uses of technology improves sales force effectiveness.
- CLO\#5: Articulate and differentiate the various issues that arise in Sales Management including recruiting, selecting, training, motivating, compensating and retaining sales people. (ILO: Communication)
- CLO\#6: Define and give examples of various sales channels commonly used today.


## BA 243 - Social Media Marketing

## 3 Credit(s)

Prerequisite(s): BT 114 or WR $121 Z$ or designated placement.

## Recommended Prerequisite(s): BA 223

Course Description: Social media marketing (SMM) covers the use of social media websites and social networks to market a company's products and services. Social media marketing discusses how companies reach new customers, engage with existing customers, and promote a desired culture, mission, or tone. Covers the basics of creating online conversations through social media outlets, social media strategy, branding through social media sites, value in the organizations content, aligning offline marketing strategies with social media, and why a social media consultant can be valuable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Research social media sites to demonstrate an understanding of how marketers are utilizing social media sites. (ILO: Information Literacy)
- CLO\#2: Evaluate how effective various efforts are by several organizations social media policies and practices. Understand how to use various social media sites.
- CLO\#3: Demonstrate proficient navigation and searching of Internet.
- CLO\#4: Evaluate several social media sites for effectiveness, usefulness, and appropriateness for targeted audience.
- CLO\#5: Create and organize a simulated social media marketing campaign on several social media sites.
- CLO\#6: Navigate and describe the layout of several social media outlets. (ILO: Information Literacy)
- CLO\#7: Communicate in writing using correct marketing terminology.


## BA 249-Retail Management

## 3 Credit(s)

Prerequisite(s): BA 101, and BT 114 or WR 121 Z or designated placement.
Course Description: Introduces students to the field of retailing and provides an understanding of the types of businesses, strategies, operations, formats and environments through which retailing activities are carried out. Course takes a multi-disciplinary approach to consider the process and structure of retailing. Topics include planning, research, consumer behavior, store design and layout, merchandising strategy, management strategy, promotional strategy, and pricing strategy. Students will be able to discuss the overall importance of retailing and how it fits into the marketing environment, understand who the retail customer is, and apply the "four Ps" of marketing to the retail sector.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Discuss the framework of retailing.
- CLO\#2: Discuss the importance of retailing and how it fits into the marketing environment.
- CLO\#3: Demonstrate basic knowledge of the characteristics of retail consumer behavior. (ILO: Critical Thinking)
- CLO\#4: Identify and discuss major retail distribution strategies.
- CLO\#5: Discuss the importance of a merchandising plan.
- CLO\#6: Discuss the elements of store layout and design and the impact on retail promotional strategies.
- CLO\#7: Discuss legal and ethical behavior as it applies to retailing, particularly in dealing with customers, employees, and vendors.


## BA 280 - Cooperative Work Experience/Business

## Var. (1-3) Credit(s)

Prerequisite(s): BA 109 and permission of CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives).
- CLO\#5: Follow instructions to meet class deadlines.
- CLO\#6: Demonstrate a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job. (ILO: Communication)
- CLO\#7: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job.
- CLO\#8: Create contacts which will help in obtaining employment.


## BA 282 - Applied Business Statistics

## 4 Credit(s)

Prerequisite(s): CIS 125 SS or BA 285 , and STAT $243 Z$
Course Description: Builds on the knowledge of descriptive statistics learned in STAT $243 Z$ (formerly offered as MTH243) to develop abilities in inferential statistics. Emphasis is on the understanding and application of interval estimating, hypothesis testing, correlation and regression, inferences using Chisquare, and one-way and two-way analysis of variance (ANOVA). Designed to provide students with the analytical skills they will need in upper division business courses including accounting, finance, operations management and applied research. Dual numbered as MTH 244.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the impact of sampling and the difference between observation and experiment.
- CLO\#2: Perform significance testing and interval estimation. Be able to describe the strengths and weaknesses of these two methods.
- CLO\#3: Test a hypothesis against the null hypothesis.
- CLO\#4: Test hypotheses comparing two populations for both categorical and quantitative response variables. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Explain when and how to use the Chi square test for categorical bivariate analysis.
- CLO\#6: Prepare statistical analysis using linear regression techniques for quantitative bivariate data.
- CLO\#7: Prepare statistical analysis using the Multiple Linear Regression technique.
- CLO\#8: Prepare statistical analysis using one way and two-way Analysis of Variance (ANOVA) techniques.
- CLO\#9: Be familiar with simple nonparametric statistical analysis and know when such analysis is appropriate.


## BA 285 - Advanced Business Applications: Excel

## 4 Credit(s)

Prerequisite(s): BA 131 or CIS 120 (formerly offered as CS120), and BT 160 or MTH 63.
Course Description: Designed for students in any discipline. Includes hands-on approach to develop a competency in basic and advanced concepts and commands of spreadsheet software. Students will learn to design, set up, and print a variety of spreadsheet applications. Microsoft Excel will be used to develop materials. Emphasis will be placed on using spreadsheet data for problems analysis. Dual numbered as CIS 125SS.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of spreadsheet terminology. (ILO: Critical Thinking)
- CLO\#2: Utilize spreadsheet software as a tool for numerical reports.
- CLO\#3: Use a spreadsheet for problem solving.
- CLO\#4: Design professional worksheets.
- CLO\#5: Create, print, and analyze data in chart form.
- CLO\#6: Create data tables and database functions in a spreadsheet.
- CLO\#7: Demonstrate and work with complex formulas and advanced statistical analysis including Excel functions. (ILO: Critical Thinking)
- CLO\#8: Import, modify and evaluate data from outside sources.


## BI 100SB - Biology of Human Body Systems

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement.

Course Description: Presents a rational and systematic observation of the human body and allows identification, description and discussion to create a basic understanding for students interested in the Basic Health Care certificate or anyone interested in a basic understanding of how the human body works. Topics include body organization, basic chemistry, cell structure and function, tissues, and an overview of the major body systems.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe, identify structures, and apply knowledge of the characteristics of living things biological organization, and the scientific method.
- CLO\#2: Describe, identify structures, and apply knowledge of basic chemical properties.
- CLO\#3: Describe, identify structures, and apply knowledge of histology, the integumentary system, and homeostasis.
- CLO\#4: Describe, identify structures, and apply knowledge of the musculoskeletal systems.
- CLO\#5: Describe, identify structures, and apply knowledge of the nervous system, including special senses.
- CLO\#6: Describe, identify structures, and apply knowledge of the endocrine system.
- CLO\#7: Describe, identify structures, and apply knowledge of the cardiovascular and lymphatic systems.
- CLO\#8: Describe, identify structures, and apply knowledge of sexual reproduction in animals.
- CLO\#9: Describe, identify structures, and apply knowledge of population dynamics in the natural world.
- CLO\#10: Describe, identify structures, and apply knowledge of the environment, including biotic and abiotic factors. (ILO: Critical Thinking)


## BI 101 - Introduction to Biology I

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and MTH 60 or designated placement.
Corequisite(s): BI 101L
Course Description: Provides an overview of important principles, concepts and topics in biology. Designed for non-majors or those interested in learning more about biology. Science majors and pre-allied health professionals should take the 200 -level biology series. Topics covered include atoms and molecules, basic chemistry, cell structure and function, cell respiration, cell division, photosynthesis, DNA structure, protein synthesis, and basic genetics.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: List and describe the steps of the scientific method. Utilize the scientific method to solve biological problems.
- CLO\#2: Describe, identify structures, and apply knowledge of cells and organelles; differentiate between plant and animal cells.
- CLO\#3: Describe, identify, and apply knowledge of general chemistry including atomic structure, chemical bonds, and characteristics of the four biological molecules.
- CLO\#4: Describe and apply knowledge of enzymes and their role in biological systems.
- CLO\#5: Describe and apply knowledge of the processes of cellular respiration and photosynthesis and identify the cellular structures involved in either. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Describe and apply knowledge of DNA and the processes of DNA replication and protein synthesis, identify the cellular structures and enzymes involved.
- CLO\#7: Describe, identify, and apply knowledge of the stages involved in mitosis and meiosis.
- CLO\#8: Describe and apply knowledge of the principles of heredity, solving genetics problems, and interpreting pedigrees.


## BI 101L - Introduction to Biology I Lab

1 Credit(s)
Prerequisite(s): RD 90 or WR 91 or designated placement, and MTH 60 or designated placement.

## Corequisite(s): BI 101

Course Description: Provides an overview of important principles, concepts and topics in biology. Designed for non-majors or those interested in learning more about biology. Science majors and pre-allied health professionals should take the 200 -level biology series. Topics covered include atoms and molecules, basic chemistry, cell structure and function, cell respiration, cell division, photosynthesis, DNA structure, protein synthesis, and basic genetics.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: List and describe the steps of the scientific method. Utilize the scientific method to solve biological problems.
- CLO\#2: Describe, identify structures, and apply knowledge of cells and organelles; differentiate between plant and animal cells.
- CLO\#3: Describe, identify, and apply knowledge of general chemistry including atomic structure, chemical bonds, and characteristics of the four biological molecules.
- CLO\#4: Describe and apply knowledge of enzymes and their role in biological systems.
- CLO\#5: Describe and apply knowledge of the processes of cellular respiration and photosynthesis and identify the cellular structures involved in either. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Describe and apply knowledge of DNA and the processes of DNA replication and protein synthesis, identify the cellular structures and enzymes involved.
- CLO\#7: Describe, identify, and apply knowledge of the stages involved in mitosis and meiosis.
- CLO\#8: Describe and apply knowledge of the principles of heredity, solving genetics problems, and interpreting pedigrees.


## BI 102 - Introduction to Biology II

## 3 Credit(s)

Prerequisite(s): MTH 60 or designated placement, and WR 90 or WR 91 or designated placement.

Corequisite(s): BI 102L

Recommended Prerequisite(s): BI 101 and BI 101L or BI 211 and BI 211L

Course Description: Provides an overview of basic animal anatomy and physiology with a special interest to humans. Designed for non-majors or those interested in learning more about biology. Science majors and pre-allied health professionals should take the 200-level biology series. Topics and systems covered include homeostasis, hormones, digestive system, circulation, lymphatic system, circulatory system, immunity, nervous system, urinary system, and reproduction.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify the basic structures and important characteristics of vertebrates.
- CLO\#2: Describe and apply knowledge of homeostasis and the animal body.
- CLO\#3: Describe, identify structures, and apply knowledge of the circulatory and lymphatic systems.
- CLO\#4: Describe, identify structures, and apply knowledge of the respiratory system. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Describe, identify structures, and apply knowledge of the digestive system.
- CLO\#6: Describe, identify structures, and apply knowledge of the urinary system.
- CLO\#7: Describe, identify structures, and apply knowledge of the immune system.
- CLO\#8: Describe, identify structures, and apply knowledge of the endocrine system and hormones.
- CLO\#9: Describe, identify structures, and apply knowledge of the nervous system.
- CLO\#10: Describe, identify structures, and apply knowledge of the male and female reproductive systems.


## BI 102L - Introduction to Biology II Lab

## 1 Credit(s)

Prerequisite(s): MTH 60 or designated placement, and WR 90 or WR 91 or designated placement.
Corequisite(s): BI 102
Recommended Prerequisite(s): BI 101 and BI 101L or BI 211 and BI 211L
Course Description: Provides an overview of basic animal anatomy and physiology with a special interest to humans. Designed for non-majors or those interested in learning more about biology. Science majors and pre-allied health professionals should take the 200-level biology series. Topics and systems covered include homeostasis, hormones, digestive system, circulation, lymphatic system, circulatory system, immunity, nervous system, urinary system, and reproduction. Offered winter term.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify the basic structures and important characteristics of vertebrates.
- CLO\#2: Describe and apply knowledge of homeostasis and the animal body.
- CLO\#3: Describe, identify structures, and apply knowledge of the circulatory and lymphatic systems.
- CLO\#4: Describe, identify structures, and apply knowledge of the respiratory system. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Describe, identify structures, and apply knowledge of the digestive system.
- CLO\#6: Describe, identify structures, and apply knowledge of the urinary system.
- CLO\#7: Describe, identify structures, and apply knowledge of the immune system.
- CLO\#8: Describe, identify structures, and apply knowledge of the endocrine system and hormones.
- CLO\#9: Describe, identify structures, and apply knowledge of the nervous system.
- CLO\#10: Describe, identify structures, and apply knowledge of the male and female reproductive systems.


## BI 103 - Introduction to Biology III

## 3 Credit(s)

Prerequisite(s): MTH 60 or designated placement, and WR 90 or WR 91 or designated placement.
Corequisite(s): BI 103L

Recommended Prerequisite(s): BI 102 and BI 102L or BI 212 and BI 212L

Course Description: Provides an overview of plants, microbes, fungi and ecology. Designed for non-majors or those interested in learning more about biology. Science majors and pre-allied health professionals should take the 200 -level biology series. Topics covered include basic evolution, classification, microbes, fungi, plant structure and function, planet diversity, populations, communities, and human impact on the environment.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and apply knowledge of the basic ideas, concepts, and principles of evolution.
- CLO\#2: Describe and apply knowledge of the basic ideas, concepts, and principles of classification.
- CLO\#3: Describe, identify, and apply knowledge of the structure, function and organization of viruses, bacteria, and protists.
- CLO\#4: Describe, identify, and apply knowledge of the structure, function, organization, and life cycles of fungi.
- CLO\#5: Describe, identify, and apply knowledge of the structure, function, organization, and life cycles of plants.
- CLO\#6: Describe, identify, and apply knowledge of the structure of populations and the dynamics of population growth.
- CLO\#7: Describe, identify, and apply knowledge of community interactions and dynamics.
- CLO\#8: Describe, identify, and apply knowledge of ecosystem structure, interactions, and dynamics.
- CLO\#9: Describe, identify, and apply knowledge of biosphere structure, interactions, and dynamics including the effects of human activities on the planet. (ILO: Quantitative Literacy and Reasoning)
- CLO\#10: Describe, identify, and apply knowledge of the major threats to biodiversity and what can be done to combat these threats.


## BI 103L - Introduction to Biology III Lab

1 Credit(s)
Prerequisite(s): MTH 60 or designated placement, and WR 90 or WR 91 or designated placement.
Corequisite(s): BI 103
Recommended Prerequisite(s): BI 102 and BI 102L or BI 212 and BI 212L
Course Description: Provides an overview of plants, microbes, fungi and ecology. Designed for non-majors or those interested in learning more about biology. Science majors and pre-allied health professionals should take the 200 -level biology series. Topics covered include basic evolution, classification, microbes, fungi, plant structure and function, planet diversity, populations, communities, and human impact on the environment.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and apply knowledge of the basic ideas, concepts, and principles of evolution.
- CLO\#2: Describe and apply knowledge of the basic ideas, concepts, and principles of classification.
- CLO\#3: Describe, identify, and apply knowledge of the structure, function and organization of viruses, bacteria, and protists.
- CLO\#4: Describe, identify, and apply knowledge of the structure, function, organization, and life cycles of fungi.
- CLO\#5: Describe, identify, and apply knowledge of the structure, function, organization, and life cycles of plants.
- CLO\#6: Describe, identify, and apply knowledge of the structure of populations and the dynamics of population growth.
- CLO\#7: Describe, identify, and apply knowledge of community interactions and dynamics.
- CLO\#8: Describe, identify, and apply knowledge of ecosystem structure, interactions, and dynamics.
- CLO\#9: Describe, identify, and apply knowledge of biosphere structure, interactions, and dynamics including the effects of human activities on the planet. (ILO: Quantitative Literacy and Reasoning)
- CLO\#10: Describe, identify, and apply knowledge of the major threats to biodiversity and what can be done to combat these threats.


## BI 121 - Elementary Anatomy and Physiology I

## 3 Credit(s)

Prerequisite(s): MTH 20 or designated placement, and WR 90 or WR 91 or designated placement.
Corequisite(s): BI 121L

## Recommended Prerequisite(s): MTH 60 or MTH 63

Course Description: This is the first term of a two-term sequence. Students must be concurrently enrolled in the laboratory portion of this course. This course covers basic anatomy and physiology for Medical Office Assistant, Medical Health Technician, Massage Therapy, Medical Assistant, Medical Transcription, and Practical Nursing. Topics covered include body organization, basic chemistry, cell structure and function, tissues, integumentary system, skeletal system, muscular system, and nervous system.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify specific terminology associated with body geography; surface and internal anatomy; and control systems.
- CLO\#2: Describe histological tissue types by identification and function
- CLO\#3: Describe, identify structures, and apply knowledge of the integumentary system.
- CLO\#4: Describe, identify structures, and apply knowledge of osseous tissue, bone structure, and the entire human skeleton.
- CLO\#5: Describe, identify structures, and apply knowledge of the articulations and movements of the human body.
- CLO\#6: Describe, identify structures, and apply knowledge of muscle tissue physiology and selected muscles of the human body. (ILO: Critical Thinking)
- CLO\#7: Describe, identify structures, and apply knowledge of the nervous system and sense organs, focusing on neuron anatomy, neurophysiology and anatomy of special sense organs.


## BI 121L - Elementary Anatomy and Physiology I Lab

## 1 Credit(s)

Prerequisite(s): MTH 20 or designated placement, and WR 90 or WR 91 or designated placement.

## Corequisite(s): BI 121

Recommended Prerequisite(s): MTH 60 or MTH 63
Course Description: This is the first term of a two-term sequence. Students must be concurrently enrolled in the laboratory portion of this course. This course covers basic anatomy and physiology for Medical Office Assistant, Medical Health Technician, Massage Therapy, Medical Assistant, Medical Transcription, and Practical Nursing. Topics covered include body organization, basic chemistry, cell structure and function, tissues, integumentary system, skeletal system, muscular system, and nervous system. Includes a laboratory component that requires dissection.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify specific terminology associated with body geography; surface and internal anatomy; and control systems.
- CLO\#2: Describe and identify histological tissue types and their functions. by identification and function.
- CLO\#3: Describe, identify structures, and apply knowledge of the integumentary system.
- CLO\#4: Describe, identify structures, and apply knowledge of osseous tissue, bone structure, and the entire human skeleton.
- CLO\#5: Describe, identify structures, and apply knowledge of the articulations and movements of the human body.
- CLO\#6: Describe, identify structures, and apply knowledge of muscle tissue physiology and selected muscles of the human body. (ILO: Critical Thinking)
- CLO\#7: Describe, identify structures, and apply knowledge of the nervous system and sense organs, focusing on neuron anatomy, neurophysiology and anatomy of special sense organs.


## BI 122 - Elementary Anatomy and Physiology II

## 3 Credit(s)

Prerequisite(s): BI 121 and BI 121 L or BI 231 and BI 231 L

## Corequisite(s): BI 122L

Recommended Prerequisite(s): AH 100 and CHEM 104, CHEM 104L, CHEM 104R
Course Description: This is the second term of a two-term sequence. Students must be concurrently enrolled in the laboratory portion of this course. This course covers basic anatomy and physiology for Medical Office Assistant, Medical Health Technician, Massage Therapy, Medical Assistant, Medical Transcription, and Practical Nursing. Topics covered include the endocrine systems, blood, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system and reproductive system.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe, identify structures, and apply knowledge of the endocrine system.
- CLO\#2: Describe, identify components, determine physical properties and apply knowledge of blood. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Describe, identify structures, and apply knowledge of the cardiovascular system.
- CLO\#4: Describe, identify structures, and apply knowledge of the lymphatic system and immunity. (ILO: Critical Thinking)
- CLO\#5: Describe, identify structures, and apply knowledge of the respiratory system.
- CLO\#6: Describe, identify structures, and apply knowledge of the digestive system.
- CLO\#7: Describe, identify structures, and apply knowledge of the urinary system.
- CLO\#8: Describe, identify structures, and apply knowledge of the reproductive system.


## BI 122L - Elementary Anatomy and Physiology II Lab

## 1 Credit(s)

Prerequisite(s): BI 121 and BI 121L or BI 231 and BI 231 L

Corequisite(s): BI 122
Recommended Prerequisite(s): AH 100 and CHEM 104, CHEM 104L, CHEM 104R

Course Description: This is the second term of a two-term sequence. Students must be concurrently enrolled in the laboratory portion of this course. This course covers basic anatomy and physiology for Medical Office Assistant, Medical Health Technician, Massage Therapy, Medical Assistant, Medical Transcription, and Practical Nursing. Topics covered include the endocrine systems, blood, cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system and reproductive system. Includes a laboratory component that requires dissection.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe, identify structures, and apply knowledge of the endocrine system.
- CLO\#2: Describe, identify components, determine physical properties and apply knowledge of blood. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Describe, identify structures, and apply knowledge of the cardiovascular system.
- CLO\#4: Describe, identify structures, and apply knowledge of the lymphatic system and immunity. (ILO: Critical Thinking)
- CLO\#5: Describe, identify structures, and apply knowledge of the respiratory system.
- CLO\#6: Describe, identify structures, and apply knowledge of the digestive system.
- CLO\#7: Describe, identify structures, and apply knowledge of the urinary system.
- CLO\#8: Describe, identify structures, and apply knowledge of the reproductive system.


## BI 199 - Special Studies: Biology

Var. (1-3) Credit(s)

Prerequisite(s): May vary depending on subject offerings.

Course Description: Selected topics of study in biology are offered on demand through workshops, seminars, lecture, lab, and/or independent study format.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, and research papers.


## BI 211 - General Biology I

## 3 Credit(s)

Prerequisite(s): MTH 60 or designated placement, and RD 90 or WR 91 or designated placement.

Corequisite(s): BI 211L

Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: This sequence of biology is primarily for the pre-professional student majoring in the biological sciences, science education, nursing and medicine related fields. The course emphasizes the molecular and cellular aspects of biology and is designed to introduce the foundations of living systems and biological organization. It emphasizes such topics as: the scientific method, classification of organisms, molecular \& cellular processes, energy transfer, cellular respiration, cellular division, and genetics, as well as stressing topics on biochemical genetics, genetic engineering and DNA-RNA-protein synthesis mechanisms. Students who take CHEM 104 or its equivalent before BI 211 are better prepared for the rigors of this class.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify the characteristics of living things and how these characteristics relate to energy, reproduction, evolution and the environment.
- CLO\#2: Describe, identify, and apply knowledge of inorganic and organic chemistry: elements and atoms, chemical bonds and chemical reactions, properties of water, and classification of organic compounds and their functional groups.
- CLO\#3: Describe and identify the components of a cell and the differences between plant, animal, and bacterial cells.
- CLO\#4: Describe and identify the components of a cell membrane and mechanisms by which materials can enter or leave a cell and the energy requirements of each.
- CLO\#5: Describe and apply knowledge of the role and stages of cellular communication in an organism and identify selected types of cell receptors.
- CLO\#6: Describe and apply knowledge of energy transfer in a cell, the structure and function of enzymes and their role in cellular metabolism.
- CLO\#7: Describe and apply knowledge of the processes of aerobic respiration and fermentation and identify the cellular structures involved.
- CLO\#8: Describe, identify, and apply knowledge of the stages and products of mitosis and meiosis.
- CLO\#9: Describe and apply knowledge of the principles of heredity, solving genetics problems, and interpreting pedigrees.
- CLO\#10: Describe and apply knowledge of the processes of DNA replication and protein synthesis, identify the cellular structures and enzymes involved, and describe and apply knowledge of the importance and use of biotechnology. (ILO: Critical Thinking)


## BI 211L - General Biology I Lab

## 1 Credit(s)

Prerequisite(s): MTH 60 or designated placement, and RD 90 or WR 91 or designated placement.

Corequisite(s): BI 211
Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: This sequence of biology is primarily for the pre-professional student majoring in the biological sciences, science education, nursing and medicine related fields. The course emphasizes the molecular and cellular aspects of biology and is designed to introduce the foundations of living systems and biological organization. It emphasizes such topics as: the scientific method, classification of organisms, molecular \& cellular processes, energy transfer, cellular respiration, cellular division, and genetics, as well as stressing topics on biochemical genetics, genetic engineering and DNA-RNA-protein synthesis mechanisms. Students who take CHEM 104 or its equivalent before BI 211 are better prepared for the rigors of this class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and apply knowledge of the scientific method and the metric system.
- CLO\#2: Describe, identify, and apply knowledge of inorganic and organic chemistry: elements and atoms, chemical bonds and chemical reactions, properties of water, and classification of organic compounds and their functional groups.
- CLO\#3: Describe and identify the components of a cell and the differences between plant, animal, and bacterial cells.
- CLO\#4: Describe and identify the components of a cell membrane and mechanisms by which materials can enter or leave a cell and the energy requirements of each.
- CLO\#5: Describe and apply knowledge of the role and stages of cellular communication in an organism and identify selected types of cell receptors.
- CLO\#6: Describe and apply knowledge of energy transfer in a cell, the structure and function of enzymes and their role in cellular metabolism.
- CLO\#7: Describe and apply knowledge of the processes of aerobic respiration and fermentation and identify the cellular structures involved.
- CLO\#8: Describe, identify, and apply knowledge of the stages and products of mitosis and meiosis.
- CLO\#9: Describe and apply knowledge of the principles of heredity, solving genetics problems, and interpreting pedigrees.
- CLO\#10: Describe and apply knowledge of the processes of DNA replication and protein synthesis, identify the cellular structures and enzymes involved, and describe and apply knowledge of the importance and use of biotechnology. (ILO: Critical Thinking)


## BI 212 - General Biology II

## 3 Credit(s)

Prerequisite(s): BI 211 and BI 211L

Corequisite(s): BI 212L

Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R
Course Description: Designed primarily for pre-professional students majoring in the biological sciences,
science education, and related allied health fields. Covers the basic principles of Darwinian evolution, evolution of populations and speciation; describes the structure, function and impact of viruses and bacteria; and provides an overview of the protist and animal kingdoms with emphasis on the major characteristics and importance of organisms in the taxa of each kingdom.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and apply knowledge of the fundamental concepts of the theory of evolution and the current system of taxonomy.
- CLO\#2: Describe and apply knowledge of the various species concepts and how evolutionary change is measured in populations.
- CLO\#3: Describe, identify structures, and apply knowledge of viruses and prions, their effects, and transmission through populations.
- CLO\#4: Describe and identify anatomical features of prokaryotes; identify characteristics and ecological roles of prokaryotes in domains Bacteria and Archaea.
- CLO\#5: Identify the organisms and describe characteristics and ecological roles of selected taxa in Kingdom Protista.
- CLO\#6: Describe and identify the stages of early development of organisms in Kingdom Animalia; describe the classification of animals based on body symmetry, germ layers, and level of coelom development.
- CLO\#7: Identify the organisms and describe the characteristics and ecological roles of selected taxa in Kingdom Animalia and apply knowledge of evolutionary trends of selected body systems. (ILO: Critical Thinking)


## BI 212L - General Biology II Lab

## 1 Credit(s)

Prerequisite(s): BI 211 and BI 211L
Corequisite(s): BI 212
Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: Designed primarily for pre-professional students majoring in the biological sciences, science education, and related allied health fields. Covers the basic principles of Darwinian evolution, evolution of populations and speciation; describes the structure, function and impact of viruses and bacteria; and provides an overview of the protist and animal kingdoms with emphasis on the major characteristics and importance of organisms in the taxa of each kingdom. Offered winter term.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and apply knowledge of the fundamental concepts of the theory of evolution and the current system of taxonomy.
- CLO\#2: Describe and apply knowledge of the various species concepts and how evolutionary change is measured in populations.
- CLO\#3: Describe, identify structures, and apply knowledge of viruses and prions, their effects, and transmission through populations.
- CLO\#4: Describe and identify anatomical features of prokaryotes; identify characteristics and ecological roles of prokaryotes in domains Bacteria and Archaea.
- CLO\#5: Identify the organisms and describe characteristics and ecological roles of selected taxa in Kingdom Protista.
- CLO\#6: Describe and identify the stages of early development of organisms in Kingdom Animalia; describe the classification of animals based on body symmetry, germ layers, and level of coelom development.
- CLO\#7: Identify the organisms and describe the characteristics and ecological roles of selected taxa in Kingdom Animalia and apply knowledge of evolutionary trends of selected body systems. (ILO: Critical Thinking)


## BI 213 - General Biology III

## 3 Credit(s)

Prerequisite(s): BI 211 and BI 211L

Corequisite(s): BI 213L
Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R
Course Description: Designed primarily for pre-professional students majoring in the biological sciences, science education, and related allied health fields. Topics include discussion of the fungal and plant kingdoms; the structure, growth, function and differentiation of leaves, roots, stems, flowers and plant reproduction; and basic principles of ecology including communities, population, ecosystems, the ecosphere and human impact on the environment.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify, describe, and apply knowledge of the classification, anatomical features, life cycles and ecological roles of selected taxa in Kingdom Fungi.
- CLO\#2: Identify, describe, and apply knowledge of the classification, anatomical features, life cycles and ecological roles of selected taxa of seedless plants in Kingdom Plantae.
- CLO\#3: Identify, describe, and apply knowledge of the classification, anatomical features, life cycles and ecological roles of selected taxa of seed plants in Kingdom Plantae
- CLO\#4: Identify, describe, and apply knowledge of the successful adaptations of seed plants to terrestrial ecosystems, including pollination strategies and the structure and classification of fruits.
- CLO\#5: Describe and apply knowledge of the process of photosynthesis.
- CLO\#6: Identify, describe, and apply knowledge of the basic structures, organization, and tissues found in plant roots, stems, and leaves.
- CLO\#7: Describe and apply knowledge of the major principles of population ecology. (ILO: Critical Thinking)
- CLO\#8: Describe and apply knowledge of the major principles of community ecology.
- CLO\#9: Identify, describe, and apply knowledge of selected ecosystem types, cycles of matter, and the biosphere.


## BI 213L - General Biology III Lab

1 Credit(s)
Prerequisite(s): BI 211 and BI 211L

## Corequisite(s): BI 213

Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: Designed primarily for pre-professional students majoring in the biological sciences, science education, and related allied health fields. Topics include discussion of the fungal and plant kingdoms; the structure, growth, function and differentiation of leaves, roots, stems, flowers and plant reproduction; and basic principles of ecology including communities, population, ecosystems, the ecosphere and human impact on the environment.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify, describe, and apply knowledge of the classification, anatomical features, life cycles and ecological roles of selected taxa in Kingdom Fungi.
- CLO\#2: Identify, describe, and apply knowledge of the classification, anatomical features, life cycles and ecological roles of selected taxa of seedless plants in Kingdom Plantae.
- CLO\#3: Identify, describe, and apply knowledge of the classification, anatomical features, life cycles and ecological roles of selected taxa of seed plants in Kingdom Plantae
- CLO\#4: Identify, describe, and apply knowledge of the successful adaptations of seed plants to terrestrial ecosystems, including pollination strategies and the structure and classification of fruits.
- CLO\#5: Describe and apply knowledge of the process of photosynthesis.
- CLO\#6: Identify, describe, and apply knowledge of the basic structures, organization, and tissues found in plant roots, stems, and leaves.
- CLO\#7: Describe and apply knowledge of the major principles of population ecology. (ILO: Critical Thinking)
- CLO\#8: Describe and apply knowledge of the major principles of community ecology.
- CLO\#9: Identify, describe, and apply knowledge of selected ecosystem types, cycles of matter, and the biosphere.


## BI 231 - Anatomy and Physiology I

## 3 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement, and BI 211 and BI 211L
Corequisite(s): BI 231L
Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R
Course Description: This is the first term of a three-term sequence. This course benefits students entering health professions, physical education and pre-professional medical or veterinary degrees. Emphasis is placed on the structure, function and regulatory mechanisms of the tissues, skin, skeleton, muscles and neurons. Includes a laboratory component that requires dissection.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify specific terminology associated with body geography; surface and internal anatomy; and control systems.
- CLO\#2: Describe histological tissue types by identification and function.
- CLO\#3: Describe, identify structures, and apply knowledge of the integumentary system.
- CLO\#4: Describe, identify structures, and apply knowledge of osseous tissue, bone structure, and the entire human skeleton.
- CLO\#5: Describe, identify structures, and apply knowledge of the articulations and movements of the human body.
- CLO\#6: Describe, identify structures, and apply knowledge of muscle tissue physiology and selected muscles of the human body. (ILO: Critical Thinking)
- CLO\#7: Describe, identify structures, and apply knowledge of the nervous system, focusing on neuron anatomy and neurophysiology.


## BI 231L - Anatomy and Physiology I Lab

## 1 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement, and BI 211 and BI 211L
Corequisite(s): BI 231
Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: This is the first term of a three-term sequence. This course benefits students entering health professions, physical education and pre-professional medical or veterinary degrees. Emphasis is placed on the structure, function and regulatory mechanisms of the tissues, skin, skeleton, muscles and neurons. Includes a laboratory component that requires dissection.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify specific terminology associated with body geography; surface and internal anatomy; and control systems.
- CLO\#2: Describe histological tissue types by identification and function.
- CLO\#3: Describe, identify structures, and apply knowledge of the integumentary system.
- CLO\#4: Describe, identify structures, and apply knowledge of osseous tissue, bone structure, and the entire human skeleton.
- CLO\#5: Describe, identify structures, and apply knowledge of the articulations and movements of the human body.
- CLO\#6: Describe, identify structures, and apply knowledge of muscle tissue physiology and selected muscles of the human body. (ILO: Critical Thinking)
- CLO\#7: Describe, identify structures, and apply knowledge of the nervous system, focusing on neuron anatomy and neurophysiology.


## BI 232 - Anatomy and Physiology II

## 3 Credit(s)

Prerequisite(s): BI 231 and BI 231L
Corequisite(s): BI 232L
Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: This is the second term of a three-term sequence. This course benefits students
entering health professions, physical education and pre-professional medical or veterinary degrees. Emphasis is placed on the structure, function and regulatory mechanisms of the nervous, endocrine, special sense and circulatory systems. Includes a laboratory component that requires dissection.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describes, identifies structures, and apply knowledge of the nervous system, focusing on the structure and function of the spinal cord, brain, and autonomic nervous system.
- CLO\#2: Describe, identify structures, and apply knowledge of the special senses, including olfaction, gustation, vision, hearing, and equilibrium.
- CLO\#3: Describe, identify structures, and apply knowledge of the structure and function of the endocrine system.
- CLO\#4: Describe, identify structures, and apply knowledge of the blood and its components and functions.
- CLO\#5: Describe, identify structures, and apply knowledge of the human heart, focusing on structure and function.
- CLO\#6: Describe, identify structures, and apply knowledge of the vascular system, focusing on structure and function of blood vessels and blood pressure. (ILO: Critical Thinking)


## BI 232L - Anatomy and Physiology II Lab

## 1 Credit(s)

Prerequisite(s): BI 231 and BI 231L
Corequisite(s): BI 232
Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R
Course Description: This is the second term of a three-term sequence. This course benefits students entering health professions, physical education and pre-professional medical or veterinary degrees. Emphasis is placed on the structure, function and regulatory mechanisms of the nervous, endocrine, special sense and circulatory systems. Includes a laboratory component that requires dissection.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describes, identifies structures, and apply knowledge of the nervous system, focusing on the structure and function of the spinal cord, brain, and autonomic nervous system.
- CLO\#2: Describe, identify structures, and apply knowledge of the special senses, including olfaction, gustation, vision, hearing, and equilibrium.
- CLO\#3: Describe, identify structures, and apply knowledge of the structure and function of the endocrine system.
- CLO\#4: Describe, identify structures, and apply knowledge of the blood and its components and functions.
- CLO\#5: Describe, identify structures, and apply knowledge of the human heart, focusing on structure and function.
- CLO\#6: Describe, identify structures, and apply knowledge of the vascular system, focusing on structure and function of blood vessels and blood pressure. (ILO: Critical Thinking)


## BI 233 - Anatomy and Physiology III

## 3 Credit(s)

Prerequisite(s): BI 231 and BI 231L

## Corequisite(s): BI 233L

Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R
Course Description: This is the third term of a three-term sequence. This course benefits students entering health professions, physical education and pre-professional medical or veterinary degrees. Emphasis is placed on the structure, function and regulatory mechanisms of the respiratory, lymphatic, immune, digestive, urinary, reproductive systems and acid/base and electrolyte balance. Includes a laboratory component that requires dissection.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe, identify structures, and apply knowledge of the lymphatic system.
- CLO\#2: Describe, identify structures, and apply knowledge of the respiratory system.
- CLO\#3: Describe, identify structures, and apply knowledge of the digestive system.
- CLO\#4: Describe, identify structures, and apply knowledge of the urinary system.
- CLO\#5: Describe, identify structures, and apply knowledge of the regulation of fluid, electrolyte, and acid-base balance in the human body. (ILO: Critical Thinking)
- CLO\#6: Describe, identify structures, and apply knowledge of the male and female reproductive systems.


## BI 233L - Anatomy and Physiology III Lab

## 1 Credit(s)

Prerequisite(s): BI 231 and BI 231L

## Corequisite(s): BI 233

Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: This is the third term of a three-term sequence. This course benefits students entering health professions, physical education and pre-professional medical or veterinary degrees. Emphasis is placed on the structure, function and regulatory mechanisms of the respiratory, lymphatic, immune, digestive, urinary, reproductive systems and acid/base and electrolyte balance. Includes a laboratory component that requires dissection.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe, identify structures, and apply knowledge of the lymphatic system.
- CLO\#2: Describe, identify structures, and apply knowledge of the respiratory system.
- CLO\#3: Describe, identify structures, and apply knowledge of the digestive system.
- CLO\#4: Describe, identify structures, and apply knowledge of the urinary system.
- CLO\#5: Describe, identify structures, and apply knowledge of the regulation of fluid, electrolyte, and acid-base balance in the human body. (ILO: Critical Thinking)
- CLO\#6: Describe, identify structures, and apply knowledge of the male and female reproductive systems.


## BI 234 - Microbiology

## 3 Credit(s)

Prerequisite(s): BI 211 and BI 211L

Corequisite(s): BI 234L

Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R

Course Description: Studies microorganisms, focusing primarily on bacteria and viruses. Covers the structure, function, metabolism, genetics and classification of bacteria and archaea. Also includes topics of microbial control, viral replication, epidemiology and vaccinations. Students must enroll in lecture and laboratory sections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and apply knowledge of the history and development of the microbiology discipline.
- CLO\#2: Describe, identify structures, and apply knowledge of prokaryotic organisms, including structure and function relationships.
- CLO\#3: Describe, identify structures, and apply knowledge of prokaryotic metabolism.
- CLO\#4: Describe and apply knowledge of basic prokaryote growth and culturing requirements, including biotic and abiotic factors.
- CLO\#5: Describe, identify structures, and apply knowledge of microbial genetics.
- CLO\#6: Describe, identify structures, and apply knowledge of methods of controlling microbial growth in the environment and body.
- CLO\#7: Describe, identify structures, and apply knowledge of viruses, viroids, and prions.
- CLO\#8: Describe and apply knowledge of epidemiology, disease transmission, and health-acquired infections. (ILO: Critical Thinking)
- CLO\#9: Describe and apply knowledge of basic immune response and vaccine production.


## BI 234L - Microbiology Lab

## 1 Credit(s)

Prerequisite(s): BI 211 and BI 211L

Corequisite(s): BI 234

Recommended Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R
Course Description: Studies microorganisms, focusing primarily on bacteria and viruses. Covers the structure, function, metabolism, genetics and classification of bacteria and archaea. Also includes topics of microbial control, viral replication, epidemiology and vaccinations. Students must enroll in lecture and laboratory sections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply knowledge of prokaryotic organisms, including structure and function relationships.
- CLO\#2: Apply knowledge of prokaryotic metabolism.
- CLO\#3: Apply knowledge of basic prokaryote growth and culturing requirements, including biotic and abiotic factors.
- CLO\#4: Apply knowledge of microbial genetics.
- CLO\#5: Apply knowledge of methods of controlling microbial growth in the body.
- CLO\#6: Develops and uses appropriate lab skills when transferring, culturing, and interpreting data from living bacterial cultures. (ILO: Critical Thinking)


## BT 101 - Human Relations in Organizations

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: This course uses current research, lecture, class discussion, group activities, videos, guest speakers, and supplemental exercises to explore, evaluate, and understand common situations and problems in human relations for the work world. Among the issues covered are communications, group dynamics, self-awareness (communication styles, self-esteem, attitudes, emotions, and ethics), workplace diversity and inclusion, motivation, trust-building, self-disclosure, teamwork, and conflict management.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define human relations
- CLO\#2: Explain the importance of developing good human relations skills as the key to personal growth and workplace success.
- CLO\#3: Explain how career success begins with gaining self-awareness and knowing your attitudes, motivations, communications style, and values.
- CLO\#4: Improve human relations on the job by building stronger relationships with coworkers and supervisors, practicing self-disclosure, giving and receiving positive reinforcement, accepting criticism constructively, and by presenting a professional image.
- CLO\#5: Demonstrate effective team building and conflict management strategies.
- CLO\#6: Manage work-related stress, deal with realistic workplace challenges, and gain skills to better cope with uncertainties and changes.
- CLO\#7: Explain the importance of diversity and inclusion, practicing acceptance, and achieving emotional balance. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#8: Improve work-readiness skills by developing ability to read and follow written and oral instruction, complete tasks on time, organize and process paperwork, and follow procedures.


## BT 102 - Introduction to Supervision

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement, and BT 101
Course Description: Builds on information covered in BT 101. Focuses on skills and techniques for current and potential supervisors with emphasis on day-to-day strategies that first-line managers use when directing
and evaluating employees.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the basic concepts used in planning and decision making for supervisors.
- CLO\#2: Evaluate elements of motivation, leadership, team building and conflict management.
- CLO\#3: Explain the components and benefits of Selection, Retention, and Performance Management Processes in the workplace.
- CLO\#4: Describe and analyze current changes impacting supervisors in the workplace. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#5: Explain the role of the labor movement in the United States and the impact that federal labor legislation has had on supervisory practices.
- CLO\#6: Complete an inventory of supervisory skills and analyze individual strengths and opportunities for growth.


## BT 105 - Business Ethics

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Business ethics are important skills in the business environment. Developing the ability to recognize and analyze ethical situations is becoming more critical for successful business organizations. This course explores the multi-level effects of business decisions, emphasizing contemporary topics in business ethics.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the guiding principles of business ethics.
- CLO\#2: Identify the components of a successful ethical corporate culture.
- CLO\#3: Differentiate between a Code of Ethics and a Code of Conduct.
- CLO\#4: Determine the steps to develop and implement an ethics program within an organization. (ILO: Critical Thinking)


## BT 106 - Advertising

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

## Recommended Prerequisite(s): BA 223

Course Description: This course will provide insight into the role of advertising and integrated marketing communications. Traditional and emerging advertising mediums will be covered in detail, along with various aspects and implications that advertising can have on a business.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize the role of Integrated Marketing Communications within a business.
- CLO\#2: Explain the market segmentation process.
- CLO\#3: Identify the various aspects that affect consumer behavior. (ILO: Critical Thinking)
- CLO\#4: Differentiate the various impacts that advertising can have on a business and society.
- CLO\#5: Identify different message strategies.
- CLO\#6: Compare and contrast the different types of media.


## BT 111 - Conflict Management

## 2 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement score.

Course Description: Provides students with the skills to turn conflict into a positive experience. Conflict is inevitable in interpersonal relationships, especially in the workplace, but the ability to constructively handle conflict and manage interpersonal differences will enhance relationships with your co-workers, supervisors, and subordinates. Students will identify what conflict is, positive and negative aspects of conflict, types and sources of conflict, and strategies in dealing with conflict. Through the use of self-assessment instruments, students will identify their personal conflict management style(s). Other topics include emotional aspects of conflict, determining which approaches to conflict management are over-utilized and under-utilized, and stress and anger management strategies used in conflict management.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Compare and contrast conflict management and conflict resolution.
- CLO\#2: Identify common sources and types of conflict found in the workplace.
- CLO\#3: Identify the positive and negative aspects of conflict in the workplace.
- CLO\#4: Compare and contrast the major conflict management styles found in a variety of conflict management style self-assessment instruments.
- CLO\#5: Identify strategies to manage conflict caused by work-related stress and anger issues.
- CLO\#6: Identify the major approaches in conflict management and determine which ones are overutilized and under-utilized.
- CLO\#7: Differentiate among the following strategies used to effectively deal with conflict: problem solving, assertiveness, cooperation, avoidance, accommodation, collaboration, and compromising.
- CLO\#8: Using various self-assessment instruments, identify your most preferred and least preferred conflict management styles and in which workplace situations they would be most/least effective. (ILO: Critical Thinking)


## BT 113 - Business English I

## 4 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Business English I provides students with athorough foundation in the fundamentals of business writing by focusing on grammar basics, mechanical skills in writing, sentence structure, proofreading and editing skills, and vocabulary development. The course surveys the conventions of standard written English and develops students' confidence in their ability to write effectively at the college level.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proficiency in identifying and correctly using the eight parts of speech in business writing.
- CLO\#2: Demonstrate knowledge of and ability to correctly use rules governing standard written English language.
- CLO\#3: Evaluate and make decisions when composing, proofreading, and editing business documents and/or communications.
- CLO\#4: Create and organize audience-appropriate written business communication using proper writing mechanics. (ILO: Communication)


## BT 114 - Business English II

## 4 Credit(s)

Prerequisite(s): BT 113

Corequisite(s): BA 131

Recommended Prerequisite(s): CIS 125WW

Course Description: Business English II increases student proficiency in writing clear, well-developed, wellorganized, articulate business messages, with emphasis on advanced grammar application, proofreading, and business research.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate ability to proofread and edit business documents.
- CLO\#2: Conduct research and create accurate citations to avoid plagiarism.
- CLO\#3: Complete appropriateresearch and create a persuasive or argumentative essay.
- CLO\#4: Prepare written business reports that analyze and synthesize data.
- CLO\#5: Apply fundamentals of standard written English rules to create and present a final research project. (ILO: Communication)


## BT 121 - Digital Marketing and e-Commerce

## 4 Credit(s)

Prerequisite(s): BA 131 and BT 113 or WR 115 or designated placement.
Course Description: Introduces the use of the Internet to improve business profit. Includes an introduction to the World Wide Web, e-business ideas, e-business planning, legal issues, Web design, security issues, evaluation of the e-business optimal product, e-marketing, payment options, using the Internet for alternative sources of supply, competitive intelligence, setting up a mall storefront, e-customer service, and creating the virtual storefront.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe and categorize the major ways the Internet is currently used for conducting business and possible future trends.
- CLO\#2: Create an e-Business plan and describe its importance to project management.
- CLO\#3: List and discuss the different e-Business models.
- CLO\#4: Use the Internet to locate product ideas, alternative supply sources and competitive intelligence. (ILO: Information Literacy)
- CLO\#5: Learn how to purchase a domain name including the steps to establish a Web presence.
- CLO\#6: Describe the benefits for an e-Business to join a trade association.
- CLO\#7: Develop online marketing strategies based on the 7 P's of marketing.
- CLO\#8: Investigate and evaluate various marketing and communication strategies and tactics for the Internet. (ILO: Critical Thinking)


## BT 160 - Business Math

## 4 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and MTH 20 or designated placement.

Course Description: This course introduces math applications used in business including percentages, fractions, interest (compounding, present value, future value), and other common business applications.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Determine the appropriate method to set up a word problem and to solve for the unknown(s).
- CLO\#2: Convert decimals and fractions to percentages and percentages to decimal and fractions. List and define the key elements of the portion formula and solve for one unknown when the other two key elements are given. Calculate the rate of percent increase or decrease.
- CLO\#3: Calculate singe trade discounts and chain discounts with net price equivalent and single equivalent discount rates. Determine the invoice price of an item with FOB shipping point and FOB destination and credit terms. Calculate the invoice due date under typical business credit terms. Compute outstanding balance with partial payments.
- CLO\#4: Calculate dollar markup and percent markup based on cost and based on selling price. Calculate selling price, cost, or the percent markup based on cost and based on selling price when two of the three are given. Calculate markdowns and markups. Price perishable items to cover spoilage loss.
- CLO\#5: Calculate simple interest and maturity value by months; years; exact time, exact interest; and exact time, ordinary interest. Using the interest formula, calculate the unknown when the other two (principal, rate, or time) are given. Compute the proper interest credits under the U.S. Rule.
- CLO\#6: Calculate bank discount, maturity value, proceeds, and effective rate for simple discount notes. Compute the maturity value, bank discount, and proceeds of discounting an interest-bearing note before maturity.
- CLO\#7: Calculate and compare simple interest and compound interest. Calculate future value (compound amount), present value, and interest by table lookup and by using a financial calculator. Compute effective rate of interest.
- CLO\#8: Calculate the future value of an ordinary annuity \& an annuity due and the present value of an ordinary annuity by table lookup and by using a financial calculator. Calculate a sinking fund payment made at the end of each period by table lookup. (ILO: Quantitative Literacy and Reasoning)
- CLO\#9: Determine the cost of installment buying by calculating amount financed, finance charge, deferred payment, and estimated APR by formula and by table lookup. Calculate paying off an installment loan before the due date. Compute finance charges on revolving charge credit card accounts.
- CLO\#10: Differentiate between the types of mortgages available. Compute monthly mortgage payments utilizing an amortization chart and a financial calculator. Calculate the total interest over the life of a mortgage and the amount of interest and principal portion of each monthly payment.
- CLO\#11: Define and calculate the mean, weighted mean, median, and mode; prepare a frequency distribution; and explain and calculate the range and standard deviation.


## BT 178 - Customer Service

## 3 Credit(s)

Prerequisite(s): BA 131 or CIS 120 (formerly offered as CS120), and BT 101 or PSY 101, and BT 113 or WR 115 or designated placement.

Course Description: Introduces students to the concepts of exceptional customer service. In today's highly competitive global marketplace, attracting and retaining customers is imperative for maximizing profits and the success of all businesses. Therefore, it is important for employees in all professions to develop the skills necessary to provide exceptional customer service. It is mandatory that customer service be considered from the top down within an organization. This course will include such topics as: customer loyalty; principles of quality customer service; service recovery; attitudes and habits that affect service; difficult customers; active listening to determine customer needs; effective communication; communication with a diverse customer population; hiring, motivating, and training service people; performance-enhancing feedback; and measurement of service performance.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the history and background of customer service and why it has become important in the global marketplace.
- CLO\#2: Define customer service and describe the internal and external customers.
- CLO\#3: Explain the role that exceptional customer service plays in maximizing profits and success of a business.
- CLO\#4: Identify principles of quality customer service.
- CLO\#5: Explain the importance of building customer loyalty.
- CLO\#6: Describe how to recover from a service failure or mistake.
- CLO\#7: Develop strategies to deal with difficult customers.
- CLO\#8: Determine customer needs, wants, and desires through active listening.
- CLO\#9: Communicate effectively with a diverse customer population (language, race, gender, religion, age, or disability). (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## BT 204 - Project Management

## 3 Credit(s)

Prerequisite(s): BA 131 and BT 113 or WR 115 or designated placement.

Course Description: This foundational course covers concepts, key terminology, and skills that are used by managers to propose, plan, secure resources, budget, and lead teams to successful completion of their
projects.
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply key project management terms.
- CLO\#2: Analyze the environment in which projects operate.
- CLO\#3: Identifya generalized view of how the various project management processes commonly interact.
- CLO\#4: Interpret the role of the project manager. (ILO: Communication)


## BT 250 - Entrepreneurship

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: This class expands on the foundation in BA 101 - Introduction to Business. It acquaints students with the principles related to the field of small business and entrepreneurship. Students will be able to describe the entrepreneur's mindset; define the characteristics of successful entrepreneurs and debunk common myths about them; and identify sources of successful business ideas. Students will also be able to differentiate among various small business entry strategies, assess marketing techniques used by entrepreneurs, compare/contrast sources of financing, and analyze the advantages and disadvantages of franchising as a means of starting a business. The culminating project in this class is an interview with a local entrepreneur and a formal, written summary of that interview.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define entrepreneurship and discuss the most commonly cited characteristics exhibited by successful small business owners.
- CLO\#2: Explain the role of business ethics and social responsibility in the current small business climate.
- CLO\#3: Compare the rewards of starting a small business venture with the potential drawbacks.
- CLO\#4: Explain the pros and cons of the sole proprietorship, partnership, and corporate forms of ownership for an entrepreneur starting a small business.
- CLO\#5: Explain the purpose of a business plan, the elements found in one and the benefits the plan provides a small business.
- CLO\#6: Summarize the sources of small business financing and compare/contrast the pros and cons of each source.
- CLO\#7: Explain the purpose of the balance sheet, income statement, and cash-flow statements used in every entrepreneurial venture.
- CLO\#8: Calculate the break-even point of a product/service (given variable costs, fixed costs, and selling price).
- CLO\#9: Discuss the advantages and disadvantages of franchising (from both the franchisor's and franchisee's point of view) as a method of starting a small business.
- CLO\#10: Synthesize the elements of the class by interviewing a small business owner (asking them how they started their business, pitfalls encountered, personal characteristics for success, advice for prospective entrepreneurs) and applying what you learned to your life. (ILO:
Communication)


## BT 265 - Writing a Business Plan (Capstone)

## 3 Credit(s)

Prerequisite(s): BA 101, BA 131, BA 211, BA 214, BA 223

Course Description: This final capstone project allows students to integrate the four functional areas of business (accounting, finance, management, and marketing) by creating and presenting a fully developed, professional business plan and competitive strategy. The final business plan will follow the format of standard business plans, including the executive summary, company description, industry analysis, management plan, marketing plan, operational plan and financial plan. Students will also orally present their business plans to the class, using appropriate technology. Students will learn to work with other stakeholders in refining their plans through interviews with relevant local businesses, business associations and peer review.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Research relevant industries and markets by using online research tools, communicating directly with companies and by analyzing available financial statements.
- CLO\#2: Compare and contrast the pros and cons of a sole proprietorship, partnership, and corporate forms of ownership. (ILO: Critical Thinking)
- CLO\#3: Explain the purpose of a professional business plan and describe the elements found in one.
- CLO\#4: Participate in a peer evaluation of professionally written business plans.
- CLO\#5: Deliver a concise and compelling presentation that "sells" the business plan.
- CLO\#6: Utilizing the business plan, make contacts and network with banks, investors, and potential partners.


## CG 100-College Success and Survival

## 2 Credit(s)

Course Description: Introduces students to many aspects of academic success. It centers on strategies for major identification, motivation towards completion, and good study habits. Additionally, it offers college resources and tools. This class will also focus on achieving positive outcomes in the academic environment through networking, navigating college systems, and positive behavior and communication skills. Students will receive guidance on adjusting personally and socially for college success. The focus is on college terms and information; academic major focus; degree choice and requirements, balancing work, school and home demands; financial planning; forming study partnerships; and stress and time management.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify learning styles and develop study skills. (ILO: Communication)
- CLO\#2: Describe a focused mindset and recognize motivation theories.
- CLO\#3: Discuss and practice effective time management skills.
- CLO\#4: Identify college resources and engage in campus life opportunities.
- CLO\#5: Research financial aid options and discuss financial literacy.
- CLO\#6: Set effective, attainable goals.
- CLO\#7: Complete career research to identify a career pathway to become major secure.
- CLO\#8: Utilize program information to develop two-term planner and set educational goal. (ILO: Critical Thinking)
- CLO\#9: Identify self-defeating behaviors and outline steps towards changing them.


## CG 105 - Finding the Money: Scholarship Essay Writing

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Corequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Teaches students to write effective scholarship essays and develop their own personal essays from initial draft to final essay format. This class explores resources and conducts research for funding college education.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop writing skills in relation to scholarship essay prompts. (ILO: Communication)
- CLO\#2: Critically analyze and offer constructive feedback to others' writing.
- CLO\#3: Identify potential scholarship opportunities.


## CG 111 - Study Skills for Math Success

## 1 Credit(s)

Corequisite(s): Students must be concurrently enrolled in a math course at RCC.
Course Description: Provides students information, techniques, strategies and skills helpful in becoming more efficient in time management, studying, listening, note taking, exams, and stress reduction; addresses basic principles of psychology of learning and assists in creating positive tools towards successful math completion.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply effective note-taking and test-taking strategies to math courses. (ILO: Communication )
- CLO\#2: Recognize the psychology of math difficulties, irrational belief, and identify other factors that impact stress response.
- CLO\#3: Demonstrate principles of time management and constructive study habits.


## CG 114 - Financial Survival for College Students

## 1 Credit(s)

Corequisite(s): RD 90 or WR 91
Course Description: Provides students with general information and strategies on making fiscally wise
choices for their education and future.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify different types of financial resources available for college students.
- CLO\#2: Construct a monthly budget and build an educations financial plan. (ILO: Communication)
- CLO\#3: Describe the SAP policy.
- CLO\#4: Access and personalize information on educational debt and repayment.


## CG 140 - Career Development

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Provides tools needed to make an informed career decision and set educational goals. The course includes self-assessment tools, career exploration options, guest speakers and field trips. Use of the RCC website is included.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify personal values, skills and abilities. Explore and utilize career and personality assessment tools.
- CLO\#2: Identify and document the necessary skills, responsibilities, education and training for careers of interest. (ILO: Critical Thinking)
- CLO\#3: Conduct career interviews with community members and college staff.
- CLO\#4: Develop and employ effective decision-making strategies for education and career.
- CLO\#5: Participate as a member of a team learning to work cooperatively with others and contribute to the group with ideas, suggestions, and effort.


## CG 147 - Decision Making

## 1 Credit(s)

Course Description: Develops an awareness of decision-making styles and encourages the practice of different decision-making styles to make effective educational and career choices.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply principles of decision making to career and college search.
- CLO\#2: Explore and select a college major and identify the progression of courses for that major. (ILO: Critical Thinking)
- CLO\#3: Identify career/education/training choices. Evaluate and identify financial aid options resources.
- CLO\#4: Identify short-term and long-term goals and appropriate applications.


## 3 Credit(s)

Course Description: Explores the fields of automotive and diesel, building construction and computer literacy. Investigates diverse subjects including high technology and the trades; and explores the dynamic changing roles of men and women in the workplace.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Classify STEM fields and occupations that fall into this category.
- CLO\#2: Identify and document the necessary skills, responsibilities, education and training for careers of interest.
- CLO\#3: Recognize and define careers in the science field, technology field, engineering field and math field. (ILO: Communication)
- CLO\#4: Explore career opportunities in the trades and technical fields and select a major. (ILO: Critical Thinking)


## CG 155 - Exploring Careers in Health Care

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Corequisite(s): BT 113 or WR 115 or designated placement score.
Recommended Prerequisite(s): CIS 120

Course Description: Introduces students to a comprehensive range of professions in health care. Students will explore career choices including educational requirements, job outlooks, occupational requirements, wage ranges, and professional requirements. Students will also explore some of the current issues and potential ethical dilemmas that health care professionals face. In addition, students will complete selfassessments in the Oregon Career Information System (CIS) to help determine which health careers are a good match for their interests and skills.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explore and explain the delivery of health care services and related career paths.
- CLO\#2: Describe key qualities of effective healthcare workers and perform a self-assessment of key qualities to determine careers of interest/compatibility.
- CLO\#3: Recognize and identify differences in international healthcare systems and identify trends in the health care industry and their related effect on health care professions.
- CLO\#4: Identify and explore specifics about health care professions and explore pathways including educational and licensing requirements, wage outlook, employment outlook, and employer expectations.
- CLO\#5: Identify and explain issues related to equity and diversity in healthcare. Synthesize information to explain how this can impact quality of patient care. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#6: Apply knowledge to create targeted health care career plan of action.


## CG 199 - Special Studies: Career Guidance

## Var. (1-3) Credit(s)

Prerequisite(s): Varies according to specific offering.

Course Description: Presents special topics in Human Development/Career Guidance. Content varies according to department/institution needs and demand.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, and research papers.


## CG 213 - Improving Parent/Child Relationships

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement

## Recommended Prerequisite(s): CIS 120

Course Description: Flexibly designed to meet parents' varying needs and schedules; presents a coherent approach to positive parenting; specific parent-child interactions are analyzed and practical steps for effective interaction are identified.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Recognize and model appropriate parental behavior.
- CLO\#2: Express children's limits clearly and state the needs of the situation. (ILO: Communication)
- CLO\#3: Discuss the benefit of stimulating independence, self-reliance, and responsibility in children.
- CLO\#4: Discuss the benefit of increasing positive interactions and decreasing bids for attention and struggles for power.


## CHEM 104-Introductory Chemistry

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement; and MTH 65 or MTH 63 or designated placement.

## Corequisite(s): CHEM 104L, CHEM 104R

Course Description: Designed for non-science majors. Introduces the essence of atoms and molecules, chemical bonds, chemical reactions, gases, acids, and bases. Prepares students for work in a laboratory that uses chemicals. Helps students recognize how cells and organisms function. Students must enroll in lecture, laboratory and recitation sections. All three sections must be taken concurrently.

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform introductory chemistry calculations.
- CLO\#2: Use the periodic table as a tool for solving problems in introductory chemistry.
- CLO\#3: Use the International Union of Pure and Applied Chemistry (IUPAC) system to name and write formulas for introductory chemical compounds.
- CLO\#4: Use Lewis structures, electronegativity values, and molecular shapes to draw conclusions about intermolecular forces and states of matter.
- CLO\#5: Write and balance chemical reactions; use balanced equations to perform stoichiometry calculations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Use energy concepts to explain reaction rates and chemical equilibrium.
- CLO\#7: Describe and calculate properties of aqueous solutions, including acids, bases, and salts.


## CHEM 104L - Introductory Chemistry Lab

## 1 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement; and MTH 65 or MTH 63 or designated placement.

Corequisite(s): CHEM 104, CHEM 104R
Course Description: Designed for non-science majors. Introduces the essence of atoms and molecules, chemical bonds, chemical reactions, gases, acids, and bases. Prepares students for work in a laboratory that uses chemicals. Students must enroll in lecture, laboratory and recitation sections. All three sections must be taken concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform introductory chemistry calculations.
- CLO\#2: Use the periodic table as a tool for solving problems in introductory chemistry.
- CLO\#3: Use the International Union of Pure and Applied Chemistry (IUPAC) system to name and write formulas for introductory chemical compounds.
- CLO\#4: Use Lewis structures, electronegativity values, and molecular shapes to draw conclusions about intermolecular forces and states of matter.
- CLO\#5: Write and balance chemical reactions; use balanced equations to perform stoichiometry calculations.
- CLO\#6: Use energy concepts to explain reaction rates and chemical equilibrium.
- CLO\#7: Describe and calculate properties of aqueous solutions, including acids, bases, and salts.
- CLO\#8: Interpret laboratory data to draw conclusions about introductory chemistry experiments. (ILO: Quantitative Literacy and Reasoning)
- CLO\#9: Learn how to perform hazard assessment, SDS, and learn safety techniques.


## CHEM 104R - Introductory Chemistry Recitation

1 Credit(s)
Prerequisite(s): RD 90 or WR 91 or designated placement; and MTH 65 or MTH 63 or designated
placement.
Corequisite(s): CHEM 104, CHEM 104L

Course Description: Designed for non-science majors. Introduces the essence of atoms and molecules, chemical bonds, chemical reactions, gases, acids, and bases. Prepares students for work in a laboratory that uses chemicals. Helps students recognize how cells and organisms function. Students must enroll in lecture, laboratory and recitation sections. All three sections must be taken concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform introductory chemistry calculations.
- CLO\#2: Use the periodic table as a tool for solving problems in introductory chemistry.
- CLO\#3: Use the International Union of Pure and Applied Chemistry (IUPAC) system to name and write formulas for introductory chemical compounds.
- CLO\#4: Use Lewis structures, electronegativity values, and molecular shapes to draw conclusions about intermolecular forces and states of matter.
- CLO\#5: Write and balance chemical reactions; use balanced equations to perform stoichiometry calculations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Use energy concepts to explain reaction rates and chemical equilibrium.
- CLO\#7: Describe and calculate properties of aqueous solutions, including acids, bases, and salts.


## CHEM 105 - Introductory Organic Chemistry

## 3 Credit(s)

Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R or higher-level chemistry course
Corequisite(s): CHEM 105L

Course Description: Designed for non-science majors. Introduces the essence of nuclear chemistry and organic chemistry, including hydrocarbons, alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines and amides. Prepares students for work in a laboratory that uses chemicals. Also helps students understand how cells and organisms' function. Students must enroll in lecture and laboratory sections. Both lecture and lab are required to be taken together.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare and contrast chemical and nuclear reactions.
- CLO\#2: Describe the physical and chemical properties of introductory organic compounds: hydrocarbons, alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines, and amides.
- CLO\#3: Recognize and distinguish between distinct isomers of introductory organic compounds. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Use and recognize correct IUPAC nomenclature for introductory organic compounds.
- CLO\#5: Describe and identify the products of chemical reactions involving introductory organic compounds.


## CHEM 105L - Introductory Organic Chemistry Lab

## 1 Credit(s)

Prerequisite(s): CHEM 104, CHEM 104L, CHEM 104R or higher-level chemistry course.

Corequisite(s): CHEM 105
Course Description: Designed for non-science majors. Introduces the essence of nuclear chemistry and organic chemistry, including hydrocarbons, alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines and amides. Prepares students for work in a laboratory that uses chemicals. Also helps students understand how cells and organisms' function. Both lecture and lab are required to be taken together

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare and contrast chemical and nuclear reactions.
- CLO\#2: Describe the physical and chemical properties of introductory organic compounds: hydrocarbons, alcohols, ethers, aldehydes, ketones, carboxylic acids, esters, amines, and amides.
- CLO\#3: Recognize and distinguish between distinct isomers of introductory organic compounds.
- CLO\#4: Use and recognize correct IUPAC nomenclature for introductory organic compounds.
- CLO\#5: Describe and identify the products of chemical reactions involving introductory organic compounds.
- CLO\#6: Use the results of laboratory tests to identify an unknown organic compound. (ILO: Quantitative Literacy and Reasoning)


## CHEM 106 - Introductory Biochemistry

## 3 Credit(s)

Prerequisite(s): CHEM 105, CHEM 105L

## Corequisite(s): CHEM 106L

Course Description: Designed for non-science majors. Introduces the essence of biochemistry, including chirality, carbohydrates, lipids, proteins, enzymes, nucleic acids and metabolism. Prepares students for work in a laboratory that uses chemicals. Also helps students understand how cells and organisms function. Both lecture and lab are required to be taken together.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Recognize and interpret different representations of chiral compounds.
- CLO\#2: Describe the physical and chemical properties of introductory biochemical compounds: carbohydrates, lipids, amino acids, proteins, enzymes, and nucleic acids.
- CLO\#3: Recognize and distinguish between distinct isomers of introductory biochemical compounds. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Give examples of the roles of introductory biochemical compounds in living organisms.
- CLO\#5: Explain and interpret metabolic reactions involving introductory biochemical compounds.


## CHEM 106L - Introductory Biochemistry Lab

## 1 Credit(s)

Prerequisite(s): CHEM 105, CHEM 105L

Corequisite(s): CHEM 106
Course Description: Designed for non-science majors. Introduces the essence of biochemistry, including chirality, carbohydrates, lipids, proteins, enzymes, nucleic acids and metabolism. Prepares students for work in a laboratory that uses chemicals. Also helps students understand how cells and organisms' function. Both lecture and lab are required to be taken together.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Recognize and interpret different representations of chiral compounds.
- CLO\#2: Describe the physical and chemical properties of introductory biochemical compounds: carbohydrates, lipids, amino acids, proteins, enzymes, and nucleic acids.
- CLO\#3: Recognize and distinguish between distinct isomers of introductory biochemical compounds.
- CLO\#4: Give examples of the roles of introductory biochemical compounds in living organisms.
- CLO\#5: Explain and interpret metabolic reactions involving introductory biochemical compounds.
- CLO\#6: Use the results of laboratory tests to identify an unknown biochemical compound. (ILO: Quantitative Literacy and Reasoning)


## CHEM 221 - General Chemistry I

## 3 Credit(s)

Prerequisite(s): MTH 65

Corequisite(s): CHEM 221L, CHEM 221R
Recommended Prerequisite(s): CIS 120
Course Description: Presents chemistry to pre-professional students interested in science careers (chemistry, geology, physics, biology), engineering, medicine, and veterinary medicine. Introduces the concepts of atomic chemistry, chemical equations, stoichiometry, the gas laws, thermochemistry, the periodic table, and chemical bonding. An introduction to the chemical laboratory is presented. Students must enroll in lecture, laboratory and recitation sections. All three sections must be taken concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Use the periodic table as a tool for solving problems in general chemistry.
- CLO\#3: Use the IUPAC system to name and write formulas for ionic and covalent compounds.
- CLO\#4: Use quantum mechanics principles to describe and explain electron configurations, spectroscopy, and periodic trends.
- CLO\#5: Write and balance chemical reactions; use balanced equations to perform stoichiometry calculations, including solution stoichiometry. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Draw Lewis structures for molecules and polyatomic ions.
- CLO\#7: Use basic thermodynamics principles to perform energy calculations.
- CLO\#8: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.


## CHEM 221L - General Chemistry I Lab

## 1 Credit(s)

Prerequisite(s): MTH 65
Corequisite(s): CHEM 221, CHEM 221R
Recommended Prerequisite(s): CIS 120

Course Description: Presents chemistry to pre-professional students interested in science careers (chemistry, geology, physics, biology), engineering, medicine, and veterinary medicine. Introduces the concepts of atomic chemistry, chemical equations, stoichiometry, the gas laws, thermochemistry, the periodic table, and chemical bonding. An introduction to the chemical laboratory is presented. Students must enroll in lecture, laboratory and recitation sections. All three sections must be taken concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Use the periodic table as a tool for solving problems in general chemistry.
- CLO\#3: Use the IUPAC system to name and write formulas for ionic and covalent compounds.
- CLO\#4: Use quantum mechanics principles to describe and explain electron configurations, spectroscopy, and periodic trends.
- CLO\#5: Write and balance chemical reactions; use balanced equations to perform stoichiometry calculations, including solution stoichiometry. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Draw Lewis structures for molecules and polyatomic ions.
- CLO\#7: Use basic thermodynamics principles to perform energy calculations.
- CLO\#8: Interpret laboratory data to draw conclusions about general chemistry experiments.
- CLO\#9: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.
- CLO\#10: Learn how to perform hazard assessment, SDS, and learn safety techniques.


## CHEM 221R - General Chemistry I Recitation

## 1 Credit(s)

Prerequisite(s): MTH 65

Corequisite(s): CHEM 221, CHEM 221L
Recommended Prerequisite(s): CIS 120
Course Description: Presents chemistry to pre-professional students interested in science careers (chemistry, geology, physics, biology), engineering, medicine, and veterinary medicine. Introduces the concepts of atomic chemistry, chemical equations, stoichiometry, the gas laws, thermochemistry, the
periodic table, and chemical bonding. An introduction to the chemical laboratory is presented. Students must enroll in lecture, laboratory and recitation sections. All three sections must be taken concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Use the periodic table as a tool for solving problems in general chemistry.
- CLO\#3: Use the IUPAC system to name and write formulas for ionic and covalent compounds.
- CLO\#4: Use quantum mechanics principles to describe and explain electron configurations, spectroscopy, and periodic trends.
- CLO\#5: Write and balance chemical reactions; use balanced equations to perform stoichiometry calculations, including solution stoichiometry. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Draw Lewis structures for molecules and polyatomic ions
- CLO\#7: Use basic thermodynamics principles to perform energy calculations.
- CLO\#8: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.


## CHEM 222-General Chemistry II

## 3 Credit(s)

Prerequisite(s): CHEM 221, CHEM 221L, CHEM 221R and MTH 95
Corequisite(s): CHEM 222L, CHEM 222R
Course Description: Continues topics presented in CHEM221/L/R. Exposes students to the liquid and solid states of matter, solution properties, kinetics, equilibrium, acids and bases, and chemical solubility. More complex instruments and tools found in chemical laboratories are introduced and used in the lab. Students must enroll in lecture, laboratory, and recitation sections. All three sections must be taken concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Use VSEPR and molecular orbital theory to explain molecular characteristics such as shape, polarity, and resonance.
- CLO\#3: Use quantitative methods to describe and explain the characteristics of solids, liquids, gases, and solutions.
- CLO\#4: Use rate laws to draw conclusions about reaction mechanisms.
- CLO\#5: Calculate and predict outcomes of reactions based on equilibrium constants and Le Chatelier's principle.
- CLO\#6: Use the quadratic formula, successive approximations, and other calculator methods to solve equilibrium and acid/base problems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#7: Describe and explain the properties of acids, bases, and salts, with an emphasis on the concept of acid-base pairs.
- CLO\#8: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.


## CHEM 222L - General Chemistry II Lab

## 1 Credit(s)

Prerequisite(s): CHEM 221, CHEM 221L, CHEM 221R and MTH 95

Corequisite(s): CHEM 222, CHEM 222R
Course Description: Presents chemistry to pre-professional students interested in science careers (chemistry, geology, physics, biology), engineering, medicine, and veterinary medicine. Introduces the concepts of atomic chemistry, chemical equations, stoichiometry, the gas laws, thermochemistry, the periodic table, and chemical bonding. An introduction to the chemical laboratory is presented. Students must enroll in lecture, laboratory and recitation sections. All three sections must be taken concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Use VSEPR and molecular orbital theory to explain molecular characteristics such as shape, polarity, and resonance.
- CLO\#3: Use quantitative methods to describe and explain the characteristics of solids, liquids, gases, and solutions.
- CLO\#4: Use rate laws to draw conclusions about reaction mechanisms.
- CLO\#5: Calculate and predict outcomes of reactions based on equilibrium constants and Le Chatelier's principle.
- CLO\#6: Use the quadratic formula, successive approximations, and other calculator methods to solve equilibrium and acid/base problems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#7: Describe and explain the properties of acids, bases, and salts, with an emphasis on the concept of acid-base pairs.
- CLO\#8: Interpret laboratory data to draw conclusions about general chemistry experiments.
- CLO\#9: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.
- CLO\#10: Learn how to perform hazard assessment, SDS, and learn safety techniques.


## CHEM 222R - General Chemistry II Recitation

## 1 Credit(s)

Prerequisite(s): CHEM 221, CHEM 221L, CHEM 221R and MTH 95
Corequisite(s): CHEM 222, CHEM 222L
Course Description: Continues topics presented in CHEM221. Exposes students to the liquid and solid states of matter, solution properties, kinetics, equilibrium, acids and bases, and chemical solubility. More complex instruments and tools found in chemical laboratories are introduced and used in the lab. Students must enroll in lecture, laboratory, and recitation sections. All three sections must be taken concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Use VSEPR and molecular orbital theory to explain molecular characteristics such as shape, polarity, and resonance.
- CLO\#3: Use quantitative methods to describe and explain the characteristics of solids, liquids, gases, and solutions.
- CLO\#4: Use rate laws to draw conclusions about reaction mechanisms.
- CLO\#5: Calculate and predict outcomes of reactions based on equilibrium constants and Le Chatelier's principle.
- CLO\#6: Use the quadratic formula, successive approximations, and other calculator methods to solve equilibrium and acid/base problems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#7: Describe and explain the properties of acids, bases, and salts, with an emphasis on the concept of acid-base pairs.
- CLO\#8: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.


## CHEM 223-General Chemistry III

## 3 Credit(s)

Prerequisite(s): MTH 111 Z and CHEM 222, CHEM 222L, CHEM 222R

Corequisite(s): CHEM 223L, CHEM 223R

Course Description: Completes general chemistry sequence. Presents a deeper view of thermochemistry, electrochemistry, nuclear chemistry, descriptive chemistry of the periodic table, the transition metals, and introduces organic chemistry and biochemistry. Students are directed in the use of laboratory instrumentation. Students must enroll in lecture, laboratory, and recitation sections. All three sections must be taken concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Apply equilibrium principles to solve buffer, titration, and solubility problems in general chemistry.
- CLO\#3: Use thermodynamic concepts (enthalpy, entropy, Gibbs free energy) to calculate and explain the spontaneity of chemical reactions.
- CLO\#4: Apply the concepts of oxidation and reduction to balancing chemical equations, performing thermodynamic calculations, diagramming electrochemical cells, and describing practical applications. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Use the language of nuclear chemistry to describe and explain radioactivity, half-life, antimatter, transmutation, nuclear energy, and medical applications.
- CLO\#6: Use the language of organic and biochemistry to describe and explain organic molecules, isomers, functional groups, and polymers.
- CLO\#7: Describe and explain the characteristics of transition metal complexes: oxidation state, isomers, ligands, geometry, and d-orbitals.
- CLO\#8: Interpret laboratory data to draw conclusions about general chemistry experiments.
- CLO\#9: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.


## CHEM 223L - General Chemistry III Lab

## 1 Credit(s)

Prerequisite(s): MTH 111 Z and CHEM 222, CHEM 222L, CHEM 222R

Corequisite(s): CHEM 223, CHEM 223R

Course Description: Completes general chemistry sequence. Presents a deeper view of thermochemistry, electrochemistry, nuclear chemistry, descriptive chemistry of the periodic table, the transition metals, and introduces organic chemistry and biochemistry. Students are directed in the use of laboratory instrumentation. Students must enroll in lecture, laboratory, and recitation sections. All three sections must be taken concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Apply equilibrium principles to solve buffer, titration, and solubility problems in general chemistry.
- CLO\#3: Use thermodynamic concepts (enthalpy, entropy, Gibbs free energy) to calculate and explain the spontaneity of chemical reactions.
- CLO\#4: Apply the concepts of oxidation and reduction to balancing chemical equations, performing thermodynamic calculations, diagramming electrochemical cells, and describing practical applications. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Use the language of nuclear chemistry to describe and explain radioactivity, half-life, antimatter, transmutation, nuclear energy, and medical applications.
- CLO\#6: Use the language of organic and biochemistry to describe and explain organic molecules, isomers, functional groups, and polymers.
- CLO\#7: Describe and explain the characteristics of transition metal complexes: oxidation state, isomers, ligands, geometry, and d-orbitals.
- CLO\#8: Interpret laboratory data to draw conclusions about general chemistry experiments.
- CLO\#9: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry
- CLO\#10: Learn how to perform hazard assessment, SDS, and learn safety techniques


## CHEM 223R - General Chemistry III Recitation

1 Credit(s)
Prerequisite(s): MTH 111 Z and CHEM 222, CHEM 222L, CHEM 222R

Corequisite(s): CHEM 223, CHEM 223L

Course Description: Completes general chemistry sequence. Presents a deeper view of thermochemistry, electrochemistry, nuclear chemistry, descriptive chemistry of the periodic table, the transition metals, and introduces organic chemistry and biochemistry. Students are directed in the use of laboratory instrumentation. Students must enroll in lecture, laboratory, and recitation sections. All three sections must be taken concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use the metric system, scientific notation, significant figures, and conversion factors to perform general chemistry calculations.
- CLO\#2: Apply equilibrium principles to solve buffer, titration, and solubility problems in general chemistry.
- CLO\#3: Use thermodynamic concepts (enthalpy, entropy, Gibbs free energy) to calculate and explain the spontaneity of chemical reactions.
- CLO\#4: Apply the concepts of oxidation and reduction to balancing chemical equations, performing thermodynamic calculations, diagramming electrochemical cells, and describing practical applications. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Use the language of nuclear chemistry to describe and explain radioactivity, half-life, antimatter, transmutation, nuclear energy, and medical applications.
- CLO\#6: Use the language of organic and biochemistry to describe and explain organic molecules, isomers, functional groups, and polymers.
- CLO\#7: Describe and explain the characteristics of transition metal complexes: oxidation state, isomers, ligands, geometry, and d-orbitals.
- CLO\#8: Use the chemical literature to locate and analyze information relevant to a specific question in chemistry.


## CIS 60 - PC Basics I

## 2 Credit(s)

Course Description: Designed for students with little or no previous experience with computers. Introduces basic computer fundamentals through lecture, demonstrations and hands-on experience with a personal computer. This course will cover basic hardware terminology, popular Internet technologies, email, online course skills, basic file management operations, word processing, and spreadsheets and may include other applications. Additionally, introduces students to basic computer concepts and terms and the practical applications of microcomputers in life. Course is graded on a pass/no pass basis. Course does not transfer.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Acquire a working knowledge of basic computer technology.
- CLO\#2: Explain and demonstrate Internet browsing skills, including the use of hyperlinks, basic search engines, and basic email operations.
- CLO\#3: Identify popular computer hardware, Windows operating system, and computer peripherals.
- CLO\#4: Demonstrate basic use of a word processing application. (ILO: Critical Thinking)
- CLO\#5: Explain and demonstrate basic file management skills, including saving files, opening files, creating folders, copying files, file deletion, moving files, and renaming files. (ILO: Information Literacy)
- CLO\#6: Be able to explain basic use of common features of an online course management system.


## CIS 120 - Concepts in Computing I

## 2 Credit(s)

Course Description: Students will learn Windows Interface, file management skills and how to use word processing, spreadsheet, and presentation software. Additionally, professional e-mail correspondence,

Internet, best practices to safety on the Internet, Blackboard usage and basic Windows operating systems fundamentals will be covered.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrates electronic communications appropriate to their audience and situations.
- CLO\#2: Effectively navigate and search the Internet using a browser.
- CLO\#3: Be able to utilize industry standard productivity software to produce commonly used word processing documents.
- CLO\#4: Be able to utilize industry standard productivity software to produce basic spreadsheets that include basic formulas, functions, charts, and formatting. (ILO: Critical Thinking)
- CLO\#5: Demonstrate and utilize basics of presentation software.
- CLO\#6: Place, create and organize files so that they are easily located.
- CLO\#7: Navigate, operate, and customize a computer using an operating system.
- CLO\#8: Communicate using correct technical terminology.
- CLO\#9: Navigate and effectivity use Blackboard.


## CIS 125DB - Database Management Systems

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or BA 131, and MTH 60 or MTH 63 or BT 160
Course Description: Designed for students in any discipline, this course includes a hands-on approach to develop competency in basic and advanced concepts and commands of database management. Students will learn to design, set up, and print a variety of forms and reports. Software to be used to develop materials is Microsoft Access.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of database terminology.
- CLO\#2: Distinguish between uses of flat files and relational databases.
- CLO\#3: Use MS Access as a tool for database creation, management, and reports. (ILO: Critical Thinking)
- CLO\#4: Use MS Access to plan and implement a relational database design. (ILO: Critical Thinking)
- CLO\#5: Plan and design multiple fields and tables within a database.
- CLO\#6: Create, sort, index, move around in the file, and display data according to criteria.
- CLO\#7: Implement complex calculations in fields, queries and reports. (ILO: Critical Thinking)


## CIS 125PT - Effective Presentations

## 2 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or BA 131, and BT 113 or WR 115 or designated placement.

Course Description: Includes a hands-on approach to develop competency in basic and advanced concepts and commands of effective presentations. Students will also learn techniques for developing and
creating presentations that engage the audience, illustrate ideas, and use media effectively. Software used to develop presentations in the course is Microsoft PowerPoint. The course does not fulfill degree or certificate requirements for computer proficiency.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify elements of the PowerPoint user interface and navigate within the interface.
- CLO\#2: Use PowerPoint tools to create slides using text, graphics, charts, sound, and video. (ILO: Critical Thinking)
- CLO\#3: Use PowerPoint tools to create consistent design elements in a presentation.
- CLO\#4: Plan and create a presentation that engages an audience and effectively communicates and illustrates main topics, concepts, and ideas. (ILO: Critical Thinking)


## CIS 125SS - Spreadsheet Applications

## 4 Credit(s)

Prerequisite(s): MTH 63 or BT 160 (higher Math recommended), and CIS 120 (formerly offered as CS120) or BA 131

Course Description: Designed for students in any discipline. This course includes hands-on approach to develop a competency in basic and advanced concepts and commands of spreadsheet software. Students will learn to design, set up, and print a variety of spreadsheet applications. Microsoft Excel will be used to develop materials. Emphasis will be placed on using spreadsheet data for problems analysis. Course is also offered as BA 285 Advanced Business Applications: Excel.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of spreadsheet terminology. (ILO: Critical Thinking)
- CLO\#2: Utilize spreadsheet software as a tool for numerical reports.
- CLO\#3: Use a spreadsheet for problem solving.
- CLO\#4: Design professional worksheets.
- CLO\#5: Create, print, and analyze data in chart form.
- CLO\#6: Create data tables and database functions in a spreadsheet.
- CLO\#7: Demonstrate and work with complex formulas and advanced statistical analysis including Excel functions. (ILO: Critical Thinking)
- CLO\#8: Import, modify and evaluate data from outside sources.


## CIS 125V - Visio

## 1 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120), or equivalent computing experience.

Course Description: Introduces diagramming software using Microsoft Visio Professional. Applications and projects are designed for both business and technical professional skill development. Students learn to develop any of the following: flow charts, organizational charts, office layouts, Web site diagrams, network diagrams, and building and electrical plans. Course projects will be flexible, and students will select from topics appropriate to their areas of study.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Creates and add shapes to diagrams and works with linked and embedded projects.
- CLO\#2: Apply layers and uses connection tools to create diagrams.
- CLO\#3: Creates charts and uses templates and original designs to build Visio projects.
- CLO\#4: Use diagramming tools to solve given scenario. (ILO: Information Literacy)
- CLO\#5: Assemble additional shapes and tools through online resources and update Visio application.
- CLO\#6: Apply Visio tools to given project. (ILO: Critical Thinking)


## CIS 125WW - Word Processing Applications (Microsoft Word)

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or BA 131

Course Description: Provides in-depth training in Microsoft Word 2021 software. Covers the use of creating, editing, and formatting functions for various business documents. Other topics include formatting pages, headers, footers, columns, advanced character formatting, tables, charts, merged correspondence, managing shared documents, graphics, references, and specialized tables. Students should plan on using a Windows PC for this course.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate knowledge of the ribbon, dialog boxes and keyboard shortcuts in Microsoft Word 2021.
- CLO\#2: Identify the correct software terminology to describe a variety of features and tools in Microsoft Word 2021.
- CLO\#3: Utilize the correct features in Microsoft Word to create balanced and professional documents with the correct layout of text and graphics.
- CLO\#4: Utilize Microsoft Word to create job prospecting documents.
- CLO\#5: Create, edit, and format various business documents including: memos, reports, schedules, newsletters, surveys, merged correspondence, brochures, fliers,and customized forms. (ILO: Communication)


## CIS 145 - Introduction to Hardware/Software

## 5 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or documented computer proficiency

Course Description: Students will gain a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer hardware and software. Develops competency in basic and advanced concepts and commands of the three industry-standard operating systems and their hardware requirements. Emphasis is placed on installation and conductivity of the operating systems and hardware components. Topics include the comparison of various operating systems (Windows, Linux and Apple), input/output control, introduction to the command line, software and operating systems installation, customization, and windowing environments. Designed for students in any discipline.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Install an operating system. (ILO: Information Literacy)
- CLO\#2: Apply troubleshooting techniques to identify and solve hardware and software problems.
- CLO\#3: Optimize computer performance using system tools.
- CLO\#4: Assemble and disassemble components of a computer.
- CLO\#5: Break down steps to implement and install security measures.
- CLO\#6: Perform basic networking tasks.
- CLO\#7: Assess software needs to complete a task.
- CLO\#8: Configure and secure Windows Registry. (ILO: Information Literacy)
- CLO\#9: Perform advanced file management tasks.
- CLO\#10: Perform software installation and removal.
- CLO\#11: Configure the user interface.


## CIS 179 - Introduction to Networks

## 4 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120)

Course Description: Serves as a general introduction for students who need a foundation in current networking technology and a general overview of computer networks and concepts. Network topics include design essentials, media, interface cards, communications and protocols, architectures, operations, local area networks (LANs) and wide area networks (WANs), troubleshooting, and resources.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the major standards bodies.
- CLO\#2: Understand the OSI Model and its purpose in networking. (ILO: Critical Thinking)
- CLO\#3: Identify the common network protocols in use today and discuss advantages and disadvantages of each along with possible implementations of each.
- CLO\#4: Explain the major components that comprise network media. This includes cabling and wireless technologies. (ILO: Information Literacy)
- CLO\#5: Classify what components make up a network architecture and what architectures are in use today along with advantages and disadvantages of each.
- CLO\#6: Identify hardware components and their implementations and how speed and network needs determine component implementation.
- CLO\#7: Identify different wide area networking technologies and analyze when to implement different components and discuss application of remote network connections.
- CLO\#8: Explain the importance of protecting a network, what to protect the network from and some possible prevention strategies.
- CLO\#9: Assess key components of the most commonly used protocol, TCP/IP, how it is implemented in the Internet environment and how the protocol can be subdivided into many individual protocols. (ILO: Critical Thinking)
- CLO\#10: Identify the importance of securing a network and possible methods for securing systems.


## CIS 195 - Web Authoring I

## 4 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120), and MTH 60 or designated placement, and WR 115 or designated placement.

Course Description: Introduces students to Web page and website development, moving on to working with cascading style sheets. Students will learn HTML and CSS for creating special effects and styling. Students will create HTML forms and tables, and will learn how to embed multimedia including the use of audio and video elements.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define the purpose, nature and history of web site design and creation.
- CLO\#2: Demonstrate a functional understanding of the syntax of the HTML and XHTML markup languages. (ILO: Information Literacy)
- CLO\#3: Prepare the appropriate plans for webpage and website development projects.
- CLO\#4: Demonstrate a functional understanding of Cascading Style Sheets, Web Tables, Web Forms, the use of Multimedia, and Frame design.
- CLO\#5: Demonstrate a functional understanding of the document object model (DOM), the event model and form validation.
- CLO\#6: Demonstrate an understanding of regular expressions, operators, arrays, loops and conditional statements using JavaScript.
- CLO\#7: Function efficiently in a group programming assignment requiring analysis, definition of logic, implementation, and evaluation of a program. (ILO: Information Literacy)
- CLO\#8: Demonstrate the ability to use text, manuals, help, and tutorials for continued learning after formal instruction.
- CLO\#9: Use debugging techniques to troubleshoot markup language development and understand common mistakes made when designing web sites. (ILO: Critical Thinking)


## CIS 196 - Web Authoring II

## 4 Credit(s)

Prerequisite(s): CIS 195

Course Description: Follows CIS 195 and introduces students to advanced concepts of website design and creation using HTML and CSS. Students will develop Web pages and websites and work with cascading style sheets (CSS). Course will include instruction on building a website using techniques of graceful degradation and progressive enhancement. Includes instruction on guidelines for content, style, structure, and accessibility. New structural elements are covered including the Canvas element, validation, HTML forms, audio, video, CSS3, geolocation, rich Internet applications, local storage, and multiscreen media queries.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss the purpose, nature and history of dynamic web site design and creation.
- CLO\#2: Demonstrate a functional understanding of the syntax of the HTML and XHTML markup languages including JavaScript essentials.
- CLO\#3: Prepare the appropriate plans for dynamic webpage and website development projects. (ILO: Critical Thinking)
- CLO\#4: Demonstrate an in-depth understanding of Cascading Style Sheets, Web Tables, Web Forms, the use of Multimedia, and Frame design.
- CLO\#5: Demonstrate an in depth understanding of the document object model (DOM), the event model and form validation, and dynamic content with a rich level of detail. (ILO: Information Literacy)
- CLO\#6: Demonstrate an understanding of web pages that are media aware with device specific rendering.
- CLO\#7: Demonstrate a conceptual understanding of regular expressions, operators, arrays, loops and conditional statements using JavaScript.
- CLO\#8: Function efficiently in a group programming assignment requiring analysis, definition of logic, implementation, and evaluation of a program.
- CLO\#9: Demonstrate the ability to use text, manuals, help, and tutorials for continued learning after formal instruction. (ILO: Information Literacy)


## CIS 199 - Special Studies: Computer Information Sciences

## Var. (1-4) Credit(s)

Prerequisite(s): May vary depending on subject offerings.
Course Description: Offered in a number of formats: workshop, seminar, or independent study. May also be offered as a scheduled course and cover topics in computer science or related subjects.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Variable (ILO: Variable)


## CIS 225-Computer End-User Support I

## 4 Credit(s)

Prerequisite(s): CIS 145, CIS 179, and WR 115 or designated placement.

## Recommended Prerequisite(s): WR 121Z

Course Description: Prepares students for training and supporting End-Users in a variety of organization settings. Topics to be discussed include the End-User support function in an organization, techniques for developing and delivering training modules, and techniques for providing ongoing technical support to EndUsers. Emphasis is on solving problems with users (debugging, troubleshooting, and interaction with users) with actual and/or simulated functions of a computer support department.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Analyze End-User needs and requests.
- CLO\#2: Evaluate characteristics of technical support personnel; apply characteristics to end user support tasks.
- CLO\#3: Identify quality customer service skills and how to implement skills. (ILO: Critical Thinking)
- CLO\#4: Identify software/hardware solutions for End-Users using appropriate product evaluation strategies. (ILO: Information Literacy)
- CLO\#5: Collaborate with end users using proper technical training techniques and targeted audience design. (ILO: Communication)
- CLO\#6: Assess and identify computer software and/or hardware problems.


## CIS 240 - Advanced Operating Systems

## 4 Credit(s)

Prerequisite(s): CIS 145

Course Description: This course gives students an in-depth coverage of the skills needed to configure and manage identity with Windows Server 2016. Students will have an in-depth knowledge of Windows Server 2016 identity-related services, including Active Directory, user and group accounts, Group Policy, Active Directory Certificate Services, and advanced identity solutions such as Active Directory Federation Services and Active Directory Rights Management Services.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Installing Server 2016
- CLO\#2: Research and Deploy Active Directory on Server 2016/2019 (ILO: Critical Thinking)
- CLO\#3: Explain basics of Active Directory.
- CLO\#4: Domain Controller and Active Directory management.
- CLO\#5: Managing Organizational Units and accounts.
- CLO\#6: Advanced Active Directory configuration.
- CLO\#7: User and service account configuration management. (ILO: Information Literacy)
- CLO\#8: Configuring and Manage Group Polices. (ILO: Critical Thinking)
- CLO\#9: Create and manage an Active Directory Certificate Services.
- CLO\#10: Implementing identity solutions.


## CIS 240LX - Advanced Operating Systems - Linux

## 4 Credit(s)

Prerequisite(s): CIS 145

Course Description: This course is intended for students who want to learn about the Linux operating system and prepare to pass the Linux+ certification exam from CompTIA. It does not assume any prior knowledge of Linux and is geared toward those interested in systems administration as well as those who will use or develop programs for Linux systems. The course provides comprehensive coverage of topics related to Linux administration, including Linux distributions, installation, application management, XWindows, cloud technologies, networking, and security.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify fundamental components of the Linux operating system.
- CLO\#2: Analyze different versions of Linux for various users and hardware systems.
- CLO\#3: Install, maintain, and update a common desktop version of Linux. (ILO: Critical Thinking)
- CLO\#4: Manage the Linux file system and user permissions with command line and GUI tools.
- CLO\#5: Identify network technologies and install, secure, and manage network connections. (ILO: Information Literacy)
- CLO\#6: Perform basic scripting using Python
- CLO\#7: Perform common administrative tasks using both command line and GUI tools.
- CLO\#8: Research new developments in Linux.


## CIS 279 - Network Operating Systems

## 4 Credit(s)

Prerequisite(s): CIS 145 and CIS 179
Course Description: Covers concepts related to network operating systems - specifically Windows Server. Topics include server hardware, user and group management, network file management, group policy, network printing, server maintenance, Domain Naming Service (DNS), Dynamic Host Configuration Protocol (DHCP), and system backup and restore.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Configuring TCP/IP.
- CLO\#2: Configuring DNS Servers. (ILO: Information Literacy)
- CLO\#3: Configuring Advanced DNS.
- CLO\#4: Implementing DHCP.
- CLO\#5: Managing DNS and DHCP with IPAM.
- CLO\#6: Implementing Remote Access.
- CLO\#7: Implementing Network Policy Server. (ILO: Information Literacy)
- CLO\#8: Configuring Distributed File System and Branch Office.
- CLO\#9: Implementing Advanced Network Solutions.


## CIS 280-Cooperative Work Experience/Computer Information Sciences

## Var. (1-3) Credit(s)

Prerequisite(s): Permission of CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a career-related experience for students working for an approved employer. As a capstone course, students should complete this course within the last 2 terms of their certificate or degree.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives).
- CLO\#5: Understand the importance of following instructions and meeting deadlines. (ILO: Information Literacy)
- CLO\#6: Understand and demonstrate a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job.
- CLO\#7: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job. (ILO: Information Literacy)
- CLO\#8: Make contacts which will help in obtaining employment.


## CIS 281 - Implementing and Supporting a Server Environment

## 4 Credit(s)

Prerequisite(s): CIS 145 and CIS 240
Course Description: Practical, hands-on lab where students will configure and troubleshoot various network services in a client/server environment. Topics include workstation setup and troubleshooting, user and group management, network file management, TCP/IP implementation and troubleshooting, group policy, network printing, Dynamic Host Configuration Protocol (DHCP), and Windows Server Update Service (WSUS).

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Backup and migrate user files.
- CLO\#2: Upgrade an operating system.
- CLO\#3: Configure and troubleshoot TCP/IP. (ILO: Information Literacy)
- CLO\#4: Construct an Active Directory environment for End-User access. (ILO: Information Literacy)
- CLO\#5: Configure and troubleshoot DHCP.
- CLO\#6: Implement Group Policy Objects to automate computer patches and remote access.
- CLO\#7: Promote a server to domain controller.


## CIS 282 - Help Desk Internship

## 3 Credit(s)

Prerequisite(s): CIS 281
Course Description: Help Desk Internship enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, help desk technicians, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a career-related experience for students working for an approved employer. As a capstone course, students should complete this course within the last 2 terms of their certificate or degree.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Successfully complete the interview process.
- CLO\#2: Complete forms accurately and meet deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic and professional presence as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Follow instructions and meet deadlines. (ILO: Information Literacy)
- CLO\#5: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job. (ILO: Information Literacy)


## CIS 284 - Network Security Fundamentals

## 4 Credit(s)

Prerequisite(s): CIS 179 or documented Network+ certification.

Course Description: Introduces the beginning concepts of computer and network security and threats. Introduction to security principles, common network and system attacks and defense technologies and techniques will be covered. Topics will also include basic cryptography, mobile device security, wireless network security, security policies, authentication, Internet communication security, and other security related topics.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Acquire an appreciation for the multifaceted aspects of security and information assurance. (ILO: Information Literacy)
- CLO\#2: Identify common network attacks, how they are implemented as well as prevention strategies.
- CLO\#3: Identify all aspects of security principles with a strong focus on authentication methods.
- CLO\#4: Analyze different media type's security risks as well as prevention strategies.
- CLO\#5: Interpret Secure Internet communications via the web, email and other data transfer.
- CLO\#6: Identify key concepts and protocols involved in administering a secure network process.
- CLO\#7: Define basic cryptography methods and features of common algorithms in use and application such algorithms.
- CLO\#8: Describe how a public key infrastructure works and how to take advantage of digital certificates.
- CLO\#9: Define basic wireless and mobile device security practices.
- CLO\#10: Perform vulnerability assessment. (ILO: Critical Thinking)
- CLO\#11: Define risk mitigation is a small to medium corporation.


## CIS 285 - Network Security II

## 4 Credit(s)

Prerequisite(s): CIS 145 and CIS 284, or Instructor approval.

Course Description: The purpose of the course is to provide the student with an overview of the field of information security and assurance. Students will be exposed to the spectrum of security activities, methods, methodologies, and procedures. Coverage will include inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses, and an overview of the information security planning and staffing functions.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Outline organizational business need for information security.
- CLO\#2: Describe the functions of and relationships among laws, regulations, and professional organizations in information security. (ILO: Critical Thinking)
- CLO\#3: Explain what an information security blueprint is, identify its major components, and explain how it supports the information security program.
- CLO\#4: Define risk management, risk identification, and risk control.
- CLO\#5: Define the role of access control in information systems and identify and discuss the four fundamental functions of access control systems.
- CLO\#6: Identify and describe the categories and models of intrusion detection and prevention systems.
- CLO\#7: Describe the operating principles of the most popular cryptography tools. (ILO: Communication)
- CLO\#8: Describe the relationship between information security and physical security.
- CLO\#9: Demonstrate how an organization's information security blueprint becomes a project plan.


## CIS 299 - Special Studies: Computer Information Sciences

## 3 Credit(s)

Prerequisite(s): May vary depending on subject offerings.
Course Description: The course is offered in a number of formats: workshop, seminar, or independent study. May also be offered as a scheduled course and cover topics in computer science or related subjects.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Variable (ILO: Variable)


## CJ 200 - Introduction to Criminology

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Offers an interdisciplinary perspective of crime and criminal behavior in relation to the criminal justice system. Theoretical approaches to explaining crime, criminal statistics, typologies, and victimology will be assessed. The influence of crime theory on public policy will be explored. Course is cross-listed as SOC 244.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify offender characteristics-including race, age, socioeconomic status- associated with criminal behaviors. (ILO: Communication)
- CLO\#2: Explain criminogenic conditions.
- CLO\#3: Outline major theories on crime causation including biological, psychological, and sociological explanations of criminal behavior.
- CLO\#4: Analyze key considerations in a plan to address a particular crime problem based on a specific theory of crime or based on a crime typology. (ILO: Critical Thinking)
- CLO\#5: Compare and contrast the characteristics of, and theories of crime associated with, classical and positive schools of criminological thought.
- CLO\#6: Analyze the impact of crime on society and advocate policy orientations that guide the public's response to the crime problem.
- CLO\#7: Assess basic concepts and theory applications associated with the branch of criminology known as victimology.
- CLO\#8: Apply basic statistical formulas and crime reporting techniques used in the study of crime.
- CLO\#9: Recognize the complex nature of crime and apply research used in the development of solutions for the prevention and control of crime.
- CLO\#10: Evaluate the value of multi-disciplinary approaches to responding to crime along with the importance of working with multiple interest groups to control crime in a community.


## CJ 201 - Juvenile Delinquency

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: This course presents a philosophical, historical, and practical survey of juvenile justice administration in the United States. In the context of an interdisciplinary framework, theories, factors, and characteristics of delinquency will be presented and treatment and delinquency prevention programs will be surveyed. Course is cross-listed as SOC 221.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe concepts, structures, and characteristics of the juvenile justice system and its components. (ILO: Communication)
- CLO\#2: Identify and utilize key sources of information useful in studying the juvenile justice field.
- CLO\#3: Debate current issues associated with the administration of juvenile justice.
- CLO\#4: Describe or define distinctions between the juvenile and adult justice system and know the roles of police, courts, and corrections in responding to and preventing delinquency. (ILO: Communication)
- CLO\#5: Express the relationship of social institutions to delinquency.
- CLO\#6: Establish the relationship between theories of delinquency causation and programs and policy developed to prevent delinquency
- CLO\#7: Explain historical and philosophical influences on the development of juvenile justice administration in the United States.
- CLO\#8: Recognize the importance of integrating social, education, civic, religious, and legal resources in an attempt to prevent criminality among youth.
- CLO\#9: Examine the basic values that are the foundation of the juvenile justice system and appreciate how changing values in society influence the justice system's response to juvenile crime.
- CLO\#10: Research applications of Oregon Revised Statutes that apply to delinquent behavior and punishment of youths.
- CLO\#11: Explain the organizational, structural and networking attributes among Oregon governmental and private sector correctional interventions.


## CJ 243 - Drugs, Crime and Addiction

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Recommended Prerequisite(s): COMM 111Z and WR 121Z
Course Description: This course will introduce students to the dynamics of drug and alcohol addiction, the social and legal issues of drug abuse, as well as examine the political considerations behind contemporary drug enforcement policy. It will also explore the historical origins of the illegal drug trade. Course is crosslisted as SOC 243.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and describe terms, concepts and related items used in the study of substance use, abuse, treatment, prevention and policy development. (ILO: Communication)
- CLO\#2: Utilize sources of information and research related to prevention, treatment, policy options and enforcement strategies related to substance abuse.
- CLO\#3: Debate positions on key issues in the continuing controversy over public substance abuse policy in the United States. (ILO: Critical Thinking)
- CLO\#4: Explain patterns of substance abuse in relation to individuals' life cycle to include elements of each phase or stage of abuse.
- CLO\#5: Describe how body organs, tissues, and systems are impacted by drug use and abuse/addiction.
- CLO\#6: Evaluate primary and secondary approaches to substance abuse prevention as viewed in the context of strategies applied by social institutions, the criminal courts, and in various correctional interventions.
- CLO\#7: Outline the historical, social, economic, and policy developments along with issues associated with the abuse of alcohol and other substances in the United States.
- CLO\#8: Delineate the social and economic contexts, and organization of systems behind the worldwide distribution of controlled substances.
- CLO\#9: Outline key provisions of federal and state controlled substances legislation, including regulatory provisions, used in controlling the cultivation, manufacture or distribution of abused substance.
- CLO\#10: Apply knowledge and understanding about the criminal justice system's response to substance use, abuse, and related problems including investigative strategies and policies.
- CLO\#11: Analyze pharmacological aspects of drug use from ingestion to secretion.
- CLO\#12: Depict resources and include description of principles and practices along with risk and protective factors for the prevention, treatment and response to substance abuse problem in a community.


## COMM 100Z - Introduction to Communication

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: COMM $100 Z$ is a survey course offering an overview of the communication discipline that emphasizes the development of best communication practices in different contexts. Formerly offered as COMM 100 / COMM100.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the ways communication is impacted by ethics, language, nonverbal behaviors, perception, culture, and contexts
- CLO\#2: Identify communication theories, perspectives, principles, and concepts. (ILO: Communication)
- CLO\#3: Explore different areas of communication to develop a broad base of skills and communicative tools when interacting with others.
- CLO\#4: Articulate the importance of communication expertise in career development and civic engagement.


## COMM 111Z - Public Speaking

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: COMM111Z emphasizes developing communication skills by examining and demonstrating how self-awareness, audience, content, and occasion influence the creation and delivery of speeches and presentations. Formerly offered as COMM 111 / COMM111.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop messages for diverse audiences, purposes, and contexts.
- CLO\#2: Identify and utilize skills to manage communication apprehension.
- CLO\#3: Deliver and adapt speeches and/or presentations to live audiences. (ILO: Communication)
- CLO\#4: Evaluate public speeches, including their own, by identifying aspects of preparation, credibility, logic, and delivery.


## COMM 115 - Introduction to Intercultural Communication

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Provides an overview of communication from an intercultural perspective. Students will learn how culture impacts social identities, communication behaviors, and meaning. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Analyze opposing viewpoints on controversial subjects and participate in group discussions with ideas, suggestions, and perspectives.
- CLO\#2: Demonstrate interpersonal skills in small group activities.
- CLO\#3: Compare viewpoints on a controversial subject and incorporate divergent cultural perspectives. (ILO: Communication)
- CLO\#4: Analyze information about social and/or organizational systems and communicate the results.


## COMM 201 - Media and Society

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: This course provides an overview of the history, present state, and future of different forms of mass communication - such as print, audio, television/film, and social media - and explores theoretical, economic, and societal perspectives on the creation and consumption of mass media, including advertising, media ethics, and media law and regulation.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify the links between mass media and culture creation.
- CLO\#2: Identify the benefits and drawbacks of each medium to offer targeted messages. (ILO: Communication)
- CLO\#3: Explain the historical progression of media into society.
- CLO\#4: Describe the role of ethics in message creation and dissemination.
- CLO\#5: Explain the unique characteristics of social media relative to other forms of mass communication.


## COMM $218 Z$ - Interpersonal Communication

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: COMM218Z increases the knowledge and use of competent communication skills to better understand oneself, others, and the role of communication in interpersonal relationships. Formerly offered as COMM 218 / COMM218.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe how culture, identity, perception, biases, and power influence the communication process.
- CLO\#2: Recognize and analyze interpersonal communication concepts (e.g., ethics, verbal and nonverbal communication, listening, emotions, and conflict). (ILO: Communication)
- CLO\#3: Assess one's own interpersonal skills to become more competent in a variety of relational contexts.
- CLO\#4: Apply foundational concepts and theories to interpersonal communication.


## COMM 225 - Small Group Communication and Problem-solving

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Examines the nature of communication in a group or team context. Students will learn about individual and group roles, methods of negotiation and problem-solving, leadership, and the evolving
nature of groups in business and society.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain how groups function as systems.
- CLO\#2: Function effectively with others. (ILO: Communication)
- CLO\#3: Identify different leadership styles and the contexts best suited for each style.
- CLO\#4: Identify the formal and informal roles of group members.
- CLO\#5: Describe the forms of power.
- CLO\#6: Explain the benefits and drawbacks of technology in the decision-making process.


## COMM 237 - Communication and Gender

## 4 Credit(s)

## Prerequisite(s): COMM $100 Z$ or COMM 111Z or COMM $218 Z$

Course Description: Examines communication similarities and differences as related to gender and sex. More specifically, this class explores the relationship between one's sex, sexual preference, and gender identity with cultural and social expectations towards the creation and management of meaning. Gender issues to be explored include the dimensions of power, cultural and social values, language use, nonverbal communication, conflict resolution, and romance. Fulfills cultural literacy requirement within the AAOT degree

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain how sex or gender identification affects self-perception.
- CLO\#2: Identify the social, cultural, and media influences on gender roles and expectations. (ILO: Communication)
- CLO\#3: Identify gender-related differences in language use and/or meaning.
- CLO\#4: Describe how one's sex or sexual identity affects romance and/or relationship behavior.
- CLO\#5: Recognize and describe gender-based tendencies for handling conflict and negotiation.
- CLO\#6: Recognize and describe social issues related to sex (and gender identity) and discrimination.


## COMM 270 - Argumentation and Debate

## 3 Credit(s)

Prerequisite(s): COMM $100 Z$ or COMM 111Z

Course Description: Encourages students to analyze, respond to, and refute the arguments of others while backing their own claims with solid logic and reasoning. Public speaking skills are stressed and required as part of this course.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and explain flaws in logic.
- CLO\#2: Formulate logically valid and well-supported arguments. (ILO: Communication)
- CLO\#3: Effectively speak in front of others.
- CLO\#4: Apply multiple viewpoints to a range of issues.
- CLO\#5: Formulate and present speech rebuttals with little to no preparation time.


## COMM 280 - Cooperative Work Experience/Communication

## Var. (1-3) Credit(s)

Prerequisite(s): Cooperative education is open to all students who have completed at least one-half of the required classes for their program of study and have the recommendation of the department cooperative education advisor.

Course Description: Cooperative education is a supervised program of on-the-job training for college credit in a Speech or Communication related area. Students are placed in a related industry, business, agency or organization which has been approved by the College as having the interest, personnel and resources to serve as a training center. The goal of cooperative education is to provide a learning experience which enriches and strengthens the student's education, personal development, and vocational preparation. It joins educators and employers in developing the community's greatest asset-its human resources.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Gain college credit for a valid learning experience to fulfill degree or certificate requirements.
- CLO\#2: Apply classroom theory to real world job experience. (ILO: Critical Thinking)
- CLO\#3: Apply learned skills, gain experience, and make contacts which will help in obtaining a job after graduation.


## COMM 299-Special Studies: Communication

## Var. (1-3) Credit(s)

Prerequisite(s): Varies by course.
Course Description: Covers a specialized area of communication in a given area of communication such as interpersonal, mass media, or organizational communication.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Varies based on course focus.


## CPL 120 - Credit for Prior Learning

## 3 Credit(s)

Course Description: Assists student in developing portfolios to be used in applying for credit for prior learning. Focuses on identifying career and educational goals and documenting college-level prior learning.

Course Level: Career/Tech Preparatory

## CS 133C\# - Programming Fundamentals Using C\#

## 4 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120), and MTH 65 or higher-level math.

Course Description: Covers computer concepts and problem solving methods in the Windows environment using C\# programming language. Topics include algorithms, simple data types, condition and iterative structures, functions and procedures, and the program documentation.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply Visual C\# to design an appropriate user interface for a custom program.
- CLO\#2: Prepare appropriate plans for programming projects. (ILO: Critical Thinking)
- CLO\#3: Demonstrate variables and calculations in a programming project.
- CLO\#4: Demonstrate the main program control structures in programming projects: sequential flow, decisions and looping.
- CLO\#5: Demonstrate the use of custom procedures and functions, classes and properties in programming projects.
- CLO\#6: Create classes with properties for use in a program.
- CLO\#7: Function efficiently in a group programming assignment requiring analysis, definition of logic, implementation, and evaluation of a program. (ILO: Communication)
- CLO\#8: Demonstrate the ability to use text, manuals, help, and tutorials for continued learning after formal instruction.
- CLO\#9: Apply Visual C\# debugging tools to troubleshoot programs.


## CS 160 - Introduction to Computer Science

## 4 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or documented proficiency, and MTH 65 or designated placement.

## Recommended Prerequisite(s): CIS 145

Course Description: Explores the disciplines and professions of computer science and software engineering. Provides an overview of computer hardware and software architecture, the study of algorithms, software design and development, data representation and organization, problem-solving strategies, ethics in the digital world, and the history of computing and its influences on society. Explores career options and begins the process of planning a program of study. Exposes students to both low-level and high-level programming languages.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define the field of computer science and related fields (computer engineering, information technology, information systems, software engineering); describe what practitioners of each of these fields do.
- CLO\#2: Describe the educational requirements and options available to those wanting to enter any of the professions in computing.
- CLO\#3: Identify the campus computing resources available to students and the appropriate uses of each for communication, research, and coursework.
- CLO\#4: Analyze the societal and ethical issues that arise as a result of the increased use of digital systems. (ILO: Critical Thinking)
- CLO\#5: Review the historical and technical evolution of computing and its impact on the field today. (ILO: Information Literacy)
- CLO\#6: Assess the direction that hardware and software development may take in the next 10 years and its impact on jobs for future computing professionals.
- CLO\#7: Describe the commonly used architecture of digital computers, and the function and relationships of the primary components of digital computers.
- CLO\#8: Describe the interrelationship between system software and application software in the context of efficient and correctly operating computing systems.
- CLO\#9: Solve problems using abstraction and modularization techniques. Describe software lifecycle and common tools of the software engineer (compilers, editors, IDEs, version control systems, change management systems, document management system). (ILO: Information Literacy)


## CS 161J - Computer Science I (Java)

## 4 Credit(s)

Prerequisite(s): CS 133C\# or CS 161U or CS 160, and MTH 111 Z or higher-level math.

Course Description: Presents the science of programming and problem solving using an object-oriented programming language. Emphasis is on a disciplined approach to algorithm development and problemsolving methods using the object-oriented programming language Java. The course covers basic programming constructs, syntax, semantics, and logic of the Java programming language. The course provides an introduction to object-oriented concepts such as encapsulation, inheritance and polymorphism. Simple UML class diagrams will be introduced and used as a tool for object-oriented design.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of the concepts of encapsulation, inheritance, and polymorphism.
- CLO\#2: Demonstrate a functional understanding of various data structures including classes, strings, arrays, and variables of different data types.
- CLO\#3: Demonstrate a functional understanding of the syntax of the Java programming language.
- CLO\#4: Evaluate selection and repetition control structures and their proper use in computer algorithms. (ILO: Critical Thinking)
- CLO\#5: Solve programming problems using systematic methods of algorithm development and design. (ILO: Information Literacy)
- CLO\#6: Demonstrate a functional understanding of object-oriented programming by interpreting problem statements, analyzing, designing, implementing, and testing complete Java programs. (ILO: Information Literacy)


## CS 161U - Computer Science I (C++)

## 4 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) and MTH 95 or higher-level math.

Course Description: Presents the science of programming and problem solving. Emphasis is on a disciplined approach to algorithm development and problem-solving methods using the programming language C++. The course covers basic programming constructs, syntax, semantics, and logic of the C++ programming language. Topics include algorithms, simple data types, conditional and iterative structures, function definition, structured programming and documentation.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of simple input and output functions.
- CLO\#2: Demonstrate a functional understanding of various data structures including classes, strings, arrays, and variables of different data types. (ILO: Information Literacy)
- CLO\#3: Demonstrate a functional understanding of the syntax of the C++ programming language.
- CLO\#4: Identify selection and repetition control structures and their proper use in computer algorithms. (ILO: Critical Thinking)
- CLO\#5: Solve programming problems using systematic methods of algorithm development and design.
- CLO\#6: Demonstrate a functional understanding of programming by interpreting problem statements, analyzing, designing, implementing, and testing complete C++ programs. (ILO: Information Literacy)
- CLO\#7: Demonstrate a working knowledge of file I/O.
- CLO\#8: Demonstrate a functional understanding of multi-dimensional arrays.


## CS 162J - Computer Science II (Java)

## 4 Credit(s)

Prerequisite(s): CS 161J

Course Description: Continues CIS161J, covering advanced programming techniques using Java. Topics include graphical user interface programming, advanced event handling, exception handling, streams, and basic file I/O. Advanced data structures and algorithms such as lists and maps are also covered. Objectoriented algorithms and design methods are emphasized.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the knowledge and skills necessary to handle exceptions in a computer program.
- CLO\#2: Demonstrate the knowledge and skills necessary to demonstrate a functional understanding of streams and file I/O.
- CLO\#3: Demonstrate a functional understanding of advanced data structures including multidimensional arrays, lists and maps. (ILO: Critical Thinking)
- CLO\#4: Acquire and evaluate written and lecture material to solve programming problems using systematic methods of algorithm development and design. (ILO: Information Literacy)
- CLO\#5: Demonstrate a functional understanding of graphical user interface controls, event handling, streams and exception handling. (ILO: Information Literacy)


## CS 162U - Computer Science II (C++)

## 4 Credit(s)

Prerequisite(s): CS 161U

Course Description: Solves complex problems using advanced features of the C++ language. Topics include function usage, pointer data type, dynamic memory allocation, string manipulation, and structure and union data types. Emphasis is on structured program design techniques.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of file I/O. (ILO: Critical Thinking)
- CLO\#2: Demonstrate a functional understanding of multi-dimensional arrays.
- CLO\#3: Demonstrate a functional understanding of pointers, including dynamic allocation and function pointers. (ILO: Information Literacy)
- CLO\#4: Declare and manipulate strings, including ragged arrays.
- CLO\#5: Create and use structures, unions, enumeration types, and elementary classes. (ILO: Information Literacy)
- CLO\#6: Create a program using a linked list.


## CS 234U - Object Oriented Programming in C++

## 4 Credit(s)

Prerequisite(s): CS 162U
Course Description: A study of object-oriented programming with C++. Beginning and intermediate concepts are covered including classes, objects, member functions, overloading, inheritance, polymorphism, templates, and virtual functions. This course prepares students with a strong C++ background for transfer into upper-division coursework using C++ at a university.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of the major concepts in Object Oriented Programming. (ILO: Critical Thinking)
- CLO\#2: Demonstrate a functional understanding of Exception Handling and Debugging techniques.
- CLO\#3: Design and write classes for use in C++ programs. (ILO: Critical Thinking)
- CLO\#4: Demonstrate use of pre-existing classes in the C++ language in programs. (ILO: Critical Thinking)
- CLO\#5: Create and use multiple types of constructors and destructors in classes.
- CLO\#6: Use Source Control to manage complex programs.


## CS 260 - Data Structures I

## 4 Credit(s)

Prerequisite(s): CS 162U or CS 234 and MTH 111Z

## Corequisite(s): MTH 251

Course Description: Studies the merge of abstract data types and the algorithms which manipulate them. Topics include the study of elementary searching and sorting algorithms and hashing, and object-oriented implementation strategies for stacks, lists, queues, trees, binary trees, B-trees, and hash tables. For each data structure examined, common and useful algorithms that utilize such structures will be studied. Course also covers an introduction and application of complexity analysis: asymptotic analysis of upper and average complexity bounds, Big O() , Theta() and Omega() notation, as well as a general introduction to resource consumption, including the tradeoff between time and space.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define the concepts behind abstract data types and data structures.
- CLO\#2: Correlate and implement various abstract data types in a programming language using multiple implementation strategies. (ILO: Critical Thinking)
- CLO\#3: Select and use various data structures to solve problems and implement algorithms. (ILO: Critical Thinking)
- CLO\#4: Write programs that use one or more of the data structures covered (lists, trees, hash tables, sets \& bags).
- CLO\#5: Explain the use of $O()$, Theta(), and Omega() to describe the amount of work done by an algorithm. Relate this to the consumption of resources (time/space) in real-world applications.
- CLO\#6: Derive a running time equation and determine O() for a number of algorithms, starting from both source code and pseudo-code.
- CLO\#7: Discuss the computational efficiency of inserting and retrieving data from various data structures and of the principal algorithms for sorting, searching and hashing.
- CLO\#8: Discuss factors other than computational efficiency that influence the choice of certain data structures and algorithms.
- CLO\#9: Be able to empirically determine the behavior of an algorithm and understand the limitations of this approach. (ILO: Critical Thinking)
- CLO\#10: Write various sorting algorithms and understand their strengths and weaknesses.


## CS 275 - Data Base Development I

## 4 Credit(s)

Prerequisite(s): CIS 125DB or previous database experience with approval of the Instructor.

Course Description: Provides students with an introduction to the concepts, skills, and tools involved in relational database design, implementation, and testing. Students will be introduced to and use Structured Query Language (SQL) for creating a client/server database and data manipulation. Covers relational database concepts, data anomalies, and data normalization. Entity-Relationship diagrams will be covered and used as a tool for designing a database system.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare the relational model to other database models.
- CLO\#2: Demonstrate Structured Query Language (SQL) to create database structures and manipulate data. (ILO: Information Literacy)
- CLO\#3: Design a database system using Entity-Relationship Diagrams and Normalization methods. (ILO: Critical Thinking)
- CLO\#4: Examine database issues in a client/server environment.
- CLO\#5: Analyze, design, implement, and test a complete database system using Microsoft's SQL Server database management system.


## DA 101 - Dental Assisting I

## 4 Credit(s)

Prerequisite(s): Successful admittance to the Dental Assistant program.
Course Description: 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, instrumentation and oral assessment.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss and define the roles of dental health care professionals and explain how each dental team member contributes to a patient's oral health.
- CLO\#2: Demonstrate proficiency in dental charting and the use of dental terminology.
- CLO\#3: Define and discuss the embryological and histological development of the dentition.
- CLO\#4: Name and identify the tissues of the oral cavity and landmarks of the face. (ILO: Critical Thinking)
- CLO\#5: Identify the basic principles of pharmacology, microbiology, and dental disease.
- CLO\#6: Discuss the impact of cultural, ethnic, racial backgrounds, when providing patient care.


## DA 102 - Dental Assisting II

## 4 Credit(s)

Prerequisite(s): Successful completion of the first term of the Dental Assistant program.

Course Description: The purpose of this course is to introduce major dental specialties of oral surgery, endodontics, periodontics, prosthodontics, and orthodontics. Also included are 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the scope of oral and maxillofacial surgery and identify instruments used in surgical procedures. (ILO: Critical Thinking)
- CLO\#2: Describe and demonstrate the action of the temporomandibular joint.
- CLO\#3: Define endodontics and identify the instruments used in endodontic procedures.
- CLO\#4: Describe the stages of periodontal disease and explain the diagnostic instruments and treatment options for periodontal disease.
- CLO\#5: Differentiate between fixed and removable prostheses.
- CLO\#6: Differentiate between preventive, interceptive, and corrective orthodontics; identify basic orthodontic instruments.


## DA 102L - Dental Assisting II Lab

## 2 Credit(s)

Prerequisite(s): Successful completion of the first term of the Dental Assistant program.

Course Description: Provides hands-on, clinical instruction for students to demonstrate their capabilities and understanding of the dental assistant's role through clinical evaluation in a lab setting. Tasks practiced include use of dental terminology, dental tray set-up, recognition of instruments used by dentists, basic chairside procedures, assisting during restorative treatment, fourhanded dentistry, and chair-side charting. Students are introduced to the various day-to-day operations within a dental office including infection control, management of hazardous waste, sterilization equipment techniques, theory and terminology, treatment room disinfection, and dental asepsis techniques. In addition, the course will provide the student with practice in the major dental specialties of oral surgery, endodontics, periodontics, prosthodontics, and orthodontics.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proficiency in using diverse dental terminology.
- CLO\#2: Demonstrate the proper use of personal protective equipment (PPE) products available for hand hygiene.
- CLO\#3: Identify common dental instruments and explain how they are used in delivering dental care.
- CLO\#4: Describe and perform entry-level chairside assisting functions in a clinical.
- CLO\#5: Explain and discuss waste management using green technology including water line maintenance and hazardous waste disposal.
- CLO \#6: Describe and perform the sterilization processes and principles of dental asepsis. (ILO: Critical Thinking)


## DA 103 - Dental Materials

## 2 Credit(s)

Prerequisite(s): DA 202 and successful admittance into the Dental Assistant program.

Course Description: Introduces materials used in a dental office including 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the legal standards that govern the properties of dental materials.
- CLO\#2: Identify and compare the differences and uses for various dental materials. (ILO: Critical Thinking)
- CLO\#3: Describe and explain the hazards associated with dental materials and chemicals including how hazardous materials must be safely handled and properly disposed.


## DA 104 - Dental Administration

## 2 Credit(s)

Prerequisite(s): Successful completion of the first term of the Dental Assistant program.

Course Description: Introduces office management and administrative skills that are required in a dental setting. Students will become familiar and practice communication skills, written correspondence, patient relations, team communications, patient clinical records, information management, patient scheduling and recall systems, dental insurance processing, inventory management, financial arrangements, collection procedures, accounts receivable and payable, and employment strategies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop mock patient files (computerized and manual) that includes information used/required by the dental office.
- CLO\#2: Discuss types of documents and written communications office used in a dental office. Identify styles and qualities that are professional and deemed appropriate. (ILO: Communication)
- CLO\#3: Describe scheduling systems (computerized and manual) and demonstrate understanding of scheduling techniques.
- CLO\#4: Discuss the purpose and types of dental insurance, identify dental procedures and coding, explain how insurance claims are filed and processed and the procedure for and purpose of claims follow-up.
- CLO\#5: Discuss the importance of accuracy in inventory control in a dental practice (computerized and manual).
- CLO\#6: Define the Dental Practice Act and the role that the State Board of dentistry plays in governing a dental practice.


## DA 106 - Dental and Medical Emergency Management

## 2 Credit(s)

Prerequisite(s): Successful admittance to the Dental program.
Course Description: Covers routine preparedness for dental team members: the dental assistant's role in emergency care, managing a dental office emergency kit, the ABC's of CPR (airway/breathing/circulation), foreign body airway obstruction, the causes, signs, and treatment of medical emergencies, and specific dental emergencies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe possible emergency situations in the dental office and actions for prevention.
- CLO\#2: Describe how to determine if a patient is unconscious.
- CLO\#3: Identify causes of airway obstructions and demonstrate opening the airway.
- CLO\#4: List the essential and non-essential components of an emergency kit in the dental office. (ILO: Information Literacy)
- CLO\#5: Discuss the importance of taking and recording vital signs.
- CLO\#6: Explain the various methods and the proper methodology for oxygen administration.


## DA 123 - Legal and Ethical Issues in Dentistry

2 Credit(s)
Prerequisite(s): Successful admittance to the Dental program.

Course Description: Exposes the student to variety of legal and ethical dilemmas in dentistry, helping students become more prudent and confident professionals. Students will become familiar with the legal system, the legal rights that define relationships between individuals, quality assurance, office protocols and patient records, and legal issues that affect employment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the differences between laws and ethics and the major components of ethical theories.
- CLO\#2: Describe the major components of the American legal system, with emphasis on how dentistry is regulated on the State and Federal level. (ILO: Information Literacy)
- CLO\#3: Define malpractice in the dental profession and describe the possible consequences of professional negligence.
- CLO\#4: Define contract, describe the types of contracts and who may enter into a contract, and the possible consequences of breaching a contract.
- CLO\#5: Define and describe the different types of consent for dental treatment and the legal and ethical boundaries regarding who may give consent.


## DA 150 - Introduction to Practicum and Seminar

## 2 Credit(s)

Prerequisite(s): Successful completion of the first term of the Dental Assistant program
Course Description: Provides an extensive overview of office responsibilities, work ethics and prepares students for the challenges of their multiple roles in the dental office including: guest, intern, 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. Guest speakers representing dental specialties and alternative dental employment possibilities will be scheduled. Resume writing and creation to prepare the student for employment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Determine the components of a dental industry resume and produce industry specific preemployment documents.
- CLO\#2: Identify required skills and abilities for dental clinical roles and create documentation for dental clinical placement.
- CLO\#3: Describe and discuss the scope of student responsibilities and phases of development within the dental practicum.
- CLO\#4: Describe and demonstrate effective verbal, nonverbal, and written communication principles and skills required in the workplace and clinical setting. (ILO Communication)


## DA 152 - Practicum and Seminar in Dental Assisting I

## 4 Credit(s)

Prerequisite(s): Successful completion of the first two terms of the Dental Assistant program.

Course Description: Students work an average of 10 per week in a host site (118 hours per term) as part of the dental team. Duties will be assigned according to the student's skill level and the work needs of the host site. Students experience first-hand the daily operations within a dental office as chair-side dental assistants and front office personnel. Students will experience entry-level and begin mid-level duties as appropriate. Moderated by an Instructor, seminars are designed to define expectations, discuss progress, and evaluate current practicum experiences.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform chairside assisting functions in a clinical setting.
- CLO\#2: Construct a resume for a dental assistant position. (ILO: Information Literacy)
- CLO\#3: Describe experiences and set personal goals.
- CLO\#4: Provide professional feedback to others.
- CLO\#5: Adhere to facility and dental assisting program policies.


## DA 153 - Practicum and Seminar in Dental Assisting II

## 4 Credit(s)

Prerequisite(s): Successful completion of the first three terms of the Dental Assistant program.
Course Description: Students work an average of 10 per week in a host site (118 hours per term) as part of the dental team. Duties will be assigned according to the student's skill level and the work needs of the host site. Students experience first-hand the daily operations within a dental office as chair-side dental assistants and front office personnel. Students will expand their skill set during the sequence with mid-level and advanced duties as appropriate. Moderated by an Instructor, seminars are designed to define expectations, discuss progress, and evaluate current practicum experiences.

Course Level: Career / Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform advanced level chairside assisting functions in a clinical setting.
- CLO\#2: Improve personal skill set by learning from clinical staff feedback.
- CLO\#3: Accurately describe experiences and set personal goals according to Instructor feedback and peer review.
- CLO\#4: Provide professional feedback to others.
- CLO\#5: Adhere to facility and dental assisting program policies.
- CLO\#6: Compare resume from DA152 to current resume. (ILO: Critical Thinking)


## DA 201 - Dental Radiology

## 4 Credit(s)

Prerequisite(s): Successful admittance to the Dental program.
Course Description: Prepares students for Dental Board Exams. Students will study 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 radiologic exam.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain how radiation causes physical harm and describe necessary safety standards. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Describe and how to expose and develop quality radiographs.
- CLO\#3: Identify and discuss standards for common exposure, processing, and film errors, and how they may be avoided or eliminated.
- CLO\#4: Recognize and describe occupational hazards in a radiographic setting.


## DA 201L - Radiology Lab

## 2 Credit(s)

Prerequisite(s): Successful admittance to a Dental program.
Course Description: Prepares the students for the Oregon Board Exam. Students will take radiographs on a manikin and on live patients.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate standard techniques used to keep both a patient and/or operator safe from overexposure to radiation.
- CLO\#2: Demonstrate radiographic techniques by producing a full-mouth set of diagnostic-quality radiographs. (ILO: Critical Thinking)
- CLO\#3: Demonstrate processing films using an automatic film processor with daylight loader.
- CLO\#4: Demonstrate mounting and labeling a set of traditional and digital radiographs.


## DA 202 - Infection Control for the Dental Professional

## 2 Credit(s)

Prerequisite(s): Successful admittance to the Dental program.
Course Description: Students will prepare for the following sections: patient and dental healthcare worker education, standard/ universal precautions and prevention of disease transmission, prevention of crosscontamination, maintaining aseptic conditions, performing sterilization procedures, environmental asepsis, and occupational safety.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe infectious diseases and their relationship to dental patient and workplace safety. Identify regulatory agencies that oversee workplace and safety standards. (ILO: Critical Thinking)
- CLO\#2: Describe waste management using green technology to include water line maintenance and hazardous waste disposal.
- CLO\#3: Demonstrate how to prevent cross-contamination and disease transmission and describe how to maintain aseptic conditions.
- CLO\#4: Describe standards and guidelines of occupational safety and infection control for dental personnel.


## DA 203 - Chairside Assisting

## 2 Credit(s)

Prerequisite(s): Successful completion of the first three terms of the Dental Assistant program.

Course Description: Prepares students for the Oregon Basic, the Oregon Board of Dentistry's written exam, a step in obtaining the Expanded Functions Dental Assistant certificate through the Dental Assisting National Board (DANB) This 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, and office management procedures.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Review infection control and identify pathogens and microorganisms that are of greatest concern in the dental office. Review regulatory agencies that oversee workplace and safety standards.
- CLO\#2: Recognize and describe occupational hazards, and explain how they may be avoided, minimized, or eliminated. Describe how to respond to a dental/occupational emergency.
- CLO\#3: Describe common legal issues in dentistry. Including patient records, oral diagnosis and business operating systems.
- CLO\#4: Describe the sterilization and disinfection processes.
- CLO\#5: Describe how to perform chairside assisting and laboratory functions in a clinical setting.
- CLO\#6: Review the proper use and benefits of personal protective equipment (PPE)and proper hand hygiene.
- CLO\#7: Discuss the impact of cultural, ethnic, racial backgrounds, geographic, and learning styles on the delivery of dental care, and utilize concepts when providing patient care. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#8: Adhere to facility and dental assisting program policies.


## DA 204 - Expanded Functions Dental Assistant

## 2 Credit(s)

Prerequisite(s): Successful completion of the first three terms of the Dental Assistant program.
Course Description: Prepares students for the Expanded Functions Dental Assistant (EFDA), an Oregon Board of Dentistry's written exam. 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 licensed Dentist Endorsement 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the hazards associated with dental materials, chemicals and amalgam and how properly handle and dispose of them.
- CLO\#2: Define and explain the purpose of amalgam and coronal polishing. (ILO: Information Literacy)
- CLO\#3: Describe the reasons for using and the placement of a dental rubber dam and dental matrices.
- CLO\#4: Describe the process and the materials used in fabricating trays for tooth whitening.
- CLO\#5: Identify the types of dental cements, and explain their properties, composition, uses, manipulation and removal.
- CLO\#6: Explain techniques for fabricating temporary crowns.
- CLO\#7: Describe the steps in taking dental impressions and the various materials used for different procedures.
- CLO\#8: Adhere to facility and dental assisting program policies.


## DA 204L - Expanded Functions of Dental Assistant Lab

## 1 Credit(s)

Prerequisite(s): Successful completion of the first three terms of the Dental Assistant program.

Course Description: Provides hands-on, clinical instruction of the lecture material presented in DA-204. The student will practice and become familiar with the clinical skills required for an expanded function dental assistant (EFDA). Expanded functions are determined by the Oregon Board of Dentistry and may change without prior notice. To be EFDA certified in Oregon, a dental assistant must successfully complete all of the requirements in one of the four pathways administered by the Dental Assisting National Board (DANB).

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe and perform EFDA functions in a clinical setting. (ILO: Critical Thinking)
- CLO\#2: Demonstrate the proper use of personal protective equipment (PPE). Describe the procedures and products available for hand hygiene.
- CLO\#3: Apply the principles of dental asepsis in performing dental assisting duties.
- CLO\#4: Explain the safe handling of hazardous materials and proper disposal.
- CLO\#5: Adhere to facility and dental assisting program policies.


## DA 206 - Dental Specialties

## 2 Credit(s)

Prerequisite(s): Successful completion of the first two terms of the Dental Assistant program. This is a special admission program that requires completion of 13-17 credits of prerequisite/preparatory courses and formal acceptance prior to entry.

Course Description: Studies the various fields of specialized dentistry recognized by the American Dental Association. Introduces applied psychology through role-playing as related to the clinical application in the specialties.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the various dental specialties.
- CLO\#2: Identify the general principles and armamentarium associated with each dental specialty.
- CLO\#3: Evaluate the various roles of auxiliary personnel as they relate to each dental specialty. (ILO: Critical Thinking)
- CLO\#4: Demonstrate legally delegable dental assisting skills as they relate to the dental specialties.


## DDM 120 - Digital Graphic Design I

## 3 Credit(s)

Corequisite(s): CIS 120 (formerly offered as CS120)
Course Description: Introduces students to the concepts of graphic design and production by integrating design principles with software capabilities. Exercises include an introduction to the use of Adobe Photoshop, Illustrator and InDesign. Concepts in color, typography, logo design, page layout, package design and Web page design are covered. Additional lab hours required. The intent of this class is to provide a sound foundation and experience in the organization of design elements, individual creative processes, a heightened sense of aesthetics; a grasp of printed and Web principles, and basic typography. These experiences shall provide a working ability in graphic design for students interested in graphic design, web design or for personal enrichment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify disciplines within the field of Graphic Design, its practices and careers. Demonstrate the creative design process.
- CLO\#2: Identify anatomy, terminology of type and traditions of basic typography. Demonstrate skill in designing with and communicating with type.
- CLO\#3: Demonstrate the concepts, elements and principles of graphic design, and the Gestalt principles of visual perception and organization. (ILO: Critical Thinking)
- CLO\#4: Demonstrate how to use the software and hardware technology necessary for graphic design.
- CLO\#5: Demonstrate effective and successful print and web publishing Understand creative typography, page design, use of color, and the generation of effective images.


## DDM 125 - Digital Photography

## 3 Credit(s)

Recommended Prerequisite(s): ART 115 and DDM 160

Course Description: Offers instruction in the use of a SLR digital camera and fundamentals of digital photography. Topics include, image composition, digital camera techniques in various formats including raw, GIF, JPEG, and PNG, digital processing using Adobe Photoshop and digital printing. Students will learn how to manually operate a digital camera, taking control of aperture settings, shutter speeds, and ISO controls. Students will learn how various lenses effect the depth of field and image quality of an exposure. No darkroom work is required. Students must provide their own digital single lens reflex cameras and these cameras must be able to allow for manual adjustment of shutter speed and aperture. Does not fulfill degree or certificate requirements for computer proficiency. Additional studio hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate DSLR camera operation, concepts of the digital darkroom and digital photographic techniques and processes.
- CLO\#2: Explore principles of traditional photography and how they apply to digital photography.
- CLO\#3: Demonstrate various techniques to enhance and manipulate an image through the application of camera and lighting techniques, effects and filters. (ILO: Critical Thinking)
- CLO\#4: Demonstrate how to transport a digital photograph from camera to computer, color and file management, and the preparation of files for photographic manipulation using Camera Raw.
- CLO\#5: Manipulate existing digital images to create original digital images using Photoshop tools and techniques.
- CLO\#6: Apply technology to publish images for print and screen presentation.


## DDM 130 - Introduction to Adobe Web Tools

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120)
Course Description: Provides an overview of various Adobe applications including Acrobat DC, Dreamweaver, Spark, Portfolio and Behance to create web and portfolio sites, social media posts and videos. Free productivity applications for time and income tracking, creating estimates and invoices, and project management will also be explored.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Determine with a variety of Adobe applications for website development and social media post design and understand their functionality and best use.
- CLO\#2: Demonstrate how to use advanced features of Adobe Acrobat.
- CLO\#3: Utilize Adobe Dreamweaver to create website pages and understand it's usage and capabilities.
- CLO\#4: Use Adobe Spark to create web pages, social media posts and videos for popular social media platforms.
- CLO\#5: Demonstrate a functional understanding of page layout using CSS and layers.
- CLO\#6: Use Adobe Portfolio to create a professional portfolio of design work.
- CLO\#7: Demonstrate a general understanding of many common productivity apps, their value, benefits and usage. (ILO: Information Literacy)
- CLO\#8: Demonstrate basic web design principles.


## DDM 140 - Electronic Publishing I (In Design)

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or equivalent computing experience.
Course Description: Introduces the student to the computer software used in the development of page design and layout. Emphasis will be placed on the production of basic business publications including newsletters, fliers, brochures, etc. General principles of page layout design will be studied including the placement of text, images, illustrations and logotypes and the important synthesis of these elements. Additional lab hours required.

## Course Learning Outcomes:

- CLO\#1: Identify and use basic Adobe InDesign tools and functions to apply the concepts of desktop publishing and commercial file preparation.
- CLO\#2: Demonstrate effective solutions for a range of design problems involving both conceptual and technical learning. (ILO: Critical Thinking)
- CLO\#3: Demonstrate team building skills, interpersonal skills, and project modification to meet a client's needs.
- CLO\#4: Apply technology for desktop publishing to Understand the use of the different file formats and types when working with embedded and linked vector and bitmapped images.
- CLO\#5: Develop good design skills to create effective publications with attention to the aesthetics of the publication.


## DDM 141 - Electronic Publishing II (In Design)

## 3 Credit(s)

Prerequisite(s): DDM 140
Course Description: Emphasizes design and proper preparation of electronic pre-press files for print and digital production. Students will execute print and interactive projects for the web using advanced design and publishing tools in InDesign. Students will also examine many advanced layout and printing techniques, multiple page document preparation and the proper methods for sending files to printers and online publishers. Additional lab hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the technical and creative process of Electronic document assembly.
- CLO\#2: Demonstrate the complexities of working with process color, spot color, CMYK, RGB, as well as additive and subtractive color in file preparation. (ILO: Critical Thinking)
- CLO\#3: Demonstrate the differences and interactions between Adobe Illustrator and Photoshop, InDesign and Acrobat.
- CLO\#4: Manage time, material, and human resources to produce publications.


## DDM 150 - Computer Illustration (IIlustrator)

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or equivalent computing experience.

Course Description: Students develop competency in the creation of computer-generated illustrations. Includes instruction in creating vector graphics and techniques for logo design, as well as brochure, book, magazine, and advertising illustration. Adobe Illustrator is currently the application used in this course.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and use basic Adobe Illustrator tools and functions to enhance and add interest to object oriented designs.
- CLO\#2: Demonstrate effective solutions for a range of design problems involving both conceptual and technical learning. (ILO: Critical Thinking)
- CLO\#3: Demonstrate team building skills, interpersonal skills, and project modification to meet a client's needs.
- CLO\#4: Apply technology to publish digital illustrations for print and screen presentation.
- CLO\#5: Use Adobe Illustrator in concert with the other primary graphic design applications.


## DDM 160 - Digital Imaging: Photoshop

## 3 Credit(s)

Corequisite(s): CIS 120 (formerly offered as CS120)

Course Description: Explores a wide range of digital imaging techniques from photo touch-ups to realistic scenes created from scratch. Digital image creation and manipulation commands and operations will be covered. Design, publishing concepts, and terms will be discussed. Particular attention will be given to creating files for effective output whether for printed media or electronic. Adobe Photoshop is currently the application used in this course.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the tools and techniques necessary to created and manipulate digital images using Photoshop.
- CLO\#2: Demonstrate effective solutions for a range of design problems involving both conceptual and technical learning. (ILO: Critical Thinking)
- CLO\#3: Demonstrate team building skills, interpersonal skills, and project modification to meet a client's needs.
- CLO\#4: Apply technology to publish images for print and screen presentation.
- CLO\#5: Develop techniques for learning and using new software.


## DDM 161 - Advanced Digital Imaging (Photoshop for Web)

## 4 Credit(s)

Prerequisite(s): CIS 195, DDM 120, DDM 160, DDM 130
Course Description: Provides intermediate-level digital imaging training using Photoshop CC for designing websites. Students learn to create shared libraries of graphics, colors and styles assets between Adobe programs and generate assets and extract assets for web at different device resolutions. The use of Dreamweaver CC to extract style information and assets from Photoshop comps will be explored. Emphasis is on utilization of effective design principles and exploration of industry-appropriate production tools.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate technical aspects of formatting and preparing graphics for the Web using current Web graphics and Web authoring programs.
- CLO\#2: Create original artworks, graphical and navigational elements, 2-D animations and multimedia elements to incorporate into a Web page.
- CLO\#3: Develop effective visual communication strategies, recognizing and using appropriate aesthetics in selection and presentation of Web graphics.
- CLO\#4: Demonstrate effective techniques for incorporating new media concepts such as userinteractivity and motion graphics into Web projects. Utilize advanced techniques in typography, photo manipulation, and page layout to produce effective, professional Websites. (ILO: Critical Thinking)


## DDM 170 - Motion Graphics (After Effects)

## 3 Credit(s)

## Prerequisite(s): DDM 160 and DDM 150

Course Description: Introduces Adobe ${ }^{\circledR}$ After Effects for 2D animation and visual effects for television. Students will learn the essentials of motion graphics including visual rhythm and kinetic typography. Through a series of lectures and assignments, students learn how to conceptualize and visualize motion graphic storyboards and develop methods of producing title sequences, television network identifications, music video effects, and Web-based graphic animations.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify methods and processes for conceptualizing in time-based media.
- CLO\#2: Demonstrate self-direction in ideation and design process.
- CLO\#3: Demonstrate an understanding of motion graphic design principles in applied practice. (ILO: Communication)
- CLO\#4: Exhibit applied knowledge of synthesis of form and content.
- CLO\#5: Demonstrate one's work in a clear and professional manner.


## DDM 185 - Introduction to Digital Video (Premiere)

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or equivalent computing experience.
Course Description: Introduces digital video production planning, acquisition, comprehension, editing and distribution. Also covers potential uses of digital video in related computer applications. Includes a hands-on component using industry-standard software to edit a variety of digital video projects.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Determine project objectives. Effectively plan a video project to include vision, audience, and the resources needed.
- CLO\#2: Demonstrate a functional understanding of digital video terminology.
- CLO\#3: Demonstrate ability to capture and edit video, organize clips and apply sound tracks using industry-standard software. (ILO: Critical Thinking)
- CLO\#4: Demonstrate ability to select appropriate audio and video file types and differentiate their use depending upon type of digital content used.
- CLO\#5: Demonstrate ability to manipulate color adjustment, use video effects and maintain aspect ratios.
- CLO\#6: Demonstrate ability to apply text media effects, credit rolls, noise textures and graphics.
- CLO\#7: Demonstrate ability to apply effective transitions and adjust transition parameters.
- CLO\#8: Troubleshoot effective solutions for a range of digital video problems involving both conceptual and technical learning.
- CLO\#9: Troubleshoot software problems.


## DDM 186 - Advanced Digital Video

## 3 Credit(s)

## Prerequisite(s): DDM 185

Course Description: Introduces digital video production planning, project management, collaboration, acquisition, comprehension, creative problem-solving, leadership, editing and distribution, and covers special effects and compositing techniques. Also includes potential uses of digital video in related computer applications, and a hands-on component using Adobe software to edit and composite a variety of digital video projects. Class would culminate with small groups preparing and producing short films. Additional lab hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Determine project objectives. Effectively plan a video project to include vision, audience, and the resources needed.
- CLO\#2: Demonstrate a functional understanding of video production terminology. (ILO: Critical Thinking)
- CLO\#3: Demonstrate ability to capture and edit video, create compositions, organize clips and media bins and apply sound tracks using industry-standard software.
- CLO\#4: Demonstrate ability to select appropriate audio and video file types and differentiate their use depending upon type of digital content used.
- CLO\#5: Demonstrate ability to manipulate color correction, use curves, contrast and other media manipulation tools and maintain aspect ratios.
- CLO\#6: Demonstrate ability to plan, write, and produce group-based short films.
- CLO\#7: Demonstrate ability to distribute short films.
- CLO\#8: Troubleshoot effective solutions for a range of digital video, animation and compositing problems involving both conceptual and technical learning.
- CLO\#9: Troubleshoot software problems.


## DDM 190 - Introduction to Animation (Adobe ® Animate)

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120)
Course Description: Using the Adobe $\circledR$ Animate application, students design rich media Web content containing interactivity, animation and sound. Students gain an understanding of Animate's logic, concepts, and language. In addition, students will learn of designer/developer resources for continued self-paced learning. Topics include introduction to rich media; the Animate drawing tools; creating Animate movies;
adding graphic elements; designing with text; symbols, instances, and libraries; working with sound and motion; using ActionScript to create interactivity; combining Animate with HTML; integrating Illustrator and Photoshop with Animate using Animate Catalyst; publishing an Animate website.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate Animate's logic, concepts, and language in order to create components necessary for 2D animation.
- CLO\#2: Demonstrate an understanding of the processes for designing and executing vector objects and graphics for animation.
- CLO\#3: Utilize effective solutions for a range of design problems involving both conceptual and technical learning.
- CLO\#4: Demonstrate the concept of communication ideas through using type and text with animation.
- CLO\#5: Demonstrate the concept of a time and motion and how to create a motion sequence.
- CLO\#6: Demonstrate an understanding the interaction of sound and image in animation.
- CLO\#7: Demonstrate the ability to plan and execute an interactive animation using the Animate timeline and ActionScript buttons. (ILO: Communication)


## DDM 191 - Advanced Animation II

## 3 Credit(s)

Prerequisite(s): CIS 195, DDM 190, and MTH 95

Course Description: Introduces animation and object-oriented programming concepts and techniques. Includes tools used by the creative industry for animation productions and interactive media. Topics covered include representing form and transforms in two dimensions, capturing user actions and driving application behavior interactively.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the foundations of computing. Utilize logic, concepts, and language in order to create a 2D animation.
- CLO\#2: Plan, write and execute an interactive animation using Processing.
- CLO\#3: Create original 2D animation concepts for production. (ILO: Communication)
- CLO\#4: Manage objects interaction. Implement input and event listeners.
- CLO\#5: Develop storyboards for planning an original animation concept. Use digital animation software to produce finished animations.


## DDM 200 - Survey of Design and Film History

## 3 Credit(s)

Prerequisite(s): DDM 120 and WR 121Z or designated placement.
Course Description: This is a survey course on the major developments, movements and critical approaches of design and film from the Industrial Revolution to the present. This course emphasizes an understanding of the historical, cultural, commercial and aesthetic contexts that influence graphic and
cinematic styles of the twentieth century, using the works of designers, artists film-makers. Students will conduct research, prepare a research paper, a presentation and create a poster on a chosen subject of the 20th Century. Additional lab hours required.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify in a comprehensive way the general development of design and film within a historical context.
- CLO\#2: Recognize and describe a particular historical style and the designers, artists, and filmmakers throughout contemporary history that have made significant contributions to their craft. (ILO: Communication)
- CLO\#3: Identify and apply artistic characteristics of a style to a design project.


## DDM 220 - Digital Graphic Design II

## 3 Credit(s)

Prerequisite(s): GD120 or DDM 120

Course Description: Explores the communication of ideas and information through visual means. Students apply design process and principles, visual language, and the art of problem solving to finding creative solutions to complex visual communications problems. Various layout formats, the creative use of typography, concept origination and development are also addressed. A professional approach to the discipline will be stressed. Additional lab hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate Visual Literacy - The ability to produce visual messages using graphic design principles.
- CLO\#2: Demonstrate the ability to use creative thinking and problem-solving techniques to work through a design problem and create an appropriate solution. (ILO: Critical Thinking)
- CLO\#3: Utilize anatomy, terminology of type and traditions of basic typography. Develop skill in designing with type.
- CLO\#4: Demonstrate the concepts, elements and principles of graphic design, and the Gestalt principles of visual perception and organization.
- CLO\#5: Demonstrate how to use the software and hardware technology necessary for graphic design.


## DDM 221 - Production Graphics

## 3 Credit(s)

Prerequisite(s): DDM 140, DDM 150, DDM 160

Course Description: Introduces students to the print production process with an emphasis on document preparation and production planning and management. Students will learn about the history of printing and the commercial printing process. The full range of the design-to-print process will be covered. Topics include paper selection, soliciting bids and preparing quotes, selecting printers, photographers and other suppliers, design editing, typography selection and copy-fitting, proper image preparation, understanding color models for print, proofing and editing, and binding and finishing techniques. Additional lab hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the history of printing and the concepts of offset printing technology.
- CLO\#2: Demonstrate layout and design as it pertains to print production and creative execution of electronic prepress documents.
- CLO\#3: Identify the role of suppliers and venders in the production process. Learn to collaborate with printers, photographers and paper suppliers to get bids.
- CLO\#4: Demonstrate industry standards for all aspects of print production including: paper manufacturing, paper types and paper selection; typography, type selection and copyfitting; color models and color management for print; color separations, screen tints, halftones, film and printing. (ILO: Critical Thinking)
- CLO\#5: Demonstrate the importance of the role the production artist plays in project management.


## DDM 223 - Digital Graphic Design III

## 3 Credit(s)

## Prerequisite(s): DDM 220

Course Description: Focuses on creative typography for visual communication and stresses the use of typography as a design and communication tool. Emphasis will be on formal design issues related to typography, composition, scale and proportion and the relationships of type, layout and color in two- and three-dimensional graphic design projects. Students will study the history and classifications of letterforms and employ this knowledge base in the creation of various typographical designs and presentations. Typical projects may range from letter and alphabet design to the use of typographical forms as the feature design elements in graphic designs or page layouts. Additional lab hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate Typographic Literacy - The ability to produce visual messages using typographic principles.
- CLO\#2: Demonstrate the ability to use creative thinking and problem-solving techniques to work through a design problem and create an appropriate solution. (ILO: Critical Thinking)
- CLO\#3: Utilize the anatomy, terminology of type and traditions of basic typography. Develop skill in designing with type.
- CLO\#4: Utilize the concepts, elements and principles of graphic design, and the Gestalt principles of visual perception and organization.
- CLO\#5: Demonstrate to use the software and hardware technology necessary for graphic design.


## DDM 224 - Digital Graphic Design IV

## 3 Credit(s)

Prerequisite(s): DDM 220 or DDM 221

Course Description: Builds on basic concepts of graphic design and introduces systems of visual organization and composition for two- and three-dimensional design. Emphasis is on problem solving and idea generation skills to develop strong conceptual solutions. Students will gain experience solving complex visual communication problems through advanced design projects in logo design, package design, point-of-
purchase and publication design. Additional lab hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate Visual Literacy - The ability to produce visual messages using graphic design principles.
- CLO\#2: Demonstrate creative thinking and problem-solving techniques to intelligently research a design problem and create an appropriate solution. (ILO: Critical Thinking)
- CLO\#3: Demonstrate the ability to use creative thinking and problem solving techniques to work through a design problem and create an appropriate solution.
- CLO\#4: Utilize concepts, elements and principles of graphic design, and the Gestalt principles of visual perception and organization.
- CLO\#5: Utilize the software and hardware technology necessary for graphic design.


## DDM 225-3D Graphics Design (Blender)

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or documented proficiency
Recommended Prerequisite(s): DDM 150 and DDM 160
Course Description: Provides an introduction to the principles of developing basic 3D graphic imagery and animations. Using a hands-on approach, students develop competence in using Blender to create 3D graphics. Topics include: modeling objects, generating surfaces, and working with textures, cameras, and lighting.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Create a series of 3D objects and original short animations. (ILO: Communication)
- CLO\#2: Utilize the Blender user-interface and the tools for modeling, texturing, animation, and special effects.
- CLO\#3: Demonstrate layout and organize a typical Blender workflow.


## DDM 226 - Advanced 3D Graphics Design II (Maya)

## 3 Credit(s)

Prerequisite(s): DDM 225

Course Description: Provides competency in advanced concepts of design and development of complex 3D graphic images, animations, and special effects. Using a hands-on approach, students develop competence in using Maya to create 3D graphics. Topics include: modeling objects, generating surfaces, and working with textures, cameras, and lighting.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Create a series of 3D objects and original short animations. Demonstrate how to plan, create, design, implement, and evaluate projects. Apply technology to task.
- CLO\#2: Utilize the Maya user-interface and the advanced tools for modeling, texturing, animation, and special effects including creation of fluid effects, hair, fur, and cloth. Demonstrate proficiency in software applications, apply technology to task.
- CLO\#3: Demonstrate layout and organize a typical Maya workflow. Utilize systems, improve and develop procedures. Prepare and follow schedule. (ILO: Communication)
- CLO\#4: Work constructively to produce a finished group project, animation, or game. (Participates as a member of a team, works cooperatively with others, contributes effort, suggestions and ideas.)
- CLO\#5: Design unique, high-quality final project for commercial or educational distribution. (Uses imagination freely, specifies goals and constraints, evaluates and chooses best alternatives.)


## DDM 229 - Portfolio and Professional Practices

## 3 Credit(s)

Prerequisite(s): DDM 220

Course Description: Discusses the opportunities in the various fields of Web design, and graphic design. Students will be guided in the preparation of a digital portfolios of their work, in the development of resumes, a personal identity system for a business cards, letterheads and envelopes, and cover letters to prospective employers. Students will learn practical interviewing techniques, job search "netiquette," and how to position themselves using online professional networking sites. The intent will be to prepare students to enter the design field with a confident and professional attitude. Additional lab hours required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the fields of disciplines in graphic design, its practices and careers. Demonstrate the creative design process.
- CLO\#2: Learn to apply self-motivation along with time management skills to accomplish a calendar of completion dates for projects. (ILO: Critical Thinking)
- CLO\#3: Identify career opportunities and demonstrate how to self-promote.
- CLO\#4: Develop professional communications skills through speaking and writing.


## DDM 230 - Studio Capstone

## 3 Credit(s)

Prerequisite(s): DDM 220

## Corequisite(s): DDM 229

Course Description: Advanced exploration of completing a community project, with the emphasis upon creative problem solving, project management and professional practices. Students will learn to solve complex visual communication problems through projects in design, advertising, social media and video production. Provides the opportunity to work collaboratively on special projects and includes in-depth study of processes and procedures. Additional lab hours required.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Employ creative thinking and problem- solving techniques to intelligently research a design problem and create an appropriate solution. (ILO: Critical Thinking)
- CLO\#2: Plan time, material, and human resources.
- CLO\#3: Collaborate skills when designing, developing and modifying projects to complete contracts and meet the customer's needs.
- CLO\#4: Employ effectively and successfully concepts for print, digital video. Understand the creative skills needed for the generation of effective solutions.
- CLO\#5: Identify the target audience and the customer's needs and purpose.


## DDM 231 - Content Management Systems (Word Press)

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120)
Course Description: Introduces a broad range of topics related to various Content Management Systems, social media marketing, email marketing and SEO practices that will allow students to explore and understand the fundamentals of building CMS database-driven sites through the creation of their own responsive, user-friendly website. Additional topics will include purchasing and configuring a domain name and web hosting, installing WordPress, content creation and customization, modifying themes using CSS and HTML, choosing and installing plugins and payment platforms, website design trends and UX/UI functionality. Course formerly offered as DDM131.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Review a variety of popularly used CMS applications and understand their functionality and best use.
- CLO\#2: Demonstrate how to purchase and set up a domain name and hosting service.
- CLO\#3: Demonstrate the ability to design, customize and edit widgets, menus and web pages in a CMS dashboard environment to create modern, responsive websites.
- CLO\#4: Demonstrate the ability to customize web pages using HTML and CSS. (ILO: Critical Thinking)
- CLO\#5: Discuss the use of social media marketing, targeting your audience, and best practices across channels.
- CLO\#6: Demonstrate a functional understanding of common e-commerce tools, payment platforms and plugins.
- CLO\#7: Find, identify and install developer supported plugins.
- CLO\#8: Identify current web design trends.
- CLO\#9: Demonstrate a functional understanding of internet privacy, know why it's important, and apply standard security practices.
- CLO\#10: Discuss UI/UX design and why it's important in Web 3.0.


## DDM 235 - Website Design

## 4 Credit(s)

Prerequisite(s): CIS 195

Course Description: Provides students with a foundation in web user interface design, including usability, navigation, visualization, functionality (site maps, FAQ's) and site accessibility. Students will use X/HTML and CSS to create websites that incorporate these concepts while maintaining visual appeal. The course will also introduce students to the core principles and methodologies of information architecture including
content assessment and organization, defining organizational structures, and developing interactive web site prototypes.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Assess needs and goals of a Web project and effectively plan website to include vision, audience, and the resources required. (ILO: Critical Thinking)
- CLO\#2: Be able to apply industry-standard Web usability and page design guidelines to a web project.
- CLO\#3: Demonstrate a functional understanding of page structure design standards and be able to apply these elements to a visually appealing Website.
- CLO\#4: Demonstrate ability to organize web content into logical units, develop hierarchies of content and create a visual diagram of the site structure.
- CLO\#5: Utilize advanced techniques in typography and page layout to produce effective, professional Websites.
- CLO\#6: Demonstrate the ability to use text, manuals, help, and tutorials for continued learning after formal instruction.


## DDM 280 - Cooperative Work Experience/Design and Digital Media

## Var. (1-6) Credit(s)

Prerequisite(s): Permission of CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a career-related experience for students working for an approved employer. As a capstone course, students should complete this course within the last 2 terms of their certificate or degree.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#3: Demonstrate good work performance (student's learning objectives).
- CLO\#4: Understand the importance of following instructions and meeting deadlines.
- CLO\#5: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job. (ILO: Critical Thinking)
- CLO\#6: Make contacts which will help in obtaining employment.


## DS 111 - Basic Electricity for Diesel Technicians I

## 6 Credit(s)

Course Description: Introduces the fundamentals of basic electricity, starters and power generation, the use of test equipment, and troubleshooting techniques. Course required for all entering Diesel Technology students.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrates industry standard safety policies.
- CLO\#2: Identify and analyze general electrical circuit systems.
- CLO\#3: Identify the relationship between voltage, resistance and current.
- CLO\#4: Identify simple DC circuits.
- CLO\#5: Diagnose, troubleshoot and repair electrical components. (ILO: Critical Thinking)
- CLO\#6: Diagnosis, troubleshoot and repair electrical components.


## DS 113 - Diesel Engine Overhaul

## 6 Credit(s)

Prerequisite(s): DS 131

Course Description: Provides diesel engine theory and hands-on experience in rebuilding and servicing diesel engines including testing, diagnosis, measurements, and repair.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the theory of operation for components in diesel engines. (ILO: Critical Thinking)
- CLO\#2: Identify the function of each engine sub-system and how they relate with each other.
- CLO\#3: Demonstrate industrial procedures used in rebuilding, diagnosing, testing, repairing, and adjusting diesel engines.
- CLO\#4: Demonstrate correct use of the tools and equipment used by the industry.
- CLO\#5: Recognize systematic approach to engine issues, troubleshooting, and diagnostic problems.


## DS 120 - Diesel Practices

## 5 Credit(s)

Course Description: Introduces basic mechanical shop safety and industrial practices, professionalism and ethics, shop tools, and equipment use. Vehicle maintenance and service procedures included. Course required for all entering Diesel Technology students.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe use of tools and chemicals, identify proper storage of parts and components, and select correct protective clothing and safety gear for various situations.
- CLO\#2: Explain diesel engine operating theories.
- CLO\#3: Compare and explain design, operating principles, and the component parts of the two stroke and four stroke diesel engines.
- CLO\#4: Demonstrate proper disassemble and reassemble techniques on various vehicle components. (ILO: Critical Thinking)


## 4 Credit(s)

Prerequisite(s): DS 120

Course Description: Provides the theory of operation and hands-on experience in tuning up and troubleshooting various live diesel engines. Topics include tune-up, engine airflow principles, and performance diagnosis.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Evaluate characteristics and thermodynamic analysis of common internal combustion engine cycles.
- CLO\#2: Evaluate and repair the fuel temperature senders, thermostat analysis, air-to-air boost temperature sensors, engine oil coolers and coolant condition of the cooling system. (ILO: Critical Thinking)
- CLO\#3: Evaluate, adjust and perform maintenance on injection timing, priming, and pressure.
- CLO\#4: Describe the function and effect of the combustion cycle on diesel engine exhaust gases.
- CLO\#5: Describe and adjust proper combustion and fuel efficiency on a diesel engine.
- CLO\#6: Troubleshoot diesel engine overhead noise and engine symptom search.


## DS 134 - Basic Electricity for Diesel Technicians II

## 3 Credit(s)

Prerequisite(s): DS 111 and DS 120

Course Description: Introduces first-year students to electrical and electronic theory and more advanced topics that relate to heavy, mid-range, light, stationary, marine diesel, propane, and natural gas applications. Students will have the opportunity to achieve task mastery by successful completion of each ASE/NATEF task.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the most common electrical terminology.
- CLO\#2: Evaluate and perform repairs to stop lamps, turn signals, flasher units, backup lamps and warning devices. (ILO: Critical Thinking)
- CLO\#3: Evaluate and perform needed repairs to electrical chassis circuits.
- CLO\#4: Evaluate and performs repairs to the engine electrical system.
- CLO\#5: Evaluate and perform repairs to the ABS electrical system.


## DS 141 - Heavy Equipment Power Trains

## 4 Credit(s)

Prerequisite(s): AM 120 or DS 120

Course Description: Studies the principles of operation of heavy transmissions, differentials, and clutches, and provides for hands-on experience in the servicing, inspecting, and rebuilding of them.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify components and theory of operation of power train.
- CLO\#2: Remove, disassemble, inspect, and install automatic and manual transmissions. (ILO: Critical Thinking)
- CLO\#3: Remove, disassemble, inspect and install differential, driveline and wheel bearing assemblies.
- CLO\#4: Remove, rebuild, diagnose, reinstall and configure differentials/rear ends.
- CLO\#5: Perform preventative maintenance on power train components.


## DS 151 - Heavy Equipment Brakes

## 5 Credit(s)

Course Description: Studies the theories of braking system operation and provides hands-on experience in the rebuilding, repairing, and adjusting of the various braking systems including hydraulic, air, and electrical types, as well as ABS brake hydraulics and operation.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform inspections, safety checks, and maintenance on air and hydraulic brake systems and components. (ILO: Critical Thinking)
- CLO\#2: Identify the components and the path of flow for a hydraulic brake system.
- CLO\#3: Identify the components and the path of flow for an air brake system.
- CLO\#4: Identify the components and the path of flow for air and hydraulic anti-lock brakes system.


## DS 160 - Heavy Equipment Suspension and Steering Systems

## 5 Credit(s)

Prerequisite(s): AM 120 or DS 120

Course Description: Provides students with the theory and hands-on training needed to properly test, repair, troubleshoot, and align suspension and steering systems used on trucks and heavy equipment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify components and explain the theory of operation of the steering system. (ILO: Critical Thinking)
- CLO\#2: Identify components and explain the theory of operation of the heavy-duty suspensions.
- CLO\#3: Demonstrate the ability to troubleshoot, diagnose and repair heavy equipment/truck brakes, steering, and suspension systems.
- CLO\#4: Inspect and adjust the 5th wheel system.
- CLO\#5: Inspect, troubleshoot, and repair the steering system and various components.
- CLO\#6: Inspect troubleshoot and repair the common suspension systems and its components.
- CLO\#7: Operate the hunter alignment machine to correctly align a truck.


## DS 199-Special Studies: Diesel

## Var. (1-6) Credit(s)

Course Description: Presents workshops dealing with the diesel and heavy equipment industry and related issues; scheduled as needed.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate knowledge of safe working practices in the workplace.
- CLO\#2: Demonstrate proficiency of written and oral communications skills. (ILO: Communication)
- CLO\#3: Demonstrate workplace skills associated with customer relations and employee employer relations.
- CLO\#4: Perform assigned lab projects and tasks as established by the supervising Instructor.


## DS 232 - Heavy Equipment Fuel Systems

## 3 Credit(s)

Prerequisite(s): DS 131
Course Description: Develops skills and knowledge for working with diesel fuel injection, turbo chargers, super chargers, gasoline, and alternative fuel systems. Includes hands-on experience in the servicing and rebuilding of components in each system.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe diesel fuel injection functions and explain how they relate to engine operation and performance.
- CLO\#2: Troubleshoot, evaluate and repair diesel fuel injection systems. (ILO: Critical Thinking)
- CLO\#3: Identify and explain the path of flow for today's common fuel systems.
- CLO\#4: Explain and recall the differences between the fuel system used in today's heavy-duty trucks.
- CLO\#5: Perform fuel system adjustments and routine checks and services.
- CLO\#6: Research and locate repair literature. (ILO: Information Literacy)


## DS 233 - Computerized Vehicle Management Systems

## 4 Credit(s)

Prerequisite(s): DS 131 and DS 134

Course Description: Allows for demonstration of mastery of basic diesel engines, fuel systems, electricity, electronics, air conditioning, heavy duty computer-controlled brakes, and suspension and repairs of all onboard, computer controlled, monitored and managed systems. Meets current ASE/NATEF (Automotive Service Excellence/ National Automotive Technicians Education Foundation) requirements for certification and is the foundation for many fleet and dealership maintenance, repair and monitoring practices.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recall and apply basic theory of heavy-duty electricity, components, and reading schematics.
- CLO\#2: Conduct repairs in an ethical and professional manner, respecting industry safety and environmental guidelines.
- CLO\#3: Recognize steps in multiplexing process. (ILO: Critical Thinking)
- CLO\#4: Identify and analyze sensor signal, computer processing, and computer outputs in the vehicle computer systems.
- CLO\#5: Diagnose, troubleshoot and repair vehicle electronic circuits.
- CLO\#6: Practice with and compare the different OEM and universal diagnostic software and electronic service tools.


## DS 260 - Hydraulic Systems for Heavy Equipment

## 3 Credit(s)

Prerequisite(s): AM 120 or DS 120, and AM 111 or DS 111
Course Description: Studies theory and operation of hydraulic systems used in the heavy equipment industry; includes hands-on experience in building, troubleshooting, and repairing these systems.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize critical safety rules for hydraulic systems and general shop policies. (ILO: Critical Thinking)
- CLO\#2: Identify the principles of the hydraulic system.
- CLO\#3: Apply hydraulic systems knowledge to equipment applications for maintenance and troubleshooting.
- CLO\#4: Diagnose, test, repair and maintain mobile hydraulic and hydrostatic equipment.
- CLO\#5: Reference, repair literature to, interpret and apply correct hydraulic schematics.


## DS 270 - Air Conditioning for Diesel Technicians

## 5 Credit(s)

Prerequisite(s): DS 120 and DS 131

Course Description: Covers vehicle air conditioning systems theory and operation. Uses industry identified skills for diagnosis, repair, and servicing of R12 and R134A systems. Also covers government regulations in the safe handling of refrigerants.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the correct use of protective gear and safety equipment while working on air conditioning systems. (ILO: Critical Thinking)
- CLO\#2: Identify the refrigeration cycle including safety procedures and testing requirements for temperature/pressure relationships.
- CLO\#3: Apply proper refrigeration recovery procedures according to EPA standards.
- CLO\#4: Inspect, trouble shoot, diagnose and repair the air condition system.
- CLO\#5: Troubleshoot and test air conditioning components, systems, and accessories, including the sequence of operation.


## DS 275 - Preventative Maintenance Inspection

## 5 Credit(s)

Prerequisite(s): DS 113, DS 131, DS 151, DS 160, DS 232, and DS 270,

Course Description: Provides culmination of all ASE/NATEF and academic courses required for completion and/or graduation from the Diesel Technology program. It requires knowledge and demonstration of basic engine maintenance and repair, heavy duty brakes, drive train, air conditioning, fuel and emission systems, electronics, safety inspection, servicing, maintenance records, and repairs of all onboard systems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate safety protocols and proper heavy-duty equipment maintenance. (ILO: Critical Thinking)
- CLO\#2: Operate, maintain, and repair a variety of heavy-duty trucks.
- CLO\#3: Maintain drive train, running gear, external engine components, and hydraulic systems.
- CLO\#4: Preventive maintenance; inspect, service, safely operate, and perform minor repairs on various heavy equipment.
- CLO\#5: Recognize failure analysis practices and procedures.


## DS 280 - Cooperative Work Experience/Diesel

## 1-3 Credit(s)

Prerequisite(s): AM 111 or DS 111 and AM 120 or DS 120
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#2: Demonstrate knowledge of safe working practices in the workplace.
- CLO\#3: Demonstrate proficiency of written and oral communications skills.
- CLO\#4: Communicate with co-workers, customers, and management in a professional and knowledgeable manner. (ILO: Communication)
- CLO\#5: Demonstrate workplace skills associated with customer relations and employee/employer relations.


## DS 290 - Diesel Repair Lab

## 3 Credit(s)

Course Description: Provides live work experience in all aspects of repair expected of an entry-level line technician. Includes engine performance, diagnosis and repair of engine components, chassis, power trains, brakes, suspension systems, hydraulic, and electrical systems. Course is for second-year students or can be taken in place of Cooperative Work Experience. Course is repeatable up to six credits.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an acceptable work ethic and safe practices in the work place, as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#2: Demonstrate knowledge of safe working practices in the workplace. (ILO: Critical Thinking)
- CLO\#3: Demonstrate proficiency of written and oral communications skills.
- CLO\#4: Perform assigned lab projects and tasks as established by the supervising Instructor.


## ECE 100 - Introduction to Early Childhood Education

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement, or BT 113

Course Description: Introduces students to the field of early education for children. Covers the history and roots, current issues and challenges in the field, and explores professional education and career directions for teachers of young children birth to eight years. Community observations in early childhood settings are required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the scope and breadth of the early childhood field and its historical foundations.
- CLO\#2: Observe and identify concepts of child development, including differing abilities of individual children.
- CLO\#3: Articulate one's own personal attributes as related to working with children and families. (ILO: Communication)
- CLO\#4: Describe the importance of the role of family in early childhood education.
- CLO\#5: Explain the importance of working ethically and respectfully with others as a responsible member of the early childhood community.
- CLO\#6: Give examples of developmentally appropriate practices and the integration of content knowledge.
- CLO\#7: Identify aspects of promoting a child's well-being and of providing a healthy and safe environment for children.


## ECE 125 - Early Childhood Development

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Provides an overview of child development from conception through eight years of age. The focus is on studying and observing the physical, cognitive, language, emotional, and social aspects of the individual during this period. This course includes the Child Development Associate (CDA) subject areas of child growth and development and observation, as well as the functional areas of physical, cognitive, communication, and creative. Child observations are required. Equivalent to ECE 125A, ECE 125B, and ECE 125C.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize the developmental stages of young children 0-8 years: prenatal, infant, toddler, preschool, and primary.
- CLO\#2: Describe the various domains of development: physical, social, emotional, cognitive, and language.
- CLO\#3: Recognize major child development theorists and their ideas.
- CLO\#4: Identify multiple influences on development and learning, including influences on one's own development. (ILO:Critical Thinking)
- CLO\#5: Demonstrate elements of objective versus subjective observation.


## ECE 125A - Early Childhood Development (Part A) Prenatal and Infant

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: An overview of child development from conception through one year of age. The focus is on studying and observing the physical, cognitive, language, emotional, and social aspects of the individual during this period. This course includes the Child Development Associate (CDA) subject areas of child growth and development and observation.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize the developmental stages for the prenatal and infancy periods.
- CLO\#2: Describe the various domains of development: physical, social, emotional, cognitive, and language.
- CLO\#3: Recognize major child development theorists and their ideas.
- CLO\#4: Identify multiple influences on development and learning, including influences on one's own development. (ILO: Critical Thinking)
- CLO\#5: Demonstrate elements of objective versus subjective observation.


## ECE 125B - Early Childhood Development (Part B) Physical and Cognitive

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: An overview of child development, focusing on studying and observing the physical and cognitive, aspects of the individual during this period. This course includes the Child Development

Associate (CDA) subject areas of child growth and development and observation.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the physical and cognitive domains of development.
- CLO\#2: Recognize major child development theorists and their ideas.
- CLO\#3: Identify multiple influences on development and learning, including influences on one's own development. (ILO: Critical Thinking)
- CLO\#4: Demonstrate elements of objective versus subjective observation.


## ECE 125C - Early Childhood Development (Part C) Communication and Creative

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: An overview of child development from one through eight years of age. The focus is on studying and observing the communication and creative aspects of the individual during this period. This course includes the Child Development Associate (CDA) subject areas of child growth and development and observation.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the communication and creative domains of development.
- CLO\#2: Recognize major child development theorists and their ideas.
- CLO\#3: Identify multiple influences on development and learning, including influences on one's own development. (ILO: Critical Thinking)
- CLO\#4: Demonstrate elements of objective versus subjective observation.


## ECE 126 - Early Childhood Education Best Practices

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines the basics of establishing a safe, healthy and developmentally appropriate learning environment for young children. This course includes the CDA subject areas of safe, healthy, and learning environment. Community observations in early childhood settings are required. Equivalent to ECE 126A, ECE 126B, ECE 126C.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain classroom practices and environments that prevent or reduce injuries. (ILO: Critical Thinking)
- CLO\#2: Summarize how to respond to injuries and emergencies that potentially could occur in an early childhood program.
- CLO\#3: Describe experiences for children to learn habits that ensure their safety, hygiene, and nutrition.
- CLO\#4: Identify strategies to maintain indoor and outdoor early childhood environments that promote wellness.
- CLO\#5: Explain how to recognize and report child abuse and neglect.
- CLO\#6: Describe how to organize indoor and outdoor areas that encourage growth and learning in all developmental domains through play and exploration.
- CLO\#7: Plan a daily schedule and routines that support children's development and learning.


## ECE 126A - Early Childhood Education Best Practices (Part A) Safe Environments

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines the basics of establishing a safe classroom environment. This course includes the CDA subject area of Safe.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain classroom practices and environments that prevent or reduce injuries. (ILO: Critical Thinking)
- CLO\#2: Summarize how to respond to injuries and emergencies that potentially could occur in an early childhood program.
- CLO\#3: Describe experiences for children to learn habits that ensure their safety.


## ECE 126B - Early Childhood Education Best Practices (Part B) Healthy Environments

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Examines the basics of establishing a healthy environment for young children. This course includes the CDA subject area of Healthy.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe experiences for children to learn habits that ensure their hygiene and nutrition.
- CLO\#2: Identify strategies to maintain indoor and outdoor early childhood environments that promote wellness.
- CLO\#3: Explain how to recognize and report child abuse and neglect. (ILO: Communication)


## ECE 126C - Early Childhood Education Best Practices (Part C) Developmentally Appropriate Learning Environments

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 91), or designated placement.

Course Description: Examines the basics of establishing a developmentally appropriate learning environment for young children. This course includes the CDA subject area of Learning Environment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe how to organize indoor and outdoor areas that encourage growth and learning in all developmental domains through play and exploration. (ILO: Critical Thinking)
- CLO\#2: Plan a daily schedule and routines that support children's development and learning.


## ECE 135 - Applied Child Development

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Examines the importance of promoting social and emotional development in young children. Explores appropriate guidance techniques. This course includes the CDA subject areas of self, social, and guidance. Community observations in early childhood settings are required. Equivalent to ECE 135A, ECE 135B, ECE 135C.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe strategies to support the development of children's sense of self in relation to others.
- CLO\#2: Identify strategies to demonstrate respect and appreciation for each child as an individual. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Identify experiences in the classroom that help children develop positive social skills.
- CLO\#4: Describe the progression of skills related to a child's social development.
- CLO\#5: Explain how to use positive guidance to minimize problem behavior, encourage selfregulation, and help each child learn.
- CLO\#6: Identify strategies to help children express their feelings in acceptable ways.


## ECE 135A - Applied Child Development (Part A) Promoting Emotional Skills

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Examines the importance of promoting emotional development in young children. This course includes the CDA subject area of Self.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe strategies to support the development of children's sense of self in relation to others.
- CLO\#2: Identify strategies to demonstrate respect and appreciation for each child as an individual. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## ECE 135B - Applied Child Development (Part B) Promoting Social Skills

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines the importance of promoting social development in young children. This course includes the CDA subject area of Social.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the progression of skills related to a child's social development. (ILO: Communication)
- CLO\#2: Identify experiences in the classroom that help children develop positive social skills.


## ECE 135C - Applied Child Development - Providing Positive Guidance

1 Credit(s)
Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines appropriate guidance techniques to promote social and emotional development in young children. This course includes the CDA subject area of Guidance.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain how to use positive guidance to minimize problem behavior, encourage selfregulation, and help each child learn. (ILO: Critical Thinking)
- CLO\#2: Identify strategies to help children express their feelings in acceptable ways.


## ECE 136 - Early Childhood Education: A Professional Overview

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Examines the importance of promoting family involvement, developing an effective early childhood classroom program based on the needs and interests of the children, and continuing professional growth. This course includes the CDA subject areas of families, program management, and professionalism. Community observations in early childhood settings are required. Equivalent to ECE 136A,

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe how to demonstrate respect for each child and their family including culture, language, family skills, needs, and interests. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Identify strategies to build partnerships with families and communicate frequently and effectively.
- CLO\#3: Describe a variety of ways for families to participate in an early childhood program.
- CLO\#4: Describe how to use ongoing observation and assessment information to plan for individual children and the group.
- CLO\#5: Explain the importance of ongoing professional development to continually improve one's knowledge and skills in working with young children and families.
- CLO\#6: Describe ethical behavior working in the field of Early Childhood Education.


## ECE 136A - Early Childhood Education: A Professional Overview (Part A) Promoting Family Engagement

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines the importance of promoting family involvement in early childhood programs in order to promote children's positive development. This course includes the CDA subject area of Families.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe how to demonstrate respect for each child and their family, including culture, language, family skills, needs, and interests. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Identify strategies to build partnerships with families and communicate frequently and effectively.
- CLO\#3: Describe a variety of ways for families to participate in an early childhood program.


## ECE 136B - Early Childhood Education: A Professional Overview - Providing Program Management

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines the importance of developing an effective early childhood classroom program based on the needs and interests of the children. This course includes the CDA subject area of Program Management.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe how to use ongoing observation and assessment information to plan for individual children and the group. (ILO: Critical Thinking)


## ECE 136C - Early Childhood Education: A Professional Overview - Promoting Professionalism

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines the importance of continuing professional growth. This course includes the CDA subject area of Professionalism.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the importance of ongoing professional development to continually improve one's knowledge and skills in working with young children and families.
- CLO\#2: Describe ethical behavior working in the field of Early Childhood Education. (ILO: Critical Thinking)


## ECE 151 - Guiding Children in Group Settings

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement. ECE 125, ECE 161, ECE 163, or ED 225 or permission of Instructor.

Course Description: Addresses positive ways to support children's social-emotional development from birth to age eight by understanding children's behavior. Focuses on adult-child and child-child interactions and relationships.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify how an adult's style of guiding children affects children's behavior and development. (ILO: Critical Thinking)
- CLO\#2: Recognize that the ability to implement positive and effective child guidance is based on one's knowledge of child development.
- CLO\#3: Describe the major positive guidance strategies.
- CLO\#4: Identify aspects of early childhood classroom design that affect child guidance and behavior and their role in indirect guidance.
- CLO\#5: Understand the role of observation in making child guidance decisions.
- CLO\#6: Identify different sources and types of stress for young children and their impacts, as well as the concept of resilience.
- CLO\#7: Identify strategies for preventing or reducing aggression, including bullying as a form of aggression.


## ECE 152 - Fostering Creativity

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Recommended Prerequisite(s): ECE 125, ECE 161, ECE 163

Course Description: This course will focus on understanding and implementing a developmental approach to providing creative experiences and opportunities for young children. The class will be taught with an active learning and cooperative education philosophy using group discussions and hands-on learning.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe how creativity in children is defined, observed, and assessed.
- CLO\#2: Examine self-awareness of one's own creative potential. (ILO: Critical Thinking)
- CLO\#3: Describe the relationship between creativity and the various developmental domains.
- CLO\#4: Summarize how children's creativity is impacted by environmental influences.
- CLO\#5: Design creative strategies and experiences into the environment and each curriculum area.
- CLO\#6: Explain the importance of communicating with parents, school administrators, and others about the role of creativity in all learning.


## ECE 154 - Children's Literature and Literacy

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement. ECE 125, ECE 161, ECE 163, or permission of Instructor.

Course Description: Surveys children's literature for young children and emphasizes setting up environments and planning activities that support emerging language and literacy skills in young children. Covers the developmental continuum of language, reading, and writing skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the value and use of children's literature in promoting children's growth in all developmental domains.
- CLO\#2: Evaluate appropriate literature for young children.
- CLO\#3: Give examples of how to create a classroom environment and integrated curriculum that promote developmentally appropriate early language and literacy strategies.
- CLO\#4: Utilize the public library as a source of children's literature for both classroom and home. (ILO: Information Literacy)
- CLO\#5: Describe opportunities and resources for families to learn about early language and literacy development.
- CLO\#6: Describe the impact of exposure to diverse literature and literary experiences on early development.


## ECE 161 - Infant/Toddler Development

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Explores child growth and development in detail from the prenatal period to age three, including elements of quality care for infants and toddlers. Direct experience observing infants and toddlers in a group setting will be an important part of the course.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe early brain development and the impact of responsive caregiving and trauma on the developing brain.
- CLO\#2: Identify major child development theories that inform infant/toddler growth and learning.
- CLO\#3: Explain how culture affects child rearing practices and early child development.
- CLO\#4: Describe major developmental milestones for infants and toddlers in all areas of development.
- CLO\#5: Apply observation methods to identify developmental milestones in infants and toddlers. (ILO: Communication)


## ECE 163 - Preschool/Primary Development

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Explores child development and learning characteristics in detail from three through eight years of age, including elements of effective teaching practices for preschool and primary age children. Direct experience observing young children in a group setting will be an important part of the course.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the multiple influences on development and learning.
- CLO\#2: Identify major child development theories that inform preschool/primary growth and learning.
- CLO\#3: Explain how culture affects child rearing practices and preschool/primary child development.
- CLO\#4: Apply observation methods to describe developmental characteristics in preschool/primary-age children. (ILO: Communication)


## ECE 175 - Developmentally Appropriate Practices

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement and ECE 125, ECE 161, ECE 163, or ED 225 or permission of Instructor.

Course Description: Explores developmentally appropriate practices (DAP) for children from birth through age eight, and the role of play in DAP. Examines environments and practices that promote positive growth in all developmental domains.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define developmentally appropriate practices.
- CLO\#2: Identify the essential components of developmentally appropriate practice for infants, toddlers, preschool age children, and school-age children. (ILO: Critical Thinking)
- CLO\#3: Describe characteristics of play that contribute to a developmentally appropriate curriculum for the various age groups.
- CLO\#4: Recognize components of developmentally appropriate environments for each age group.


## ECE 199 - Special Studies: Early Childhood Education

## Var. (1-3) Credit(s)

Prerequisite(s): A declared major in an Early Child Education program.
Course Description: Focuses study in a variety of Early Childhood Education topics to fulfill specific educational goals.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify strategies to promote developmentally appropriate practices in work with children related to the course topic.
- CLO\#2: Explain how to incorporate knowledge of early development to support early learning. (ILO: Communication)
- CLO\#3: Describe how to support the child within the context of their family and community culture.
- CLO\#4: Analyze one's own practice to promote positive outcomes for each child.
- CLO\#5: Analyze one's own professionalism and role in the field of early childhood related to the course topic.


## ECE 241 - Promoting Cognitive Development

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement, or BT 113, and ECE 161 and ECE 163

Course Description: Examines the development of integrated curriculum promoting cognitive development by engaging children in units that are child-centered and are based on observation of their interests and needs.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the developmental continuum of cognitive skills in early childhood.
- CLO\#2: Design and demonstrate meaningful science, math, and brain-based curricula for children.
- CLO\#3: Utilize a broad repertoire of developmentally appropriate and creative teaching/learning approaches in designing math, science, and brain-based curricula. (ILO: Critical Thinking)
- CLO\#4: Evaluate curricula that promotes cognitive development.
- CLO\#5: Collaborate with peers to share information and resources that will enrich the curriculum planning process.


## ECE 243 - Promoting Child Health and Physical Development

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; and ECE 125 or ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Provides an understanding of the essential elements of health, safety, and nutrition for young children. Methods and materials for enhancing motor development will be examined. Course is equivalent to ECE 243A, ECE 243B, and ECE 243C combined.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify aspects of health and wellness (physical, dental, mental, nutritional) and societal health issues facing young children and families.
- CLO\#2: Explain the importance of physical activity and ways to promote the physical development of young children.
- CLO\#3: Describe nutrition concepts as they relate to optimal health and to young children including developmentally appropriate feeding practices.
- CLO\#4: Identify common childhood infectious diseases and how to manage them.
- CLO\#5: Describe practices for working with children with special health care needs.
- CLO\#6: Identify safety concerns and best practices (physical and emotional) in environments with young children and how to respond appropriately to emergency situations. (ILO: Critical Thinking)
- CLO\#7: Recognize signs of child abuse and neglect in young children and describe reporting requirements.
- CLO\#8: Plan curriculum for teaching wellness concepts to young children.


## ECE 243A - Promoting Child Health and Physical Development Part A: Health and Wellness

## 1 Credit(s)

Prerequisite(s): WR 115 or designated placement; and ECE 125 or ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Provides an understanding of the essential elements of health, safety, and nutrition for young children. Methods and materials for enhancing motor development will be examined.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify all aspects of health and wellness (physical, dental, mental, nutritional) and societal health issues facing young children and families. (ILO: Critical Thinking)
- CLO\#2: Plan curriculum for teaching wellness concepts to young children.


## ECE 243B - Promoting Child Health and Physical Development Part B: Nutrition \& Physical Activity

## 1 Credit(s)

Prerequisite(s): WR 115 or designated placement, and ECE 125 or ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Provides an understanding of the essential elements of health, safety, and nutrition for young children. Methods and materials for enhancing motor development will be examined.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the importance of physical activity and ways to promote the physical development of young children.
- CLO\#2: Describe nutrition concepts as they relate to optimal health and to young children including developmentally appropriate feeding practices.
- CLO\#3: Identify common childhood infectious diseases and how to manage them. (ILO: Critical Thinking)
- CLO\#4: Plan curriculum for teaching wellness concepts to young children.


## ECE 243C - Promoting Child Health and Physical Development Part C: Appropriate Practices and Special Needs

## 1 Credit(s)

Prerequisite(s): WR 115 or designated placement, and ECE 125 or ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Provides an understanding of the essential elements of health, safety, and nutrition for young children. Methods and materials for enhancing motor development will be examined.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe practices for working with children with special health care needs.
- CLO\#2: Identify safety concerns and best practices (physical and emotional) in environments with young children and how to respond appropriately to emergency situations. (ILO: Critical Thinking)
- CLO\#3: Recognize signs of child abuse and neglect in young children and describe reporting requirements.


## ECE 244 - Observation and Assessment

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement, and ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Focuses on the use of observation as a tool for discovering children's interests, assessing development and behavior, and planning responsive curriculum. Observations in community early
childhood settings are required.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and apply elements of effective observation.
- CLO\#2: Implement a variety of open and closed observation methods.
- CLO\#3: Conduct focused observations of children's development in the areas of cognition, creative representation, social/emotional development, literacy, language development, and parent/child interactions.
- CLO\#4: Analyze observations from a developmental perspective to gain insight into children's thinking and behavior. (ILO: Critical Thinking)
- CLO\#5: Use observations to inform adjustments to the learning environment and curriculum and to individualize to meet the needs of particular children.
- CLO\#6: Explain when and how to refer a child for further evaluation.
- CLO\#7: Navigate internet resources effectively to enhance the learning experience.


## ECE 245 - Promoting Social/Emotional Development of Young Children

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; ECE 151 and ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Explores strategies to help children develop the social and emotional tools needed to manage their own behavior, exhibit more prosocial behavior, and master social skills. Addresses how to support children who have particular social needs such as shyness, aggressive behavior, and hearing or visual impairments.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Implement skills to develop relationships with children and support their social/emotional development.
- CLO\#2: Describe how to develop a positive emotional climate through the physical, social, and cultural environment.
- CLO\#3: Use effective teaching strategies that build skills which help children exhibit more prosocial behavior, work better as a community of learners, and become active learners.
- CLO\#4: Explain Positive Behavior Interventions and Supports (PBIS).
- CLO\#5: Determine children's social/emotional skills and needs, and plan interactions and environmental changes to address those needs.
- CLO\#6: Describe strategies to promote positive peer relationships and social inclusion through facilitated peer interactions and planned group activities.
- CLO\#7: Describe strategies to facilitate problem solving and conflict resolution among the children in the classroom and/or between individuals.
- CLO\#8: Conduct a functional behavior analysis of a child's behavior and develop a behavior support plan for the child based on this analysis. (ILO: Critical Thinking)

ECE 246 - Family, School, and Community Engagement

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; ECE 125 or ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Examines the benefits of family engagement in educational settings for the children, families, and teachers involved. Emphasizes establishing effective relationships based on mutual respect that involve families in multiple contexts and provide a variety of opportunities for families to participate in their child's education.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe diverse family and community characteristics. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Explain how to support and engage families through respectful, reciprocal relationships.
- CLO\#3: Explain how to involve families and communities in many aspects of children's development and learning.
- CLO\#4: Identify resources in the community which can serve as referral points for families in crisis or experiencing challenges.


## ECE 248 - Children with Disabilities and Their Families

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; and ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Explores ways teachers can facilitate the inclusion of young children with disabilities in a child care or classroom setting. Covers characteristics of disabilities, environmental and curricular adaptations, and instructional strategies for supporting learning. Impact of disability on families, working in partnership with parents, and participation on the IFSP/IEP team will also be addressed.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate inclusion values and respect for people with disabilities and their families. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Apply problem solving strategies and develop adaptations to facilitate individualization and support inclusion.
- CLO\#3: Describe how to create and maintain an environment that is both physically and developmentally accessible to each child.
- CLO\#4: Demonstrate understanding of the family experience and the importance of partnering with parents.
- CLO\#5: Identify characteristics of a variety of disabilities and be able to match the instructional strategies and supports to learning needs.
- CLO\#6: Explain practical and positive strategies for guiding behavior and supporting communication and social interaction.
- CLO\#7: Analyze one's own philosophy, skills, and practice related to inclusion.


## ECE 252 - Family Child Care Environment

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement, and ECE 161 and ECE 163 or permission of Instructor.

Course Description: Explores planning and evaluating physical and social environments for children in a multi-age family child care setting. Includes room arrangement, appropriate equipment, outdoor areas, and creation of a nurturing environment.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify guidelines for establishing and maintaining developmentally appropriate family child care environments for young children.
- CLO\#2: Identify, observe, and assess components of quality family child care physical environments for young children. (ILO: Critical Thinking)
- CLO\#3: Observe and assess children's use of family child care space.
- CLO\#4: Identify the importance of providing positive supportive environments and the components of such environments for children, parents, and caregiver(s).
- CLO\#5: Utilize developmental knowledge to create healthy, respectful, supportive, and challenging learning environments for children, both indoors and outdoors.


## ECE 254 - Preschool Curriculum and Environments

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement; and ECE 161 or permission of the Instructor.

Course Description: Designed for those working with preschool-aged children. Covers how to select, present, and evaluate materials and activities for $21 / 2$ - to 5 -year-old children. Emphasizes how to fulfill curriculum standards using developmentally appropriate teaching strategies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Utilize observation and developmental knowledge to create engaging curricula and environments for preschool children.
- CLO\#2: Describe how effective early childhood curriculum meets the needs of the whole child.
- CLO\#3: Identify components of quality indoor and outdoor environments for young children as part of an effective curriculum.
- CLO\#4: Describe the components of positive and supportive environments for parents and staff.
- CLO\#5: Analyze one's own practice related to classroom environment and curriculum to promote positive outcomes for each child. (ILO: Critical Thinking)


## ECE 255 - Infant/Toddler Curriculum and Environments

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement; ECE 161 or permission of the Instructor.

Course Description: Designed for those working with infants and toddlers. Covers how to select, present, and evaluate materials and experiences for children birth to 3 years old.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Utilize observation and developmental knowledge to create environments and curricula for infants and toddlers.
- CLO\#2: Describe how effective curriculum for infants and toddlers meets the needs of the whole child.
- CLO\#3: Identify components of quality indoor and outdoor environments for infants and toddlers as part of an effective curriculum.
- CLO\#4: Describe the components of positive and supportive environments for parents and staff.
- CLO\#5: Analyze one's own practice related to classroom environment and curriculum to promote positive outcomes for each child. (ILO: Critical Thinking)


## ECE 258 - Family Education and Support

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; and ECE 125, ECE 245

Course Description: Students will develop skills to provide effective family outreach and education to individuals or groups, in a center-based environment or in the family home. This course examines several principles of effective support including the parent-child relationship and attachment, supporting child development knowledge, responding to individual family culture, and incorporating a trauma-informed care approach.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the roles of attachment supporting both caregiver and child to increase family resiliency.
- CLO\#2: Design activities and tools to support families in nourishing their child's development through an approach that builds on family strength.
- CLO\#3: Identify trauma-informed care and adult learning principles that contribute to positive individual and group interactions. (ILO: Communication)
- CLO\#4: Evaluate family strengths and needs within the context of the individual family culture.
- CLO\#5: Describe the importance of self-care and reflective supervision in maintaining one's effectiveness as a child and family practitioner.


## ECE 261 - Advanced Practicum and Seminar

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement; all required 100-level ECE/ED courses; and ECE 254 or ECE 255 or ED 256

Course Description: Provides supervised teaching of children in a lab school or community setting, applying what has been learned through coursework and previous lab experiences. This course prepares students to teach and work with children and their families.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Establish effective professional relationships with cooperating teachers, college supervisor, parents, and other adults in the workplace. (ILO: Communication)
- CLO\#2: Analyze one's own teaching strategies, interactions with children, and education philosophy.
- CLO\#3: Implement developmentally effective approaches to extend children's learning and support a positive classroom community.
- CLO\#4: Explain and uphold ethical standards and other professional guidelines.
- CLO\#5: Design and implement a specialized project that effectively aligns with National Association for the Education of Young Children (NAEYC) Standards for Early Childhood Professional Preparation.


## ECE 265 - Children at Risk

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; and ECE 125 or ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Explores the types of trauma experienced by young children, the impact of trauma on early brain development, and principles of working with children and families who have experienced trauma. Emphasizes trauma-informed practices and importance of self-reflection and self-care for professionals.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify types of trauma experienced by young children and the impact on brain development. (ILO: Information Literacy)
- CLO\#2: Summarize guiding principles of trauma-informed practices for working with children and families who have experienced trauma.
- CLO\#3: Describe strategies that provide a safe and inviting learning environment and build trusting relationships with children and families who have experienced trauma. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#4: Select activities for children to develop coping strategies and internal strengths.
- CLO\#5: Identify community referral resources for families in crisis.
- CLO\#6: Identify self-care strategies to employ while working with children and families who have experienced trauma.


## ECE 266 - Supporting Dual Language Learners

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Focuses on developmentally and linguistically appropriate practices for dual language learners as well as developing a perspective of cultural competency. Models ways to develop basic vocabulary and learn cultural activities in Spanish to use with Spanish-speaking children and parents in a variety of educational situations, and how to use these strategies with all language learners.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify developmentally, culturally, and linguistically appropriate practices to use with second language learners. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Describe the process of second language acquisition and how the brain processes language.
- CLO\#3: Analyze one's sensitivity to and respect for cultural differences and attitudes.
- CLO\#4: Demonstrate communication with children and families using simple, practical, and meaningful school vocabulary in Spanish and identify how and when to effectively use an interpreter. (ILO: Communication)
- CLO\#5: Explain how the wide variety of different Spanish-speaking cultures influences communication with individual children and their families.
- CLO\#6: Describe cultural differences in attitudes toward family and education as demonstrated by Latino cultures.


## ECE 275 - Equity, Diversity, and Inclusion in Education

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement; and ECE 125 or ECE 161 or ECE 163 or ED 225 or permission of Instructor.

Course Description: Explores the role of the adult in helping children accept and appreciate diversity and uphold values of equity, inclusion, and social justice.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe anti-bias education and its goals for both children and adults.
- CLO\#2: Identify and evaluate how individuals (including oneself) have been advantaged or disadvantaged by stereotypes and the prejudices absorbed by oneself, others, and society at large. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Assess a learning environment for the extent to which it is inclusive, safe, and supportive for all children and their families.
- CLO\#4: Design a learning activity that helps each child (and oneself) develop positive social identities, accept and value human diversity, recognize unfairness, and demonstrate empowerment against prejudice and discriminatory actions.
- CLO\#5: Identify strategies to help children build skills and language that promote diversity, equity, inclusion, and social justice.


## ECE 285 - The Early Childhood Professional

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; and ECE 100 or ECE 136

Course Description: Explores professional code of ethical conduct, aspects of leadership as an early childhood professional, and the development of a professional philosophy and portfolio. Provides the opportunity to engage professionally in a community project.

## Course Learning Outcomes:

- CLO\#1: Define one's role as a member of the profession of Early Childhood Education.
- CLO\#2: Utilize the NAEYC Code of Ethical Conduct in making informed decisions.
- CLO\#3: Describe the role of ECE professionals as continuous and collaborative learners.
- CLO\#4: Demonstrate the ability to reflect and think critically about one's work with young children and families. (ILO: Critical Thinking)
- CLO\#5: Implement strategies to advocate for important issues affecting young children and families.
- CLO\#6: Explain the role of leadership in the ECE field and emerging leadership qualities in oneself.


## ECE 295 - Management of Early Childhood Programs

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement, and ECE 136 or permission of Instructor.
Course Description: Studies principles and practices in supervision and management of preschool and child care centers, including organization, budgeting, personnel records, relationships with community resources, regulatory agencies, and working with parents. Community observations in early childhood settings are required. Course may include an online component.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Articulate a vision for an early childhood program.
- CLO\#2: Describe a variety of strategies for effective Supervision/Coaching/Mentoring of program staff.
- CLO\#3: Identify principles and strategies for effective early childhood program leadership and management.
- CLO\#4: Explain the director's role in building and supporting community in an early childhood program involving children, families, and staff. (ILO: Communication)
- CLO\#5: Examine Quality Indicators of an early Childhood Program.
- CLO\#6: Evaluate and assess administration of an early childhood program.


## ECON 115 - Introduction to Economics

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Surveys the principles of economics, evolution of economic thought, and development of present United States economic structure. Covers concepts of supply and demand, opportunity costs, and history of economic ideas.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify complex economic theories, principles and practices through written and oral expression. (ILO: Communication)
- CLO\#2: Identify the succession of economic concepts that grow in complexity throughout the course.
- CLO\#3: Describe how personal choice and governmental policies enhance efforts in sustainability and environmental protection.


## ECON 201 - Principles of Microeconomics

## 4 Credit(s)

Prerequisite(s): BT 114 or WR $121 Z$ or designated placement.

Recommended Prerequisite(s): CIS 125WW

Course Description: Introduces students to the study of human behavior and choices in a market process, through traditional and modern economic models. Students will analyze relationships in supply and demand, production and cost, output and employment, market structures and political policy.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify complex economic theories, principles and practices.
- CLO\#2: Formulate ideas and resolve problems relating to key economic principles.
- CLO\#3: Identify a succession of economic concepts that grow in complexity throughout the course.
- CLO\#4: Identify how personal choice and governmental policies enhance efforts in sustainability and environmental protection. (ILO: Critical Thinking)


## ECON 202 - Principles of Macroeconomics

## 4 Credit(s)

Prerequisite(s): BT 114 or WR $121 Z$ or designated placement.
Course Description: Deals with human behavior and choices as they relate to the entire economy. Covers aggregate demand and aggregate supply of goods and services, how tax and spending affect the entire economy's output and employment, and how the Federal Reserve can manipulate the supply of money, inflation and economic growth.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define and profile important economic principles and government policy decisions that reinforce the role economic institutions play in society.
- CLO\#2: Identify complex economic theories, principles and practices.
- CLO\#3: Comprehension of a succession of economic concepts that grow in complexity throughout the course.
- CLO\#4: Describe economic principles and government policies that demonstrate the inter-related nature of our global economy. (ILO: Critical Thinking)


## ED 120 - Leadership I

## 1 Credit(s)

Course Description: Introduces basic skills in leadership. Special attention is given to developing basic leadership skills and cultural systems awareness.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe elements, challenges and strengths of leadership. (ILO: Communication)
- CLO\#2: Identify own experiences in balancing academic, work and personal commitments.
- CLO\#3: Identify ways to accommodate change and identify change styles.
- CLO\#4: Relate values and ethics to leadership styles.
- CLO\#5: Build on existing leadership skill set and develop new skills to strengthen personal leadership philosophy and enhance practical application of learning.
- CLO\#6: Describe the expectations of professional level discussion and appropriate leadership communication.


## ED 121 - Leadership II

## 1 Credit(s)

Prerequisite(s): ED 120

Course Description: Introduces basic skills in leadership. Special attention is given to assessing and developing basic management skills and organizational systems awareness.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify management styles and recognize the importance of balancing their leadership skills with management skills.
- CLO\#2: Identify and use skills needed to collaborate and effectively complete course tasks and learning goals. (ILO: Critical Thinking)
- CLO\#3: Apply existing leadership skills and knowledge with new skills and learning to overcome challenges and to solve problems.
- CLO\#4: Utilize advocacy skills while incorporating persuasion to inspire a shared vision.
- CLO\#5: Identify, create, and manage a successful meeting.
- CLO\#6: Recognize the importance of self-evaluation which provides the opportunity for improvement.


## ED 122 - Leadership III

## 1 Credit(s)

Prerequisite(s): ED 121
Course Description: Selected projects are provided to teams in the course that will require the utilization of effective leadership and management skills to achieve success. Special attention is given to assessing and providing the students meaningful coaching and feedback on their use of the key leadership and management skills.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Express ideas clearly and consistently in oral, written, and visual work.
- CLO\#2: Create and understand a balance of the time and effort necessary to succeed.
- CLO\#3: Present a positive and confident persona evident to themselves and others.
- CLO\#4: Collaborate effectively to achieve course/ learning goals. (ILO: Communication)
- CLO\#5: Internalize and assimilate information into new situations.
- CLO\#6: Build awareness and recognize own and others' emotions, assumptions, biases, and cultural contexts while envisioning creative approaches to issues and problems.
- CLO\#7: Apply knowledge through a global perspective with an awareness of context, personal assumptions, and worldview.


## ED 170 - Introductory Practicum

## Var. (1-2) Credit(s)

Prerequisite(s): RD 90 and WR 90; or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement; and ECE 125 or ECE 161 or ECE 163 or ED 225.

Course Description: Provides supervised work with children in a classroom setting. The student will work with Instructor to identify a different site for each practicum credit.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Reflect on personal suitability for working with children from practicum experience.
- CLO\#2: Reflect on practice, observations, and professional growth in the classroom setting. (ILO: Critical Thinking)
- CLO\#3: Demonstrate professional conduct in the practicum setting.


## ED 200 - Introduction to Teaching

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: This course investigates the historical, global, social, legal and philosophical foundations of education. It provides an overview of the structure and contemporary issues of the American education system. It explores the roles and ethical consideration of the education profession.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe one's connection to the education field and the role of schools in society. (ILO: Communication)
- CLO\#2: Identify legal and ethical issues in the education field.
- CLO\#3: Investigate the impact of technology on teaching and learning.
- CLO\#4: Analyze the needs of students and identify how schools can be responsive in creating a community of learners.


## ED 225 - Child Development

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Explores child growth and development from prenatal through middle childhood.
Requires observing children in a classroom setting. Formerly offered as ED165.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the developmental needs of children prenatal to 12 years. (ILO: Critical Thinking)
- CLO\#2: Summarize the multiple influences on development and learning.
- CLO\#3: Identify the major child development theories.
- CLO\#4: Describe how culture affects child rearing practices and child development.
- CLO\#5: Apply observation methods for all developmental domains.


## ED 240 - Play-Based Learning in Elementary Schools

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement; and ECE 163 or ED 225

Course Description: Explores why play is a fundamentally important part of children's learning and development. Examines play-based curriculum that meets state standards in elementary classrooms. Emphasizes the role of the teacher in supporting a playful mindset in the classroom community.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the importance of play in the context of children's development.
- CLO\#2: Develop play-based activities that meet state curriculum standards and support children's development in all domains.
- CLO\#3: Locate and utilize a wide variety of resources to develop plans that engage children in play-based learning. (ILO: Information Literacy)
- CLO\#4: Determine developmentally appropriate play-based materials and equipment for elementary school-age children.


## ED 256 - Primary Curriculum

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement; and ECE 163 or ED 225 or permission of the Instructor.

Course Description: Designed for those working with kindergarten and primary-age children. Covers how to select, present and evaluate materials and activities for children five to eight years old. Emphasizes how to fulfill curriculum standards using developmentally appropriate teaching strategies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Design and demonstrate meaningful curricula for elementary school-age children.
- CLO\#2: Design an innovative classroom floor plan to support a flexible and engaging learning environment. (ILO: Critical Thinking)
- CLO\#3: Discuss a broad repertoire of developmentally appropriate teaching/learning approaches for elementary school-age children.
- CLO\#4: Practice appropriate strategies to build a positive and connected classroom community that promotes social-emotional development.


## ED 282 - Introduction to Community College Teaching

## 3 Credit(s)

Prerequisite(s): RCC Employee(s).
Course Description: This course provides community college educators with practical and progressive techniques on what to do inside and outside the classroom to help students succeed. These practices and strategies can be applied to both in-person and online learning formats. Additionally, this course covers basic tools for navigating instructor responsibilities at Rogue Community College.

Course Level: Occupational Supplementary

## Course Learning Outcomes:

- CLO\#1: Access faculty and student resources using Rogue Community College's web site.
- CLO\#2: Identify faculty expectations at Rogue Community College.
- CLO\#3: Converse with a peer mentor at Rogue Community College. (ILO: Communication)
- CLO\#4: Identify the steps required to build a course outcomes report.
- CLO\#5: Discuss the best teaching practices at community colleges.


## ED 283 - Effective Online Instruction in Community Colleges

## 3 Credit(s)

Prerequisite(s): RCC Employee(s).
Course Description: This course covers synchronous and asynchronous online course design, management, and best practices for community college instructors. Topics covered include backward design, content creation, assessment, student engagement strategies, communication with students, accessibility, and equity. By the end of the term, students will create one complete lesson ready for online delivery.

Course Level: Occupational Supplementary

## Course Learning Outcomes:

- CLO\#1: Develop engaging and accessible online course content and multimedia.
- CLO\#2: Develop formative and summative online assessments that enhance learning.
- CLO\#3: Facilitate engaging online discussions and open communication. (ILO: Communication)
- CLO\#4: Develop an online class environment that enhances equity.
- CLO\#5: Use student feedback and self-reflection practices to improve course content.


## EET 100 - Orientation to Electronics Technology Fields

## 2 Credit(s)

Course Description: Explores careers in Electronics and associated fields in technology and engineering. Introduces the operation and use of various types of equipment and tools used in electronic technology including electronic bench equipment, component identification, schematics, calculators, and basic soldering iron practices. A 1-hour per week open laboratory includes exploring computer tools and building soldering kit. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an entry-level knowledge of careers in various electronics fields and associated supporting industries that utilize electronic systems, circuits, components, and test equipment.
- CLO\#2: Demonstrate basic proficiency with number notation, metric prefixes, and use of scientific calculator to solve for voltage, current, resistance, and wattage values. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Demonstrate proper safety practices around electronic equipment including DMM, DC Supply, and Soldering Stations.
- CLO\#4: Document the schematic symbols associated with common electronic components.


## EET 101 - Electronics Fundamentals for Non-Majors

## 3 Credit(s)

## Recommended Prerequisite(s): MTH 20

Course Description: Introduces the fundamental theories, circuits, and devices used in electronics. Covers direct and alternating current theory, test equipment, semiconductor devices and motors. Emphasizes practical concepts and applications in both lectures and laboratory experiments. Suitable for those desiring a general knowledge of electronics or exploring how electronic circuits and systems are used in other fields. A 2-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a basic knowledge of DC/AC, digital, and solid-state electronic terminology and concepts including calculating voltage, current, resistance and power distribution in series, parallel and series/parallel circuits.
- CLO\#2: Demonstrate basic proficiency in operation of electronic test equipment including digital multimeters (DMMs), DC power supplies, logic probes, function generators, and oscilloscopes. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Demonstrate a working knowledge of introductory electronics circuits including series and parallel, loaded voltage dividers, filters, relay, digital logic devices, and DC Motor drivers.
- CLO\#4: Document circuit operation and functions using verbal and written descriptions that meet laboratory standards.
- CLO\#5: Demonstrate an understanding of safety practices in the lab and work place.


## EET 102 - Soldering and Repair Techniques

## 3 Credit(s)

Prerequisite(s): EET 100 and EET 125 or permission of Instructor.

Course Description: Covers safety, soldering practices and rework operations used in the various Electronics and related fields. Techniques include through hole, surface mount, and microscopic work. Students will learn how to properly document, dismantle and put back into working order electronic systems using various hand and power tools used in electronics or related fields. A 2-hour per week open-laboratory includes safety, hands-on activities, and basic troubleshooting skills. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper safety practices around electronic equipment including DMM, DC Supply, hand and power tools, and soldering stations.
- CLO\#2: Demonstrate appropriate soldering and rework practices for through-hole and surface mount components, connectors, cables, and associated electronic fixtures.
- CLO\#3: Demonstrate correct and logical strategies and techniques for opening, repairing, and closing electronic type equipment. (ILO: Critical Thinking)
- CLO\#4: Interpret data and document the processes followed for opening, repairing, and closing electronic type equipment. (ILO: Information Literacy)


## EET 104 - Fundamentals of Manufacturing Electronics

## 4 Credit(s)

Prerequisite(s): MTH 20 or designated placement, and RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Recommended Prerequisite(s): MTH 60
Course Description: Provides students with a hands-on survey of manufacturing electronics concepts, circuits, and systems. The course introduces DC/AC theory, digital, solid state, power supply fundamentals, and integrated circuits. Topics covered include: safety practices related to working with electrical devices; electrical components and wiring; electronic test instruments; tools and fasteners; electrical units and nomenclature; principles and analysis of series, parallel, and series-parallel circuits; electrical power generation and control; and filtering devices and circuits. In addition to enhancing learning by providing practical applications of theoretical circuit models, lab assignments provide opportunities for increased knowledge and proficiency in the proper use of industry standard test equipment.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge of DC/AC, digital, and solid-state electronic terminology and theory including calculating voltage, current, resistance and power distribution in series, parallel and series/parallel circuits. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Demonstrate proficiency in operation of electronic test equipment including digital multimeters (DMMs), DC power supplies, logic probes, function generators, and oscilloscopes.
- CLO\#3: Demonstrate a working knowledge of introductory electronics circuits and PLC applications including relay switching, loaded voltage dividers, filters, power supplies, amplifiers and DC motor drivers.
- CLO\#4: Document circuit operation and functions using verbal and written descriptions that meet laboratory standards.
- CLO\#5: Demonstrate an understanding of safety practices in the lab and work place.


## EET 105 - Digital Concepts for Manufacturing

## 4 Credit(s)

Prerequisite(s): EET 104
Course Description: Exploration of digital fundamental concepts and applications relevant to manufacturing processes and Programmable Logic Controllers (PLC's) including binary and hexadecimal number systems, truth tables, and logic devices. Outcomes include the simplification of logic expressions using Boolean algebra, DeMorgan's theorems, and the use of simulation software (MultiSim) to build, test and troubleshoot ladder logic circuits. Students will do analysis of combination logic circuits and their operation and examine the characteristics of TTL and CMOS digital ICs. Students will also be introduced to the fundamentals of latches, flip-flops, decoders, and seven segment LED's. Safety practices in the work place are emphasized including personal and equipment protection, component (ESD) and ROHS compliant standards.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an applied working knowledge of digital logic theory, devices and systems as they pertain to manufacturing processes and automation.
- CLO\#2: Demonstrate operation of electronic test equipment including DMMs, oscilloscopes, function generators, logic probes and DC power supplies.
- CLO\#3: Build, test, and troubleshoot basic digital component circuits including combinational and ladder logic, decoders, and seven segment LED's. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Document circuit functions through proper data collection and troubleshooting procedures using explanatory descriptions (verbal and written) that meet laboratory standards.
- CLO\#5: Calculate and convert binary, hexadecimal, and decimal number systems and codes.
- CLO\#6: Demonstrate safety practices in the work place including personal protection, equipment, component (ESD) and ROHS compliant standards for leadless and green processes for electronics manufacturing.


## EET 108 - Wearable and Lighting for Electronics

1 Credit(s)
Course Description: Explore what wearable technology is and the trends in our digital world. Learn how to identify the components used in wearable electronic devices and safely build a wearable kit.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of what are wearable electronic circuits and systems and their applications. (ILO: Communication)
- CLO\#2: Demonstrate proper safety practices around electronic equipment including Digital Multimeter, Direct Current Supply, and Soldering Stations.
- CLO\#3: Demonstrate building a wearable electronics application.


## EET 112 - Computer Programming for Technology

## 3 Credit(s)

Course Description: This is an introductory programming course that teaches students how to write computer programs for a microcontroller that controls devices such as LEDs, sensors, DC motors, and audio piezo speaker elements as examples. The final project is building a small robot but students may choose to do an optional demonstration with Instructor approval. A 2-hour per week open-laboratory includes the application of computer tools in programming and design. Some labs and projects can be done remotely. Previous student projects included: Display board; Simon Says; Sensor Alarm System.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Follow detailed procedures to build working Microcontroller-based robot and interface circuits. Students will build and demonstrate a working Microcontroller-based robot with associated interface circuitry.
- CLO\#2: Download Programs to Robot and Test Hardware and Software Robot Operations.
- CLO\#3: Describe Embedded-C Command Structure and program the Arduino to perform movements, sounds, and light indicators.
- CLO\#4: Apply Electronics Fundamentals as related to automated control and interfacing. Students will apply electronics fundamentals as related to automated control and interfacing. (ILO: Quantitative Literacy \& Reasoning)


## EET 113 - Exploration of Alternative Energies

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or documented proficiency, and MTH 20 or designated placement.

Course Description: Explores the fundamentals of the basic principles behind energy and introduce the various types of energy sources, distribution methods, and the consequences of the use of each source. Emphasis is on the physical principles behind energy and the related effects on our environment. In addition, the students will explore and integrate the questions of energy policy in combination with potential energy strategies to build a sustainable future.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe various types of energy sources and energy distribution methods. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Describe the principles of each energy source and consequences of each use including the effects upon environment.
- CLO\#3: Integrate and express the questions of energy policy in combination with potential energy strategies to build a sustainable future.


## EET 118 - Introduction to Renewable Energy Systems (RES)

## 5 Credit(s)

Prerequisite(s): EET 125

## Corequisite(s): MTH 63 or MTH 60

Course Description: Introduces solar, hydro, thermal, wind, bio-fuels, and control and conversion systems. Students will learn appropriate safety practices, terminology, and mathematics concepts/applications tied to renewable energy sources and systems. Includes hands-on projects and application assignments.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Follow detailed procedures and diagrams to build working sustainable energy systems.
- CLO\#2: Use specialized measuring tools, test equipment, and software packages to measure and determine solar radiation, solar irradiance, earth-sun relationships, factors for placement of PV systems and factors for enhancing energy production.
- CLO\#3: Apply measured values and software acquired data to plan, document, and implement components for a renewable energy system.
- CLO\#4: Apply electronics fundamentals as related to renewable energy systems and control interfacing circuits. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Document circuit functions, data collection procedures, troubleshooting procedures, and descriptions (verbal and written) that meet program standards.
- CLO\#6: Demonstrate understanding of safety practices in the lab and work place including personal protection, equipment, and component when designing, building, and troubleshooting basic renewable energy systems.


## EET 120 - Renewable Energy Systems (RES) Site Analysis and Design

## 4 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or designated placement, and EET 118 and EET 125
Course Description: Course curriculum provides foundational skills and knowledge to complete the preplanning, site survey, and process for installation of photo voltaic (PV) energy systems. The course covers the relationships for renewable energy sources, estimated performance, and site analysis in preparation for developing a proposal for installation. Includes components used in a renewable system, system configurations, system calculations, and sizing of the system.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the basic principles, rationale and strategies for sizing stand-alone PV versus utility-interactive PV systems and prepare one-line electrical diagrams for PV systems to indicate applicable component connections.
- CLO\#2: Document the power usage and time of use for various electrical loads and determine the peak power demand and energy consumption over a given period of time; apply Ohm's Law and conductor properties to calculate the voltage drop for PV source circuits.
- CLO\#3: Apply nameplate specifications on PV modules, balance of components in determining the allowable system voltage limits, selection of wire sizing of conductors, over current protection, disconnects, and appropriate safety interfaces (grounding points, fault protection, and voltage drop percentages). (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Demonstrate the PV module DC nameplate output, list the de-rating factors and other system losses, and their typical values, and calculate the resulting effect on AC power and energy production, using both calculations and online software applications.
- CLO\#5: Use specialized equipment, resources, and software to determine and measure solar radiation, solar irradiance, earth-sun relationships, factors for placement of PV systems and factors for reducing or enhancing production.
- CLO\#6: Demonstrate proper personal and equipment safety procedures when designing and installing PV systems related to OSHA standards including article 690 of the National Electrical Code. Recognize the principles of electrical hazards associated with PV systems, including electric shock and arc flash.


## EET 121 - NABCEP Entry-level Preparation

## 2 Credit(s)

Prerequisite(s): EET 120 and MTH 60 or MTH 63 or designated placement.

Course Description: Provides students with a review of system design, installation, mechanical connections, and safety requirements for photovoltaic (PV) systems in preparation for the North American Board of Certified Energy Practitioners (NABCEP) entry-level certification test.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Calculate voltage, current, and power specifications as they relate to PV modules, arrays, and the balance of components for a PV system.
- CLO\#2: Document PV module and array specifications, estimate PV performance, and collect solar radiation data related to estimate performance and sizing requirements. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Operate electronic test equipment including digital multimeters (DMMs).
- CLO\#4: Demonstrate a PV system balance of components (i.e. charge controllers, batteries, inverters, etc.), system sizing methodologies and calculations, configurations, and utility interconnection.
- CLO\#5: Demonstrate the considerations, mounting systems, and procedures for mechanical integration of the photovoltaic system installation.
- CLO\#6: Demonstrate the considerations, voltage and current requirements, conductors and wiring methods, overcurrent protection, disconnects (AC and DC), grounding, and battery systems for electrical integration of the photovoltaic system installation. (ILO: Quantitative Literacy and Reasoning)
- CLO\#7: Demonstrate fundamental working knowledge of the proper OHSA safety procedures for personal, equipment, and component when designing, installing, and troubleshooting PV systems.


## EET 125 - DC Electronics - Circuits I

## 5 Credit(s)

Corequisite(s): EET 100 and MTH 60 or MTH 63 or designated placement.
Course Description: Covers atomic and direct current (DC) electrical theory applicable to the field of electronics. Introduces voltage, current, resistance, and power concepts in analysis, construction, and testing and troubleshooting of resistive DC circuits. Includes series, parallel, and series-parallel resistive circuit analysis techniques, and theorems. A 3-hour per week open laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge of DC electronic terminology and theory including calculating voltage, current, resistance and power distribution in series, parallel and series/parallel circuits. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Demonstrate proper operation of electronic test equipment including analog meters, digital multimeters (DMM's) and DC power supplies.
- CLO\#3: Calculate, build, test and troubleshoot DC components and circuits including resistors, resistor networks, loaded voltage dividers, Thevenin, and Wheatstone bridge circuits. (ILO: Critical Thinking)
- CLO\#4: Document circuit functions, data collection procedures, troubleshooting procedures, and descriptions (verbal and written) that meet program standards.
- CLO\#5: Demonstrate proper safety procedures for personal, equipment, component (ESD) when designing, building, and troubleshooting AC circuits.


## EET 126 - AC Electronics - Circuits II

## 5 Credit(s)

Prerequisite(s): EET 100, EET 125, and MTH 60 or MTH 63 or designated placement.

Course Description: Covers Resistive, Capacitive, and Inductive properties. Includes RC/RL transient response; sinusoidal waveforms; reactance and impedance; AC power. Phasor analysis of RC, RL, and RLC circuits; Practical filter designs and Bode Plot analysis. Introduction to relay and transformer applications. Students will learn how to make practical measurements and complete basic troubleshooting using function generators and oscilloscopes both in simulation and on the bench. A 3-hour per week openlaboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of AC electronic theory, mathematical concepts, and calculations including sine wave signals, rate of change, period and frequency, phase relationships, current and voltage values and other periodic waveforms.
- CLO\#2: Calculate, draw, and interpret voltage, current, impedance and power diagrams for RC, RL, and LCR series and parallel circuits.
- CLO\#3: Demonstrate the theory and operation of electronic test equipment including DMMs, oscilloscopes, function generators, LCRs and DC power supplies.
- CLO\#4: Calculate, simulate, built, test, and troubleshoot AC circuits including RC time and firstorder high pass, low pass and resonant filter circuits. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Document circuit functions, data collection procedures, troubleshooting procedures, and descriptions (verbal and written) that meet program standards.
- CLO\#6: Demonstrate proper safety procedures for personal, equipment, component (ESD) when designing, building, and troubleshooting AC circuits.


## EET 127 - Computing Environments for Technicians

## 4 Credit(s)

Recommended Prerequisite(s): CIS 120 (formerly offered as CS120) and MTH 20 or designated placement.

Course Description: Surveys computing environments where computers, operating systems, programming languages and network connections integrate using Windows, Linux, and Android applications. Includes activities involving command line, terminal applications, programming, and hardware identification. Using the Raspberry Pi or Beaglebone to explore interfacing with other devices, loT applications, driving external circuitry with practical lab projects and applications using various software interfaces. A 3-hour per week open-laboratory includes the application of computer tools, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies. Final projects are driven by student interests and practical applications. Previous student projects include: Remote engine starter; Retro Game Controller; Entertainment System; Sensor Controlled Automated Dog Alarm.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Follow detailed procedures to configure and operate a Raspberry Pi or Beaglebone and interface basic DC circuits.
- CLO\#2: Download, Write, and Test Programs for the Raspberry Pi or Beaglebone and Test Hardware and Software Operations.
- CLO\#3: Describe Linux Commands and processes for file and folder structure, configuration, and permission status.
- CLO\#4: Apply Electronics Fundamentals as related to embedded system with digital control and interfacing.
- CLO\#5: Adapt Raspberry Pi or Beaglebone Hardware and Software for Project. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Demonstrate safety practices in the workplace including personal protection, equipment, component (ESD) and ROHS compliant standards for leadless and green processes for electronics manufacturing.


## EET 129 - Introduction to Embedded Systems

## 3 Credit(s)

Recommended Prerequisite(s): MTH 20 or designated placement.

Course Description: Provides students with a hands-on introduction to embedded systems and basic electronic interfacing circuits. Introduces DC circuits that are used with embedded systems. Explores the use of embedded $C$ programming language to control a microcontroller to turn on and off LEDs, motors, and speakers. Enhanced learning provided by practical lab projects and programming to implement decisions based on input conditions to control output interface circuits. The lab assignments provide opportunities for increased knowledge and proficiency in the proper use of industry-standard electronics test equipment. A 2hour per week open-laboratory or online remote work required. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Follow detailed procedures to configure and operate an Arduino Embedded System and interface to basic DC circuits.
- CLO\#2: Download, write, and test programs for the Arduino and Test Hardware and Software Operations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Describe embedded C Commands and processes for programming structure, configuration, and documentation standards.
- CLO\#4: Apply electronics fundamentals as related to embedded system with digital control and interfacing.


## EET 130 - Digital and MSI Logic - Digital I

## 5 Credit(s)

Prerequisite(s): EET 125 and EET 129
Course Description: Introduces digital logic theories: number systems and conversions, Boolean algebra, simplification theorems, combinational logic, and arithmetic circuits. Fundamentals of medium scale integrated circuits (MSI) logic devices including multiplexers, demultiplexers, encoders, and decoder circuits. Students will learn how to use test equipment including Digital Multimeter, logic probe, and oscilloscopes to measure and troubleshoot digital circuits. Simulation and programmable software will be introduced. A 3hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some lab work can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of digital logic theory, devices and systems. Calculate and convert through various number systems and codes. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Demonstrate operation of electronic test equipment including DMMs, oscilloscopes, function generators, logic probes and DC power supplies.
- CLO\#3: Build, test, and troubleshoot basic digital hardware applications including basic gates, combinational circuits, adders, multiplexers, demultiplexers, encoders, decoders, tri-state devices including using field programmable gate array (FPGA) technology. (ILO: Critical Thinking)
- CLO\#4: Document circuit functions through proper data collection and troubleshooting procedures using explanatory descriptions (verbal and written) that meet laboratory standards.
- CLO\#5: Write and interpret Embedded-C code, flowcharts, and pseudocode that reflect function, time, and process for logic processes. Develop proper file management practices and protocols.
- CLO\#6: Demonstrate safety practices in the workplace including personal protection, equipment, component (ESD) and ROHS compliant standards for leadless and green processes for electronics manufacturing.


## EET 131 - Sequential Logic and Interfacing - Digital II

## 5 Credit(s)

Prerequisite(s): EET 130
Course Description: Covers theory and emphasizes hands-on laboratory application of sequential digital logic circuits, which build upon the fundamentals of combinational digital logic developed in EET30. Includes flip-flops, counters, registers, and bus logic. Introduces memory devices, analog-to-digital and digital-toanalog converters (ADCs/DACs), digital interfacing, digital troubleshooting, and introduction to Verilog language for programmable logic devices (FPGAs). Students will gain practical experience using logic
analyzers and real-time capture with mixed signal oscilloscopes. A 3-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proficiency and have practical knowledge and troubleshooting skills of latches, shifters, counters, analog to digital converters, digital to analog converters, and communication protocols.
- CLO\#2: Demonstrate operation of electronic test equipment including Logic Analyzer, DMMs, Mixed Signal Oscilloscopes, function generators, logic probes and DC power supplies.
- CLO\#3: Build, test, and troubleshoot counters, shift registers, analog to digital conversion circuits with interface to microcontroller and embedded systems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Demonstrate a working knowledge of field programmable gate arrays (FPGAs) and complex programmable logic devices (CPLDs) including applications, processes for programming, and troubleshooting.
- CLO\#5: Document circuit functions, proper data collection procedures, troubleshooting procedures and explanatory descriptions that meet laboratory standards.
- CLO\#6: Demonstrate safety practices in the workplace including personal protection, equipment, component (ESD) and ROHS compliant standards for leadless and green processes for electronics manufacturing.


## EET 132 - Introduction to Verilog

## 5 Credit(s)

Prerequisite(s): EET 130

Corequisite(s): EET 131 or Instructor approval.

Course Description: Explores field programmable gate array (FPGAs) and complex programmable logic devices (CPLDs) including applications, processes for programming, DC parameters and timing analysis and troubleshooting. Applications include Sequential Logic, Latches, Flip/Flops, Timers, Counters/Registers, HDL Implementation, PLD HW Implementation, Finite State Machine Design/Analysis, and Logic Testing. Laboratory assignments and projects will focus on using the Intel/Alteras platform and Verilog programming language to implement and test designs. A 3-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be completed remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proficiency and can program circuits that include: sequential logic, latches, flip-flops, timers, counters/registers, finite state machines, MPU systems, and memory devices.
- CLO\#2: Demonstrate operation of electronic test equipment including Logic Analyzers, DMMs, oscilloscopes, function generators, logic probes and DC power supplies.
- CLO\#3: Program, build, test, and troubleshoot MSI based digital hardware applications including counters, shift registers, binary mathematical circuitry, and analog to digital conversion circuits with interface to microcontroller and embedded systems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Demonstrate a working knowledge of complex programmable logic devices (CPLDs) and field programmable gate arrays (FPGAs) including applications, processes for programming, DC parameters and timing analysis and troubleshooting.
- CLO\#5: Document circuit functions, proper data collection procedures, troubleshooting procedures and explanatory descriptions (verbal and written) that meet laboratory standards.
- CLO\#6: Demonstrate safety practices in the workplace including personal protection, equipment, component (ESD) and ROHS compliant standards for leadless and green processes for electronics manufacturing.


## EET 140 - Semiconductors and Devices I

## 5 Credit(s)

## Prerequisite(s): EET 126

Course Description: Introduction to semiconductor devices. Characteristics and biasing of diodes and transistors. Analysis, troubleshooting of circuits using diodes and bipolar transistors. Application of transistors as amplifiers and switches are analyzed and students learn to troubleshoot. There are two practical projects for designing, building, and verifying operation of a power-supply and Class A amplifier. A 3-hour per week laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the theory and operational characteristics of Regulated Power Supplies and Bipolar Junction Transistor (BJT) amplifier circuits (voltage divider and two supply emitter bias).
- CLO\#2: Demonstrate the ability to use solid state concepts, mathematical models, graphs, calculations, and analysis to predict Class A Bipolar Junction Transistor amplifier static (DC) and dynamic (AC) operational characteristics. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Access and use specification sheets and other relevant documentation to determine operational parameters and characteristics.
- CLO\#4: Use electronic test equipment to evaluate and troubleshoot Power Supplies and Bipolar Junction Transistor amplifier circuits.
- CLO\#5: Demonstrate proper safety procedures for personal, equipment and components (ESD) when designing, building, testing, and troubleshooting electronic circuits.
- CLO\#6: Document circuit functions, data collection procedures, troubleshooting procedures and descriptions (verbal and written) that meet program standards.


## EET 180 - Cooperative Work Experience - Electronics

## Var. (1-3) Credit(s)

Prerequisite(s): Initial standing in Electronics Technician Certificate or Electronics Technology AAS degree program.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, students should
complete this course within the last 2 terms of their certificate or degree.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate awareness and demonstration of work ethics guidelines as listed/described in the student's learning objectives.
- CLO\#2: Demonstrate competency in operation of electronic test equipment including analog meters, digital multimeters (DMMs), power supplies, logic probes, function generators and/or oscilloscopes as described in student learning objectives.
- CLO\#3: Demonstrate a working knowledge of introductory electronics/computer hardware as described in student learning objectives. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Demonstrate understanding of safety practices in the work place.


## EET 199 - Selected Studies: Electronics

## Var. (1-6) Credit(s)

Prerequisite(s): A declared major in an Electronics program.

Course Description: Provides study for students in technical programs in areas linked to industry. State-of-the-art equipment is used for industry standard-level instruction.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge of electronic terminology and theory.
- CLO\#2: Demonstrate proper operation of electronic test equipment.
- CLO\#3: Calculate, build, test and troubleshoot components, circuits and systems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Document circuit functions, data collection procedures, troubleshooting procedures, and descriptions (verbal and written) that meet program standards.
- CLO\#5: Demonstrate proper safety procedures for personal, equipment, and components (ESD).


## EET 205 - International Society of Certified Electronic Technicians (ISCET) Certification/Preparation

## 1 Credit(s)

Prerequisite(s): EET 220
Course Description: Prepares students for ISCET associate level examination using software, review exercises, and ISCET study guide. Emphasis is on direct current, alternating current, digital and solid-state theory, devices, and circuits. In addition, component, circuit, and systems troubleshooting is reviewed with an emphasis on proper test equipment calibration, set up, and usage.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate associate level knowledge of electronic mathematics, DC, AC, digital, solid state theory, test equipment and troubleshooting.
- CLO\#2: Demonstrate theory and operation of electronic test equipment including DMMs, power supplies, function generators, logic probes and oscilloscopes.
- CLO\#3: Demonstrate working knowledge of electronic hardware components, circuits, applications and systems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Demonstrate understanding of safety practices in the lab and work place including personal protection, equipment, and component (ESD) when designing, building, and troubleshooting basic digital circuits.


## EET 215 - Operational Amplifiers and Linear Integrated Circuits

## 5 Credit(s)

## Prerequisite(s): EET 140

Course Description: Characteristics and applications of operational amplifiers (op-amps). Design and analysis of op-amp amplifiers, comparators, voltage and current regulators, summers, integrators, and differentiators. Frequency response of op-amp circuits. Applications of the op-amp in power supplies and control systems. A 3-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe basic operational characteristics and parameters of operational amplifiers (opamps).
- CLO\#2: Access specification sheets and other relevant documentation to determine operating parameters.
- CLO\#3: Recognize operational amplifier circuits and identify output based on input values.
- CLO\#4: Troubleshoot Operational Amplifier circuits using applicable documentation, experience, and other resources to determine normal static and dynamic characteristics. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Identify circuit faults based on comparison to nominal versus measured values.
- CLO\#6: Document circuit functions, data collection procedures, troubleshooting procedures, and descriptions (verbal and written) that meet program standards. (ILO: Critical Thinking)
- CLO\#7: Demonstrate proper safety procedures for personal, equipment, component (ESD) when designing, building, and troubleshooting AC circuits.


## EET 220 - Semiconductors and Devices II

## 5 Credit(s)

## Prerequisite(s): EET 140

Course Description: Introduces the operating principles of solid-state devices such as unijunction transistors, SCRs, special purpose diodes, photovoltaic cells, thyristors, and optoelectronic devices. Topics include theory and application of field effect transistors as switches and amplifiers, large signal amplifier applications of bipolar junction transistors, frequency analysis in solid state circuits, and silicon-controlled rectifier theory and applications. Static and dynamic analysis of device and circuit operational performance is covered with application to problem solving and troubleshooting skills. In addition to hands-on experience with industry standard test equipment, computer simulation is used to enhance the presentation of theory and circuit applications and to develop troubleshooting skills. A 3-hour per week open-laboratory includes
the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify Class and Type and explain operational characteristics of each type, and class of Bipolar Junction Transistor (BJT), and field Effect Transistor (FET)
- CLO\#2: Access and use specification sheets and other relevant documentation to determine operating parameters.
- CLO\#3: Mathematically analyze circuits to determine expected static (DC) and dynamic (AC) operational values and characteristics.
- CLO\#4: Use applicable test equipment to measure circuit static and dynamic operational values
- CLO\#5: Troubleshoot Bipolar Junction Transistor and Field. Effect Transistor amplifier circuits using measured operational values, applicable documentation experience, and other resources to identify circuits faults based on comparison between expected and measured values. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Document circuit functions, data collection procedures, troubleshooting procedures, and description (verbal and written) that meet program standards. (ILO: Critical Thinking)
- CLO\#7: Demonstrate proper safety procedures for personal, equipment and components (ESD) when designing, building, testing and troubleshooting electronic circuits.


## EET 225 - Electronics Troubleshooting

## 3 Credit(s)

Prerequisite(s): EET 220
Course Description: Presents comprehensive theory and hands-on application of troubleshooting electronics components, circuits, and systems. Instruction includes technician responsibilities, safety, troubleshooting digital and analog systems, block and schematic diagram reading, test equipment loading and limitations, component faults/failures, opens and shorts, parts replacement, final inspection and test, and documentation. A 2-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an advanced working knowledge of electronics troubleshooting theory, techniques and practices.
- CLO\#2: Demonstrate operation of electronic test equipment including DMMs, oscilloscopes, function generators and power supplies.
- CLO\#3: Demonstrate ability to troubleshoot components, circuits, and systems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Document circuit functions, proper data collection procedures, troubleshooting procedures followed, and explanatory descriptions that meet posted laboratory standards.
- CLO\#5: Demonstrate understanding of safety practices in the lab and work place. Including personal protection, equipment, and component (ESD) when designing, building, and troubleshooting basic digital circuits.


## EET 230 - Radio Frequency Communications Fundamentals

## 5 Credit(s)

## Prerequisite(s): EET 220

Course Description: Examines the principles and circuitry utilized for radio frequency transmission and reception. In addition to basic principles and underlying theory, typical circuits for implementing amplitude modulation, frequency modulation, and digital communications techniques are discussed. Additional topics include basic principles and typical structure of communications receivers and transmitters, basic principles and techniques for multiplexing and de-multiplexing radio frequency signals, transmission line theory and application, electromagnetic wave propagation, and antenna fundamentals. Emphasis is placed on development of hands-on operational performance evaluation, tuning, and troubleshooting skills. A 3-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of electronic communications principles and theory, including digital applications, related to AM, FM, and SSB transmission and reception.
- CLO\#2: Demonstrate ability to use basic soldering techniques to assemble an AM/FM radio from a kit.
- CLO\#3: Demonstrate competency in operation of electronic test equipment including DMMs, oscilloscopes, spectrum analyzers, function generators and power supplies.
- CLO\#4: Demonstrate working knowledge of typical circuitry, analog and digital, utilized in electronic communication receivers and transmitters. (ILO: Critical Thinking)
- CLO\#5: Access and interpret specification information and other documentation relative to assembly, test, alignment and troubleshooting of communication circuitry.
- CLO\#6: Test, align and troubleshoot typical electronic communication circuitry. (ILO: Quantitative Literacy and Reasoning)
- CLO\#7: Demonstrate correct application of safety practices related to working with high frequency and high voltage/power circuitry, devices and equipment in the lab and work place.


## EET 235 - Microwave Applications

## 5 Credit(s)

Prerequisite(s): EET 230

Course Description: Provides instruction in microwave theory and hands-on experience in using test instrumentation to explore the characteristics of microwave technology. Explores transmission lines, VSWR, the Smith Chart, impedance matching, stripline, microstrip and S parameters. Includes mixer/detector characteristics, up and down converters, IF strips, noise figure and temperature, receiver sensitivity, amplifiers, filters, duplexers, couplers, attenuators, terminators, isolators, mismatch loss, switches, propagation loss, antenna gain, and connectors. Includes hazards of microwave radiation to personnel and electrostatic discharge (ESD) to sensitive solid-state components. A 3-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the circuit and circuit function for each section in the block diagram of a typical wireless microwave communication receiver.
- CLO\#2: Use high frequency signal generator in conjunction with a slotted line, standing wave ratio (SWR) meter and Smith Chart to determine type and amount of impedance mismatch and type, amount and position of correction required.
- CLO\#3: Use Power Meters, Spectrum Analyzers, RF Signal Generators and other applicable test equipment to characterize measure and evaluate the operational characteristics of a microwave frequency range integrated circuit amplifier.
- CLO\#4: Explain "S" Parameters and use Power Meters, Spectrum Analyzers, RF Signal Generators, Directional Couplers, attenuators, and other applicable test equipment to measure "S" Parameters for a microwave frequency device.
- CLO\#5: Describe the characteristics of the most common types of digital modulation schemes used for wireless communication.
- CLO\#6: Demonstrate proper safety procedures for personal equipment, and components (ESD) when designing, building, testing and troubleshooting electronic circuits.
- CLO\#7: Document circuit functions, data collection procedures, troubleshooting procedures, and descriptions that meet program standards. (ILO: Quantitative Literacy and Reasoning)


## EET 240 - Microcontrollers I

## 5 Credit(s)

## Prerequisite(s): EET 130

Course Description: Provides detailed instruction in the software and hardware architecture of the Microchip AVR 8-bit RISC microcontrollers. Assembly language programming, debugging, and hardware interfacing allows for investigation of registers, memory maps, timing, decoding, memory addressing, and input/output porting of microcontroller-based systems. A 3-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of microcontroller and microprocessor architecture theory including coding, operation and interfacing techniques.
- CLO\#2: Demonstrate operation of electronic test equipment including DMMs, oscilloscopes, logic probes, DC power supplies, and logic analyzers.
- CLO\#3: Demonstrate a working knowledge of embedded circuitry hardware, interfacing devices and applications.
- CLO\#4: Build, test, and troubleshoot basic microcontroller and/or microprocessor interfacing circuitry applications including: basic input/output, mathematical and logic conversion, motorcontrolled circuitry and programs, analog to digital and digital to analog processes. (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Interpret assembly programming code, flowcharts, pseudocode, and hand-coding of programs for a microcontroller-based system. (ILO: Critical Thinking)
- CLO\#6: Document circuit functions, proper data collection procedures, troubleshooting procedures followed, and explanatory descriptions (verbal and written) that meet laboratory standards.
- CLO\#7: Demonstrate industry-standard safety practices in the lab and workplace including personal protection, equipment, and component (ESD) when designing, building, and troubleshooting digital/analog circuits.


## EET 241 - Microcontrollers II

## 5 Credit(s)

## Prerequisite(s): EET 240

Course Description: Continues exploration of computer architecture with focus on the Atmel AVR 8-bit RISC microcontrollers. Includes advanced study of interfacing and initializing of specialized integrated circuits necessary for advanced applications. Students will also explore the circuitry and programming necessary to interface high-power devices like stepper motors to microcomputer ports. In addition, students will be introduced to $C$ high-level language as it relates to programming microcontroller-based systems. A 3hour per week open laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge of microcontroller and microprocessor architecture theory including coding, operation and interfacing techniques.
- CLO\#2: Demonstrate operation of electronic test equipment including DMMs, oscilloscopes, logic probes, DC power supplies, and logic analyzers.
- CLO\#3: Build, test, and demonstrate an advanced working knowledge of microprocessor circuitry, microcontrollers, hardware, interfacing, devices and applications.
- CLO\#4: Interpret assembly programming code, flowcharts, pseudocode, and hand-coding of programs for a microcontroller-based system. Write comments that reflect function, time, and process for programming processes.
- CLO\#5: Document circuit functions, proper data collection procedures, troubleshooting procedures followed, and explanatory descriptions (verbal and written) that meet laboratory standards. (ILO: Quantitative Literacy and Reasoning)
- CLO\#6: Demonstrate understanding of safety practices in the lab and workplace. Including: personal protection, equipment, and component (ESD) when designing, building, and troubleshooting basic digital circuits. Includes ROHS compliant standards for leadless and green processes for electronics manufacturing and assembly.


## EET 250 - Prototype Development and Documentation

## 4 Credit(s)

Prerequisite(s): EET 220 and EET 240

Recommended Prerequisite(s): EET 241
Course Description: Emphasizes technical writing and documentation while developing a functioning electronic system. Includes design and construction of a prototype electronic project requiring integration of a microcontroller-based system with digital and analog devices. Projects can include the use of FPGA devices, Embedded platforms (i.e., Arduino, Raspberry Pi, ESP32, loT devices, etc.). A 3-hour per week open-laboratory includes the application of computer tools in circuit design, evaluation, troubleshooting, and analysis. Some labs and projects can be done remotely. Promotes and supports sustainable and green technologies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate prototyping and development skills through design of a working microprocessor-based project involving architecture theory, machine coding, port operation, timing and interfacing.
- CLO\#2: Demonstrate operation of electronic test equipment including DMMs, mixed signal oscilloscopes, logic probe, DC power supplies, and logic analyzers.
- CLO\#3: Design, build, test, and demonstrate a student-based project including microcontrollers, hardware, interfacing, software, devices and applications. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Document circuit functions, proper data collection procedures, troubleshooting procedures followed, and explanatory descriptions (verbal and written) that meet laboratory standards.
- CLO\#5: Demonstrate understanding of safety practices in the lab and work place including personal protection, equipment, and component (ESD) when designing, building, and troubleshooting basic digital circuits.


## EET 280 - Cooperative Work Experience: Electronics

Var. (1-3) Credit(s)<br>Prerequisite(s): Permission of CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Understand and demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate industry standard work performance (student's learning objectives). (ILO: Quantitative Literacy and Reasoning)
- CLO\#5: Demonstrate following instructions and meeting deadlines.
- CLO\#6: Demonstrate a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job.
- CLO\#7: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job.
- CLO\#8: Document new knowledge, skills, and experience while on the job.
- CLO\#9: Develop professional contacts which will help in obtaining employment.


## EMS 160 - Electrocardiogram (ECG) Interpretation

## 2 Credit(s)

Recommended Prerequisite(s): Some form of medical training or background is suggested (i.e. EMT, CNA, etc.).

Course Description: Focuses on a basic introduction and understanding of electrocardiograms (ECGs). It covers information needed to interpret ECGs including anatomy and physiology of the human heart and how it relates to the ECG. Students will also learn basic electrophysiology, how to interpret sinus rhythms, atrial rhythms, junctional and ventricular rhythms, as well as AV blocks and pacemaker rhythms. This course will periodically discuss patient conditions related to an electrocardiogram and make suggestions towards the treatment of those patients. Finally, 12-lead electrocardiograms are introduced and how they relate to patients. Information from this course augments student knowledge for those who desire to work in various medical occupations.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Distinguish key principles of cardiac anatomy, physiology, and electrophysiology.
- CLO\#2: Identify key principles in electrocardiogram (ECG) interpretation.
- CLO\#3: Distinguish specific ECG rhythms - sinus, atrial, junctional, and ventricular.
- CLO\#4: Compare specific ECG concepts - AV blocks, pacemaker rhythms, and 12-lead ECG.
- CLO\#5: Apply concepts learned in the classroom to the assessment and management of simulated patients. (ILO: Critical Thinking)


## EMS 165 - Introduction to Pharmacology for Health Occupations

## 2 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement, and MTH 20 or designated placement.

Course Description: Introduces the world of pharmacology beginning with regulations and safety issues, working through different medication preparations and dosages, and medical math and safe drug calculations. This course will periodically discuss patient conditions related to medications and the effects medications have on the patient's body. And, finally, the course introduces correct medication administration procedures and the medications prescribed or administered that specifically target the autonomic nervous and cardiovascular systems. Information from this course augments student knowledge for those who desire to work in various medical occupations including emergency medical technician, medical assistant, nursing, paramedicine, or other allied health professions. It can be used as a pharmacology refresher or continuing education for professionals already practicing in their specific field of medical practice.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Outline key principles of pharmacology, consumer safety, and drug regulation.
- CLO\#2: Distinguish common drug names and classifications, common sources of medication and their effects on the body.
- CLO\#3: Interpret and employ key principles in medication preparations and supplies, systems of measurement, and appropriate safe dosage calculations.
- CLO\#4: Highlight techniques of medication administration, either parenteral or enteral route. (ILO: Critical Thinking)
- CLO\#5: Distinguish Autonomic and Cardiovascular specific medications.


## 4 Credit(s)

Prerequisite(s): Current Oregon EMT licensure. This is a special admission course and requires completion of an application process prior to admission. Prior to clinical experience a criminal background check and drug screen must be completed. Concurrent enrollment in EMS211 and EMS 211L is required.

## Corequisite(s): EMS 211L

Course Description: EMS211 is the first section of a course that prepares individuals for National Registry certification as Advanced EMT and licensure in Oregon as an Emergency Medical Technician Intermediate. The course will develop a student's ability to recognize and treat the symptoms of illness and injury in the pre-hospital setting.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Outline and apply key principles of emergency care according to Advanced EMT education guidelines.
- CLO\#2: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#3: Demonstrate effective teamwork in managing simulated emergency scenarios.
- CLO\#4: Outline and implement self-care strategies for persons who intervene in emergency situations. Formulate a plan of self-care.


## EMS 211L - Advanced EMT Intermediate - Part I Lab

## 1 Credit(s)

Prerequisite(s): Current Oregon EMT licensure. This is a limited-entry course and requires completion of an application process prior to admission. Prior to clinical experience a criminal background check and drug screen must be completed. Concurrent enrollment in EMS 211 and EMS211L is required.

## Corequisite(s): EMS 211

Course Description: EMS211L develops students' abilities to recognize and treat the symptoms of illness and injury in classroom labs and simulated emergency scenes. Includes skills in patient assessment, basic and advanced airway management, trauma assessment and management, medication administration, and the use of automated external defibrillators (AED).

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Outline and apply key principles of emergency care according to Advanced EMT education guidelines.
- CLO\#2: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#3: Demonstrate effective teamwork in managing simulated emergency scenarios.
- CLO\#4: Outline and implement self-care strategies for persons who intervene in emergency situations. Formulate a plan of self-care.


## EMS 212 - Advanced EMT Intermediate - Part II

## 4 Credit(s)

Prerequisite(s): Current Oregon EMT or A-EMT licensure. Successful completion of EMS 211L and EMS 211 L . Prior to clinical experience a criminal background check and drug screen must be completed.
Concurrent enrollment in EMS212, EMS 212L, and EMS 222 is required.

Corequisite(s): EMS 212L and EMS 222

Course Description: EMS212 is the second section of a course that prepares individuals for National Registry certification as Advanced EMT and licensure in Oregon as an Emergency Medical Technician Intermediate. The course will develop a student's ability to recognize and treat the symptoms of illness and injury in the pre-hospital setting.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an understanding of key principles of emergency care of the AEMT and EMTIntermediate.
- CLO\#2: Analyze and distinguish various electrocardiogram rhythms outlined in the Oregon EMTIntermediate Scope.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Demonstrate effective teamwork in managing simulated emergency scenarios.


## EMS 212L - Advanced EMT Intermediate - Part II Lab

## 1 Credit(s)

Prerequisite(s): Current Oregon EMT or A-EMT licensure. Successful completion of EMS 211 and EMS 211L. Prior to clinical experience a criminal background check and drug screen must be completed. Concurrent enrollment in EMS 211, EMS212L, and EMS 222 is required.

Corequisite(s): EMS 211 and EMS 222

Course Description: EMS212L develops students' abilities to recognize and treat the symptoms of illness and injury in classroom labs and simulated emergency scenes. Includes skills in patient assessment, basic airway management, trauma assessment and management, medication administration, and the use of automated external defibrillators (AED) as well as advanced cardiac life support skills and manual defibrillation.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an understanding of key principles of emergency care of the AEMT and EMTIntermediate.
- CLO\#2: Analyze and distinguish various electrocardiogram rhythms outlined in the Oregon EMTIntermediate Scope.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Demonstrate effective teamwork in managing simulated emergency scenarios.


## EMS 213 - Advanced EMT Intermediate - Part III

## 2 Credit(s)

Prerequisite(s): Current Oregon EMT or A-EMT licensure. Successful completion of EMS 212, EMS 212L, and EMS 222. Prior to clinical experience a criminal background check and drug screen must be completed. Concurrent enrollment in EMS213, EMS 213L, and EMS 223 is required.

## Corequisite(s): EMS 213L and EMS 223

Course Description: EMS213 is the third section of a course that prepares individuals for National Registry certification as Advanced EMT and licensure in Oregon as an Emergency Medical Technician Intermediate. The course will develop a student's ability to recognize and treat the symptoms of illness and injury in the pre-hospital setting.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Outline and apply key principles of emergency care of the AEMT and EMT-Intermediate.
- CLO\#2: Formulate and execute a plan to care for a complex medical patient using the EMTIntermediate scope of practice.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Demonstrate effective teamwork in managing simulated emergency scenarios.


## EMS 213L - Advanced EMT Intermediate - Part III Lab

## 1 Credit(s)

Prerequisite(s): Current Oregon EMT or A-EMT licensure. Successful completion of EMS 212, EMS 212L, and EMS 222. Prior to clinical experience a criminal background check and drug screen must be completed. Concurrent enrollment in EMS 213, EMS213L, and EMS 223 is required.

Corequisite(s): EMS 213 and EMS 223
Course Description: EMS213L develops students' abilities to recognize and treat the symptoms of illness and injury in classroom labs and simulated emergency scenes. Includes skills in patient assessment, basic and advanced airway management, trauma assessment and management, medication administration, and the use of automated external defibrillators (AED) as well as advanced cardiac life support skills and manual defibrillation.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Outline and apply key principles of emergency care of the AEMT and EMT-Intermediate.
- CLO\#2: Formulate and execute a plan to care for a complex medical patient using the EMTIntermediate scope of practice.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Demonstrate effective teamwork in managing simulated emergency scenarios.


## EMS 222 - Advanced EMT Intermediate - Clinical Practice II

## 1 Credit(s)

Prerequisite(s): Current Oregon EMT or A-EMT licensure. Successful completion of EMS 211 and EMS 211L. Prior to clinical experience a criminal background check and drug screen must be completed.
Concurrent enrollment in EMS 212, EMS 212L, and EMS 223 is required.

Corequisite(s): EMS 212, EMS 212L, and EMS 223

Course Description: This is the clinical experience that will focus on practical application of the skills and knowledge acquired in the lecture and lab components of the AEMT lecture and lab courses.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform an adequate patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies.
- CLO\#2: Safely perform numerous emergency procedures on live patients of various age groups.
- CLO\#3: Demonstrate leadership in the management of multiple personnel on emergency scenes. (ILO: Critical Thinking)
- CLO\#4: Evaluate workplace expectations regarding attendance, safety, conduct, and professionalism.


## EMS 223 - Advanced EMT Intermediate - Clinical Practice III

## 2 Credit(s)

Prerequisite(s): Current Oregon EMT or A-EMT licensure. Successful completion of EMS 212, EMS 212L, and EMS 222. Prior to clinical experience a criminal background check and drug screen must be completed. Concurrent enrollment in EMS 213, EMS 213L, and EMS 222 is required.

Corequisite(s): EMS 213, EMS 213L, and EMS 222

Course Description: This is the clinical and field experiences that will focus on practical application of the skills and knowledge acquired in lecture and lab components of the AEMT course.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform an adequate patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies.
- CLO\#2: Safely perform numerous emergency procedures on live patients of various age groups.
- CLO\#3: Demonstrate leadership in the management of multiple personnel on emergency scenes. (ILO: Critical Thinking)
- CLO\#4: Evaluate workplace expectations regarding attendance, safety, conduct, and professionalism.


## EMS 270 - Paramedic Preparation

## 3 Credit(s)

Prerequisite(s): Acceptance into the RCC Paramedic course, which is a special admission course and requires completion of an application process prior to admission.

Course Description: Prepares students for entry into the Paramedic course series. Covers basic concepts of anatomy and physiology related to emergency care. Investigates the pathophysiology of common diseases and the likely patient presentations for each. Topics include patient assessment, differential diagnosis, critical thinking, and medical decision-making.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recall and describe emergency pathophysiology and basic principles of pharmacology.
- CLO\#2: Illustrate connections between pathophysiology and patient presentations for a variety of conditions.
- CLO\#3: Demonstrate appropriate application of the topics presented, within the student's current EMS Scope of Practice. (ILO: Critical Thinking)


## EMS 271 - Paramedic Care and Practice I

## 9 Credit(s)

Prerequisite(s): Current Oregon EMT, AEMT, or EMT-Intermediate license. This is a special admission course and requires the completion of an application process before admission.

Corequisite(s): EMS 281
Course Description: The first of a four-term sequence in the paramedic education series. Covers patient assessment, advanced pathophysiology, airway management, general pharmacology, respiratory emergencies, intravenous (IV) therapy, obstetrics, and pediatrics. Lab and simulated emergency scene experiences will develop students' abilities to recognize and treat the symptoms of illness and injury. Includes hands-on assessment and utilizes Basic and Advanced Life Support equipment to apply the concepts learned. It also develops skills and abilities in managing emergency medical scenes, coordinating resources, and delegating tasks as appropriate.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Work effectively with others to complete complex tasks, both in the classroom and in lab scenarios.
- CLO\#2: Recall and describe emergency pathophysiology and basic principles of pharmacology.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Practice appropriately applying the topics presented within the Paramedic Scope of Practice.


## EMS 272 - Paramedic Care and Practice II

## 9 Credit(s)

Prerequisite(s): Current Oregon EMT, AEMT, or EMT-Intermediate license and completion of EMS 271 and EMS 281.

Course Description: Second course in the paramedic series. Covers the anatomy and electrophysiology of the heart, ECG and 12-Lead interpretation, and the pathophysiology and pre-hospital management of cardiac disease, including the Advanced Cardiac Life Support Provider (ACLS) course. It also covers neurologic, psychiatric, and special needs patients. Lab and simulated emergency scene experiences will develop students' abilities to recognize and treat symptoms of illness and injury. Includes hands-on assessment and utilizes both Basic and Advanced Life Support equipment to apply the concepts learned. It also develops skills and abilities in managing emergency medical scenes, coordinating resources, and delegating tasks as appropriate.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Work effectively with others to complete complex tasks, both in the classroom and in lab scenarios.
- CLO\#2: Recall and describe cardiac care, anatomy, and ECG Interpretation.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Demonstrate appropriate application of the topics presented, within the Paramedic Scope of Practice.


## EMS 273 - Paramedic Care and Practice III

## 9 Credit(s)

Prerequisite(s): Current Oregon EMT, AEMT, or EMT-Intermediate license and completion of EMS 272 and EMS 282.

## Corequisite(s): EMS 283

Course Description: The third course in the paramedic series. Covers the principles and practices for identifying and managing trauma patients, and a Pre-hospital Trauma Life Support (PHTLS) course is included. Reviews neonatal care and pediatrics covered in EMS271 and includes the Pediatric Advanced Life Support (PALS) certification course. It also covers EMS Operations, gastrointestinal and renal issues, toxicology, infectious disease, environmental emergencies, endocrinology, and ethical and legal issues. Labs and simulated emergency scene experiences will develop students' abilities to recognize and treat the symptoms of illness and injury. Includes hands-on assessment and utilizes both Basic and Advanced Life Support equipment to apply the concepts learned. It also develops skills and abilities in managing emergency medical scenes, coordinating resources, and delegating tasks as appropriate.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Work effectively with others to complete complex tasks, both in the classroom and in lab scenarios.
- CLO\#2: Demonstrate appropriate management of medical and trauma emergencies. (ILO: Critical Thinking)
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting.
- CLO\#4: Demonstrate appropriate application of EMS care, within the Paramedic Scope of Practice.


## EMS 281 - Paramedic Clinical Practice I

## 3 Credit(s)

Prerequisite(s): Current Oregon EMT, AEMT, or EMT-Intermediate license.

## Corequisite(s): EMS 271

Course Description: The clinical experience of this course will focus on airway management in the anesthesia setting, patient assessment in the Emergency Department, and Basic Life Support (BLS) assessments with a Paramedic Field Preceptor. The class will begin with an orientation session to the clinical tracking system and the RCC Paramedic Clinical Manual. Specific procedures and issues common to clinical sites will be reviewed with the students prior to beginning their rotations. Clinical orientation to each site may be required prior to clinical placement.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Safely perform emergency procedures, including endotracheal intubation on live patients of various age groups.
- CLO\#2: Perform an adequate patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies. (ILO: Critical Thinking)
- CLO\#3: Demonstrate workplace expectations regarding attendance, safety, conduct, and professionalism.
- CLO\#4: Perform as an individual with appropriate bedside manner during patient care situations.


## EMS 282 - Paramedic Clinical Practice II

## 3 Credit(s)

Prerequisite(s): Current Oregon EMT, AEMT, or EMT-Intermediate license and completion of EMS 271 and EMS 281 with a "C" or better.

Corequisite(s): EMS 272
Course Description: The clinical experience of this course will focus on airway management in the OR, patient assessment and treatment and application of paramedic skills in the emergency department, labor and delivery, and the care of pediatric patients through assessments in the ER and NICU. Specific procedures and issues common to these clinical sites will be reviewed with the students prior to beginning their rotations.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Safely perform emergency procedures on live patients of various age groups, as outlined in the clinical manual.
- CLO\#2: Perform an appropriate patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies. (ILO: Critical Thinking)
- CLO\#3: Demonstrate workplace expectations regarding attendance, safety, conduct, and professionalism.
- CLO\#4: Perform as an individual with appropriate bedside manner during patient care situations.


## 3 Credit(s)

Prerequisite(s): Current Oregon EMT, AEMT, or EMT-Intermediate license and completion of EMS 272 and EMS 282 with a "C" or better.

## Corequisite(s): EMS 273

Course Description: The clinical experience of this course will focus on patient assessment, treatment, and application of paramedic skills in the ED. Airway management in the OR setting, management of critical patients in the ICU/CCU, and assessment and management of patients with psychiatric illnesses will take place. Specific procedures and issues common to these clinical sites will be reviewed with the students prior to beginning their rotations.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Safely perform emergency procedures on live patients of various age groups, as outlined in the Clinical Manual.
- CLO\#2: Perform a comprehensive patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies.
- CLO\#3: Demonstrate workplace expectations regarding attendance, safety, conduct, and professionalism.
- CLO\#4: Perform as an individual with appropriate bedside manner during patient care situations. (ILO: Communication)


## EMS 284 - Paramedic Clinical Capstone

## 9 Credit(s)

Prerequisite(s): Current Oregon EMT, AEMT, or EMT-Intermediate license and completion of EMS 273, and EMS 283 with a "C" or better.

Course Description: This is the field capstone of the paramedic course. Individual student meetings with the clinical coordinator and/or clinical instructors will be conducted throughout the course of the term. Students will ride as a third on an Advanced Life Support medical unit, not as part of the minimum staffing, and complete ALS-level calls as to meet or exceed the requirements outlined in Oregon Administrative Rule.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Safely perform numerous emergency procedures on live patients of various age groups.
- CLO\#2: Perform a comprehensive patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies. (ILO: Critical Thinking)
- CLO\#3: Evaluate leadership in the management of multiple personnel on emergency scenes. (ILO: Communication)
- CLO\#4: Evaluate workplace expectations regarding attendance, safety, conduct, and professionalism.


## Var. (1-8) Credit(s)

Prerequisite(s): Some level of advanced emergency training or background is suggested (i.e. AEMT, EMTIntermediate, Paramedic, RN, etc.).

Course Description: This course will focus on patient assessment and treatment, and application of Advanced Life Support skills. Specific course details vary based on content being addressed.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Safely perform numerous emergency procedures on live patients of various age groups.
- CLO\#2: Perform a comprehensive patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies. (ILO: Critical Thinking)
- CLO\#3: Demonstrate leadership in the management of multiple personnel on emergency scenes. (ILO: Communication)


## ENG 104 - Introduction to Literature (Fiction)

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Provides a survey of important works of fiction by writers from different cultures and time periods. The course is designed to foster thoughtful interpretation, analysis, and appreciation of fiction.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain how such elements as point of view, plot, setting, characterization, tone, style, theme, and symbolism affect our reading and interpretation of the literary genre of fiction. (ILO: Communication)
- CLO\#2: Apply a range of critical approaches to literature, such as Formalist, Psychoanalytical, Marxist, Feminist, Reader-response, Deconstructionist, and New Historicist.
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 105 - Introduction to Literature (Drama)

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Provides a survey of representative works of drama from different cultures and time periods. In addition to providing an introduction to important plays, playwrights, and historical movements in drama, the course explores the nature of the dramatic experience, with emphasis on understanding and appreciating live productions.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the literary genre of drama in its various forms--tragedy, comedy, tragicomedy, theater of the absurd, and realistic drama. (ILO: Communication)
- CLO\#2: Apply a range of critical approaches to literature, such as Formalist, Psychoanalytical, Marxist, Feminist, Reader-response, Deconstructionist, and New Historicist.
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 106 - Introduction to Literature (Poetry)

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Explores the artistic use of language and a world made larger through the vicarious experiences offered through poetic expression.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the elements of lyric, narrative, and dramatic poetry through reading and analyzing a variety of poems with emphasis on such elements as tone, diction, theme, imagery, rhythm, and form. (ILO: Communication)
- CLO\#2: Apply a range of critical approaches to literature, such as Formalist, Psychoanalytical, Marxist, Feminist, Reader-response, Deconstructionist, and New Historicist.
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 107 - World Literature: Ancient to Classical

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Surveys important works from the literature of early civilizations: Sumerian, Egyptian, Hebrew, Greek, Chinese, Indian, and Roman. The course is designed to foster thoughtful interpretation, analysis, and appreciation of literature. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Summarize and explain the influence of significant texts from the time of the Sumerians up to the Romans. (ILO: Communication)
- CLO\#2: Explain how historical and social contexts influence literary expression.
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 108 - World Literature: Medieval to Renaissance

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Provides a survey of important works of world literature including manuscripts from India's classical age, China's "Middle Period," the rise of Islam, the Middle Ages in Western Literature, the Golden Age of Japanese culture, and the Renaissance in Europe. Fulfills cultural literacy requirement within
the Associate of Arts Oregon Transfer degree (AAOT).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Summarize and explain the influence of significant texts from the 7th through 15th century. (ILO: Communication)
- CLO\#2: Explain how historical and social contexts influence literary expression.
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 109 - World Literature: Enlightenment to Modern

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Provides a survey of important works of literature representing the 17th century Ottoman Empire, the Enlightenment in Europe, Romanticism in Europe and America, popular art in premodern Japan, 19th century realism, and twentieth century literature in a global context. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Summarize and explain the influence of significant texts from the 16th through 21st century. (ILO: Communication)
- CLO\#2: Explain how historical and social contexts influence literary expression.
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 199 - Special Studies: English

Var. (1-3) Credit(s)

Prerequisite(s): Varies by course.

Course Description: The course is offered in a number of formats: workshop, seminar, or independent study

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

1: Varies based on course focus. (ILO: Varies based on course focus.)

## ENG 201 - Shakespeare I

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Introduces Shakespeare's plays with an emphasis on current theoretical approaches and performance history. The course will cover three to five plays from among Shakespeare's comedies, romances, histories, and tragedies.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate familiarity with the plots, themes, and characters in Shakespeare's plays.
- CLO\#2: Explain how Shakespeare's historical and social context influenced his plays. (ILO: Critical Thinking)
- CLO\#3: Explain how race, gender, time, and place shape a given text.
- CLO\#4: Apply current theoretical approaches to the plays (e.g., Feminist theory, New Historicism).


## ENG 202-Shakespeare II

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Introduces Shakespeare's plays with an emphasis on current theoretical approaches and performance history. The course will cover three to five plays from among Shakespeare's comedies, romances, histories, and tragedies.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate familiarity with the plots, themes, and characters in Shakespeare's plays.
- CLO\#2: Explain how Shakespeare's historical and social context influenced his plays. (ILO: Critical Thinking)
- CLO\#3: Explain how race, gender, time, and place shape a given text.
- CLO\#4: Apply current theoretical approaches to the plays (e.g., Feminist theory, New Historicism).


## ENG 204 - Survey of English Literature: Medieval to Renaissance

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Provides a historical survey of important works from the literature of the British Isles, from the roots of Old English in the fifth century through the Early Modern period. The course is designed to foster thoughtful interpretation, analysis, and appreciation of literature.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate familiarity with significant texts of varying length and complexity in a variety of genres.
- CLO\#2: Explain how historical and social contexts influence literary expression. (ILO: Critical Thinking)
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 205 - Survey of English Literature: 18th Century to Romantic

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Provides a historical survey of important works from the literature of the British Isles from the seventeenth century Restoration period through the Romantic period of the early nineteenth century. The course is designed to foster thoughtful interpretation, analysis and appreciation of literature.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate familiarity with significant texts of varying length and complexity in a variety of genres.
- CLO\#2: Explain how historical and social contexts influence literary expression. (ILO: Critical Thinking)
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 206 - Survey of English Literature: Victorian to Modern

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Provides a historical survey of important works from the literature of the British Isles and nations it colonized from the Victorian period through the twentieth century. The course is designed to foster thoughtful interpretation, analysis, and appreciation of literature.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate familiarity with significant texts of varying length and complexity in a variety of genres.
- CLO\#2: Explain how historical and social contexts influence literary expression. (ILO: Critical Thinking)
- CLO\#3: Explain how race, gender, time, and place shape a given text.


## ENG 253 - Survey of American Literature: Colonial

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Provides a survey of literary works from the Colonial, Enlightenment, and Romantic periods, and includes such diverse forms as essays, journals, sermons, political documents, poetry and fiction.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the ways in which social, philosophical, and political currents influence literary expression.
- CLO\#2: Describe similarities and differences in Colonial, Enlightenment, and Romantic thinking regarding wilderness, religion, artistic expression, rights of Native Americans, attitudes toward family, and community morals and customs. (ILO: Communication)
- CLO\#3: Explain how race, gender, time, and place shape a given text.
- CLO\#4: Explain changes in the prevailing American philosophies during the time period covered in the course.


## ENG 254 - Survey of American Literature: 19th Century

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Surveys the period of American literature between the 1830s and the turn of the century, and includes such diverse forms as essays, journals, sermons, political documents, poetry, and fiction. In many of the works, historical events such as slavery and the Civil War provide both background and subject matter for the artistic productions of the authors studied.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the ways in which social, philosophical, and political currents influence literary expression.
- CLO\#2: Describe the uniquely American elements in a range of texts through focusing on the formation of an American identity, the Civil War, the issue of slavery, emerging feminist literature, and the capitalism of Wall Street. (ILO: Communication)
- CLO\#3: Explain how race, gender, time, and place shape a given text.
- CLO\#4: Explain changes in the prevailing American philosophies during the time period covered in the course.


## ENG 255 - Survey of American Literature: 20th Century

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Covers the period of American literature between the early 1900s and the present. In many of the works, historical events such as World War I, the Great Depression, and World War II provide both background and subject matter for the artistic productions of the authors studied.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the ways in which social, philosophical, and political currents influence literary expression.
- CLO\#2: Describe the uniquely American elements in American literature through focusing on the two World Wars, the Great Depression, the Civil Rights and Feminist movements, the Cold War, and the legacy of the Vietnam Conflict. (ILO: Communication)
- CLO\#3: Explain how race, gender, time, and place shape a given text.
- CLO\#4: Explain changes in the prevailing American philosophies during the time period covered in the course.


## ENG 257 - African American Literature

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Introduces literature of Americans whose roots are in Africa. Emphasizes the period of post-Civil War through the Harlem Renaissance. Covers the birth of the African American canon, post-war novels, short stories, poems, autobiographies, and plays. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate familiarity with a variety of African American literary works within different genres, such as folktales, short stories, dramas, poetry, and novels-with emphasis on such literary elements as point of view, characterization, setting, plot, tone, style, theme, and symbolism.
- CLO\#2: Explain the way our own experiences, biases, expectations, and attitudes shape our reading of texts. (ILO: Critical Thinking)
- CLO\#3: Explain the interplay of race, gender, and culture in literary expression and society.


## ENG 260 - Introduction to Women Writers

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Introduces literature by women and women-identified men. Emphasizes the Middle Ages period through the present. Covers "birth" of women's literary canon, treatises, short stories, autobiographies, novels, poems, and plays. Literary magazines may be read to introduce early feminist and womanist literary criticism. Focuses on oral and written texts representing interests, aspirations, and experiences of women. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate familiarity with a variety of literary works by women within different genres, such as short stories, dramas, poetry, novels, and essays- with emphasis on such literary elements as point of view, characterization, setting, plot, tone, style, theme, and symbolism.
- CLO\#2: Explain the way our own experiences, biases, expectations, and attitudes shape our reading of texts.
- CLO\#3: Explain the interplay of race, gender, and culture in literary expression and society. (ILO: Critical Thinking)
- CLO\#4: Apply a range of critical approaches to literature, such as Formalist, Psychoanalytical, Marxist, Feminist, Reader-response, Deconstructionist, and New Historicist. Primacy will be given to Feminist and Womanist approaches to a text.


## ENG 275 - The Bible as Literature

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Studies the composition, stories, and themes of the Bible in order to deepen understanding of its meaning and influence.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Summarize the stories, characters, and themes of the Bible and explain their ongoing impact on Western arts, culture, and philosophy. (ILO: Communication)
- CLO\#2: Explain the historical background of the Bible, its composition, and the formation of the canon.
- CLO\#3: Explain the concept of Myth in terms of meaningful narrative, and apply this to the biblical text in its Western historical and literary context.


## ENG 280 - Cooperative Work Experience / English

## Var. (1-3) Credit(s)

Prerequisite(s): Cooperative education is open to all students who have completed at least one-half of the required classes for their program of study, and have the recommendation of the Department cooperative education advisor.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Gain college credit for a valid learning experience to fulfill degree or certificate requirements.
- CLO\#2: Apply classroom theory to real world job experience. (ILO: Critical Thinking)
- CLO\#3: Learn skills, gain experience, and make contacts which will help in obtaining a job after graduation.


## ENGR 101 - Engineering Orientation I: Careers, Skills and Computer Tools

2 Credit(s)
Prerequisite(s): MTH 111 Z or designated placement.
Course Description: Introduces engineering curricula, career paths, ethics, problem solving, communication, and computer programming. The three-term sequence is required for all areas of engineering.

Course Level: Lower Division Collegiate

Course Learning Outcomes:

- CLO\#1: Explain the importance of deadlines as an engineering professional.
- CLO\#2: Participate in several team projects (e.g., Reverse Engineering, Patent Proposal, etc.) (ILO: Communication)
- CLO\#3: Explain issues of ethics in the engineering profession.
- CLO\#4: Analyze the interaction of engineering problem solving and design processes.
- CLO\#5: Demonstrates use of key areas (e.g., ethics, sustainability, cost, safety, etc., and the interaction of these topics) in decision making as an engineering professional.


## ENGR 102 - Engineering Orientation II: Careers, Skills and Computer Tools

## 2 Credit(s)

Prerequisite(s): ENGR 101

Course Description: Examines communication and problem-solving skills in engineering.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Analyze the various capabilities of Excel (linear regression, matrix operations, statistics, etc.) for engineering applications.
- CLO\#2: Demonstrates use of Excel for engineering problem solving (linear regression, matrix operations, statistics, etc.).
- CLO\#3: Applies understanding of key areas (e.g., ethics, sustainability, cost, safety, etc. and the interaction of these topics) in decision making as an engineering professional. (ILO: Communication)


## ENGR 103 - Engineering Orientation III: Careers, Skills and Computer Tools

## 2 Credit(s)

Prerequisite(s): ENGR 102
Course Description: Examines communication and problem-solving skills in engineering.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the various capabilities of MATLAB (matrix algebra, plotting 3D graphs, numerical techniques, etc.) for engineering applications.
- CLO\#2: Participate in hands-on experience in MATLAB for engineering problem solving (matrix algebra, plotting 3D graphs, numerical techniques, etc.).
- CLO\#3: Demonstrates use of key areas (e.g., ethics, sustainability, cost, safety, etc., and the interaction of these topics) in decision making as an engineering professional. (ILO: Communication)


## ENGR 201 - Electrical Fundamentals I

## 2 Credit(s)

Prerequisite(s): MTH 251

Course Description: Examines electrical theory laws. Includes circuit analysis of DC circuits; natural, step, and sinusoidal responses of circuits; and operational amplifier characteristics and applications.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply Ohm's law, Kirchoff's current and voltage laws.
- CLO\#2: Apply voltage division and current division appropriately in solving simple circuits.
- CLO\#3: Apply techniques such as node-voltage, mesh-current, source transformation, Thevenin and Norton equivalent circuits.
- CLO\#4: Classify voltage, current, power and energy. (ILO: Quantitative Literacy and Reasoning)


## ENGR 201L - Electrical Fundamentals I Lab

## 1 Credit(s)

Prerequisite(s): MTH 251

Corequisite(s): ENGR 201
Course Description: Examines electrical theory laws. Includes circuit analysis of DC circuits; natural, step, and sinusoidal responses of circuits; and operational amplifier characteristics and applications.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Assemble DC combination circuits from the elements (e.g., resistors, capacitors, op-amps) present in the laboratory based on circuit diagrams. (ILO: Critical Thinking)
- CLO\#2: Demonstrate the use of techniques such as node-voltage, mesh-current, source transformation, Thevenin and Norton equivalent circuits.
- CLO\#3: Measure voltage, current, power and energy and show how they relate with each other.


## ENGR 202 - Electrical Fundamentals II

## 2 Credit(s)

Prerequisite(s): ENGR 201, ENGR 201L
Corequisite(s): ENGR 202L
Course Description: Examines electrical-theory laws. Includes circuit analysis of AC circuits using complex numbers for single- and three-phase power. Students must enroll in lecture and laboratory sections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply Ohm's law for AC circuits (i.e., use impedance instead of resistance).
- CLO\#2: Calculate using impedance, phasors and Bode plots to solve an AC circuit.
- CLO\#3: Demonstrate the use of complex number vectors (example: phasors) to interpret measurements and results from simulations of voltage and current in ideal and non-ideal AC circuit elements to calculate the power in single phase and three-phase power. (ILO: Quantitative Literacy \& Reasoning)


## ENGR 202L - Electrical Fundamentals II Lab

## 1 Credit(s)

Prerequisite(s): ENGR 201, ENGR 201L
Corequisite(s): ENGR 202
Course Description: Examines electrical-theory laws. Includes circuit analysis of AC circuits using complex numbers for single- and three-phase power. Students must enroll in lecture and laboratory sections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply complex number vectors (example: phasors) to calculate the power for an ideal AC circuit element given its voltage and current for single- and three-phase power. (ILO: Critical Thinking)
- CLO\#2: Apply Ohm's law for AC circuits (i.e., use impedance instead of resistance), Kirchhoff's current and voltage laws in the laboratory setting. and how to use them in analyzing AC circuits.
- CLO\#3: Apply the use of techniques such as impedance, phasors and Bode plots in solving an AC circuit.
- CLO\#4: Demonstrate the use of complex number vectors (example: phasors) to interpret measurements and results from simulations of voltage and current in ideal and non-ideal AC circuit element to calculate the power in single phase and three-phase power.


## ENGR 211 - Statics

## 3 Credit(s)

Prerequisite(s): MTH 112 and BT 113 or WR 115 or designated placement.
Corequisite(s): PH 211, PH 211L, PH 211R and MTH 251
Course Description: Analyzes forces induced in structures and machines by various types of loading.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Draw a complete and correct free body diagram of an object.
- CLO\#2: Calculate resultant vectors from a system of forces and moments. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Write and solve applicable equations of equilibrium for statically determinate objects.
- CLO\#4: Apply statics concepts to trusses, frames and machines, and calculation of internal forces.
- CLO\#5: Determine the centroid and moment of inertia for an arbitrary area.
- CLO\#6: Use common engineering program-solving methods.


## ENGR 212 - Dynamics

## 3 Credit(s)

## Prerequisite(s): ENGR 211

Course Description: Explores kinematics, Newton's laws of motion, work-energy theorem, and impulsemomentum relationships as applied to engineering systems.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and apply kinematic and dynamic equations for a particle in Cartesian, cylindrical and spherical coordinates.
- CLO\#2: Apply methods of work-energy and impulse-momentum to describe the motion of a particle. (ILO: Communication)
- CLO\#3: Apply the parallel axis theorem to determine the moments of inertia of a body for specified axes.
- CLO\#4: Apply relative motion concepts using translating and rotating reference frames for twodimensional systems.
- CLO\#5: Apply Newton's equations to solve problems involving rigid bodies in plane motion.
- CLO\#6: Apply methods of work-energy and impulse-momentum to describe rigid body motion.


## ENGR 213 - Strength of Materials

## 3 Credit(s)

## Prerequisite(s): ENGR 211

Course Description: Presents the concepts of introductory mechanics of materials. Topics addressed are the concept of stress, axial stress and strain, torsion, pure bending, transverse loading, transformations of stress and strain, design of beams and shafts for strength, deflection of beams, and columns.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify, formulate and solve engineering problems.
- CLO\#2: Apply understanding of statics, calculus, physics, chemistry, and probability/ statistics to analyzing and designing simple mechanical systems with engineering materials.
- CLO\#3: Recognize types of failure modes, material property influence, and use of factors of safety or allowable stresses/strains on design.
- CLO\#4: Develop effective written and graphical skills to communicate a given design. (ILO: Communication)


## ENV 111 - Introduction to Environmental Science

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90,or WR 91 (WR 91 substitutes for both RD 90 and WR 90), and MTH 20 or designated placement.

Course Description: Introduces the uses of chemical, physical, and biological principles to explain the complexity and diversity found in environmental systems. The course, designed for both environmental science majors and non-majors, will explore a wide range of environmental topics including the conservation of matter and energy, the atmosphere, nutrient cycles, the hydrologic cycle, population dynamics, biodiversity, human impact on the environment, resource and waste management, and the role of economics and politics in sustainability.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describes and applies knowledge of basic chemical and cellular properties.
- CLO\#2: Describes and applies knowledge of air pollution.
- CLO\#3: Describes and applies knowledge of climate change and ozone depletion.
- CLO\#4: Describes and applies knowledge of biogeochemical cycles.
- CLO\#5: Describes and applies knowledge of population dynamics.
- CLO\#6: Describes and applies knowledge of biodiversity.
- CLO\#7: Describes and applies knowledge of human impact on the environment.
- CLO\#8: Describes and applies knowledge of resource and waste management.
- CLO\#9: Describes and applies knowledge of sustainability and the role of economics and politics in sustainability. (ILO: Critical Thinking)


## ES 105 - Introduction to Emergency Services

## 4 Credit(s)

Course Description: Explores the organization, funding, and role of emergency services within the community and government; an overview of emergency medical services and fire protection services; legal and professional considerations regarding emergency response; emergency services personnel; history and trends of emergency services; evaluation and planning; disaster response; and training, leadership, and career development within emergency services.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Outline the history and current structure of emergency services (ES) systems. (ILO: Critical Thinking)
- CLO\#2: Classify the basic legislation and regulation of emergency services (ES).
- CLO\#3: Outline the types and levels of organizations of emergency services (ES) and the benefit to ES personnel.
- CLO\#4: Categorize the education and training requirements of emergency services (ES) personnel.
- CLO\#5: Outline and predicts the role of emergency service agencies and personnel during MCI and disaster response and their role in in community relations and safety.
- CLO\#6: Highlight the role of ES personnel and the role of the agency in worker wellness and safety. Examine Workplace Harassment, \& Discrimination. (ILO: Communication)


## ES 131 - Emergency Medical Technician - Part I

## 6 Credit(s)

Prerequisite(s): This is a special admission course and requires the completion of an application process before admission. Before acceptance, students must complete all screening requirements outlined in OAR

409-030-0190, additional RCC requirements (AHA BLS certification, RCC placement process), and any other state-issued placement mandates. Prerequisites within the application process include RD 90, WR 90 (or WR 91) and eligibility for MTH 20 or higher.

Course Description: ES131 is the first half of a two-term course that prepares individuals for National Registry certification and licensure in Oregon as an Emergency Medical Technician. The course will develop a student's ability to recognize and treat the symptoms of illness and injury in the pre-hospital setting through didactic and simulated or clinical opportunities. The lab or clinical opportunities develop students' abilities to identify and treat the symptoms of illness and injury in the classroom and hands-on environments. Includes skills in patient assessment, essential airway management, trauma assessment and management, medication administration, and automated external defibrillators (AED).

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe key principles of emergency care.
- CLO\#2: Formulate and execute a plan to care for a medical patient within the EMT scope of practice.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Practice effective teamwork in managing simulated or actual emergency situations.
- CLO\#5: Outline and implement self-care strategies for persons who intervene in emergency situations. Formulate a plan of self-care.


## ES 132 - Emergency Medical Technician - Part II

## 6 Credit(s)

Prerequisite(s): ES 131 in the prior term.

Course Description: ES132 is the second half of a course that prepares individuals for National Registry certification and licensure in Oregon as an Emergency Medical Technician. The course will develop a student's ability to recognize and treat the symptoms of illness and injury in the pre-hospital and lab setting. The lab develops students' abilities to recognize and treat the symptoms of illness and injury in classroom labs and simulated emergency scenes. Includes skills in patient assessment, basic airway management, trauma assessment and management, medication administration, and the use of automated external defibrillators (AED). Students will also be scheduled for assessment and skills procedures in an emergency department and on an ambulance (minimum 12-hours each).

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate effective communication, cultural competency, and conflict management and intervention skills for people in crisis.
- CLO\#2: Formulate and execute a plan to care for a trauma and special populations patient within the EMT scope of practice.
- CLO\#3: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#4: Demonstrate effective teamwork in managing simulated emergency scenarios
- CLO\#5: Demonstrate workplace expectations regarding attendance, safety, conduct, and professionalism.


## ES 171 - Emergency Vehicle Operations

## 2 Credit(s)

Prerequisite(s): A valid Oregon driver's license

Course Description: Presents the most up-to-date information on ambulance and fire apparatus operations and the techniques used to operate them safely. This course provides the practical, hands-on experience necessary for students to become safe and knowledgeable emergency vehicle operators. This course meets the requirements of National Fire Protection Association 1002: Chapter 4.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrates the steps involved in an apparatus inspection.
- CLO\#2: Describe the legal responsibilities of an emergency vehicle operator and the physical and natural forces involved in emergency vehicle operation.
- CLO\#3: Describe common problems faced by emergency vehicle operators. (ILO: Critical Thinking)
- CLO\#4: Successfully navigate the emergency vehicle operations course in an ambulance or fire vehicle in a safe manner.


## ES 199 - Special Studies: Emergency Services

## Var. (1-3) Credit(s)

Prerequisite(s): Some level of emergency training or background is suggested (i.e. Emergency Medical Responder, EMT, Firefighter, etc.).

Course Description: Develops students' abilities to recognize and treat the symptoms of illness and injury in classroom labs and simulated emergency scenes. Includes skills in patient assessment, basic airway management, trauma assessment and management, medication administration, and the use of automated external defibrillators (AED).

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate key principles of emergency care.
- CLO\#2: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting.
- CLO\#3: Demonstrate effective teamwork in managing simulated emergency scenarios (ILO: Communication)
- CLO\#4: Variable, depending on content.


## ES 205 - Crisis Intervention and Management for Emergency Services Workers

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Focuses on the practical application of psychology in everyday situations including crises encountered in a variety of settings related to public safety workers. Presents materials on the
communication and interaction with people in various crisis situations, death and death notification, suicide, behavioral emergencies, abuse, and stress. A great deal of time is spent on strategies for the personal health and wellness of the Emergency Services Worker. Techniques on the initial intervention, defusing and assessment, self-care, and referral in crisis are included.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe historical and theoretical concepts of crisis intervention and importance of selfcare.
- CLO\#2: Demonstrate and outline effective communication strategies, cultural competency, and conflict intervention skills. (ILO: Communication)
- CLO\#3: Demonstrate how to provide support, direction and control to persons in crisis, and demonstrate/outline practical approaches to suicide intervention.
- CLO\#4: Identify intervention strategies with diverse populations, domestic abuse, child abuse, and elder abuse and mistreatment.
- CLO\#5: Describe collective responses by multiple providers of emergency services during catastrophic disasters in communities.
- CLO\#6: Identify and describe community resources available to support individuals of crisis.
- CLO\#7: Outline and describe the importance of maintaining an attitude that stresses personal effectiveness, self-control, empathy, and safety in responding to crisis.
- CLO\#8: Outline and implement self-care strategies for persons who intervene in crisis situations. Formulate a plan of self-care. (ILO: Critical Thinking)


## ES 268 - Emergency Service Rescue

## 3 Credit(s)

Prerequisite(s): ES 131 or current EMT.

Course Description: Introduces elementary procedures of rescue practices, systems, components, support, and control of rescue operations. Includes techniques and tools of patient extrication and rescue and emphasizes their applications in various emergencies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the incident management structures for various rescue situations.
- CLO\#2: Demonstrate basic rope rescue techniques, including knots, anchors, and systems.
- CLO\#3: Describe rescue procedures for a confined space emergency.
- CLO\#4: Explain limitations and requirements during confined space and trench rescue situations.
- CLO\#5: Demonstrate vehicle extrication procedures.
- CLO\#6: Explain safety and procedural elements of water rescue.
- CLO\#7: Demonstrate safe work practices during rescue. (ILO: Critical Thinking)


## ES 280 - Cooperative Work Experience/Emergency Services

## 3 Credit(s)

Prerequisite(s): ES 132 or FRP 251 and permission of CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, students should complete this course within the last two terms of their certificate or degree. This is a variable credit course. See advisor for any questions.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Understand and demonstrate the importance of completing forms accurately and meeting deadlines. (ILO: Communication)
- CLO\#2: Understand and demonstrate the importance of an acceptable work ethic as described in the student's learning objectives. (ILO: Critical Thinking)
- CLO\#3: Understand and demonstrate good work performance (student's learning objectives).
- CLO\#4: Understand the importance of following instructions and meeting deadlines.
- CLO\#5: Understand and demonstrate a professional presence.
- CLO\#6: Make contacts which will help in obtaining employment.


## ES 295 - Health and Fitness for Emergency Service Workers

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Provides students with the necessary health and wellness foundation needed prior to entering the emergency services fields of firefighting, paramedicine or law enforcement. Students receive an overview of the key topics that promote a life of health and wellness. Students are given the opportunity to assess their current lifestyles and their relationships to wellness, physical fitness, nutrition, and risk for illness/disease. With appropriate participation and study, students will receive a firm understanding of community health issues, and the relationship of lifestyle to health and longevity so as to plan realistic shortand long-term goals for their health.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an understanding of the health and wellness trends in the fire service and other emergency service professions.
- CLO\#2: Define "healthy emergency workers"; explore wellness and disease prevention.
- CLO\#3: Understand the effects of diet, stress and exercise on healthy living and life expectancy. Evaluate his/her current state of general health and wellness, risk and personal safety in the emergency services professions.
- CLO\#4: Consider the effects of psychosomatic and spiritual health on the human body systems. Research and present a health-related issue individually or with partners/teams. (ILO: Information Literacy)


## FR 101 - First Year French I

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Introduces basic skills in French in speaking, writing, reading, and aural comprehension to the Novice Mid level. Special attention is given to developing cultural awareness. The sequence enables students to reach at least Novice High proficiency as defined by the guidelines of the American Council on the Teaching of Foreign Languages (ACTFL). FR101 / FR 102 / FR 103 must be taken in sequence.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly about basic life skills topics with those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior.
- CLO\#3: Use learned vocabulary words, phrases, and expressions to describe and express important ideas on a range of topics, both orally and in writing. (ILO: Communication)
- CLO\#4: Comprehend and explain important ideas and some details from simple authentic audio and video sources.
- CLO\#5: Explain important ideas and basic details in face-to-face interactions when speech is limited and basic.


## FR 102 - First Year French II

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement, and FR 101
Course Description: Introduces basic skills in French in speaking, writing, reading, and aural comprehension to the Novice High level. Special attention is given to developing cultural awareness. The sequence enables students to reach at least Novice High proficiency as defined by the guidelines of the American Council on the Teaching of Foreign Languages (ACTFL). FR 101 / FR102 / FR 103 must be taken in sequence.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly about basic life skills topics with those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior.
- CLO\#3: Use learned vocabulary words, phrases, and expressions to describe and express important ideas on a range of topics, both orally and in writing. (ILO: Communication)
- CLO\#4: Comprehend and explain important ideas and basic details from simple authentic audio and video sources.
- CLO\#5: Explain important ideas and some details in face-to-face interactions when speech is limited and basic.


## FR 103 - First Year French III

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement, and FR 102

Course Description: Introduces basic skills in French in speaking, writing, reading, and aural comprehension to the Intermediate Low level. Special attention is given to developing cultural awareness. The sequence enables students to reach at least Novice High proficiency as defined by the guidelines of the American Council on the Teaching of Foreign Languages (ACTFL). FR 101 / FR 102 / FR103 must be taken in sequence. Courses are not suitable for heritage speakers.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly about basic life skills topics with those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior.
- CLO\#3: Use learned vocabulary words, phrases, and expressions to describe and express important ideas on a range of topics, both orally and in writing. (ILO: Communication)
- CLO\#4: Comprehend and explain important ideas and basic details from simple authentic audio and video sources.
- CLO\#5: Explain important ideas and some details in face-to-face interactions when speech is limited and basic.


## FRP 199-Special Studies: Fire Science

## Var. (1-3) Credit(s)

Prerequisite(s): Some level of emergency training or background is suggested (i.e. Emergency Medical Responder, EMT, Firefighter, etc.).

Course Description: Includes a variety of workshops focusing on Fire Science. The topics include areas that improve and develop skills and new methods. They also provide training for career advancement and meet the Oregon Department of Public Standards and Training accredited topics when applicable.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Work through incident management structures for various rescue and suppression situations. (ILO: Communication)
- CLO\#2: Use skills obtained to prepare for career and promotional exams.
- CLO\#3: Variable, depending on content.


## FRP 211 - Hiring Practices in the Fire Service

## 3 Credit(s)

Course Description: Covers methods of preparation for interviews, and tips on appearance, language usage, and interaction. Practice interviews are followed with critique sessions and tips on identifying and eliminating weaknesses.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to able to speak effectively in front of a group. (ILO: Communication)
- CLO\#2: Prepare and articulate answers to interview questions in high pressure situations.
- CLO\#3: Be able to organize thoughts and articulate them to an interviewer.
- CLO\#4: Display confidence and authority without appearing over-confident.


## FRP 233 - Firefighter Safety and Survival

## 3 Credit(s)

Prerequisite(s): FRP 251 or Instructor approval.
Course Description: Introduces 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.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Work effectively as an individual and in a team to complete complex tasks in lab scenarios. (ILO: Critical Thinking)
- CLO\#2: Explain the concept empowering all emergency services personnel to stop unsafe acts.
- CLO\#3: Apply concepts learned in tool use and function in a hands-on lab setting.
- CLO\#4: Describe how the National Highway Transportation Administration rules and regulations are implemented in fire agencies to promote safety.


## FRP 242 - Introduction to Codes and Ordinances

## 3 Credit(s)

Course Description: Studies codes used in the fire service that provide students with the knowledge needed to explain how to effectively apply the codes and associate historic fires with the development of the codes used today.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the purpose of fire codes and be able to determine how they are applied in various occupancy types. (ILO: Critical Thinking; Information Literacy)
- CLO\#2: Understand the differences of various types of codes including building, mechanical, residential, high rise, electrical, housing and wildland interface, and when the various types are applied.
- CLO\#3: Describe the legal aspects of code enforcement including the legal responsibilities and the enforcement authority of the authority having jurisdiction.
- CLO\#4: Use the International Fire Code (IFC) code book, to select the appropriate code sections to specific safety issues.


## FRP 249 - Fire Service Leadership

## 3 Credit(s)

Prerequisite(s): FRP 251 or approval of Instructor.
Course Description: Examines and develops leadership and supervisory skills for mid-level supervisors in the fire service.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Examine the roles and responsibilities of local government supervisors. (ILO: Critical Thinking)
- CLO\#2: Identify characteristics, attitudes, and behaviors of effective supervisors.
- CLO\#3: Apply theories of effective supervision in practice.
- CLO\#4: Demonstrates problem-solving in a group or committee setting.


## FRP 251 - Firefighter Essentials I

## 8 Credit(s)

Prerequisite(s): This is a special admission course. Completion of a competitive entry process that includes an application, interview, and physical agility test required prior to admission. Additional requirements include the OSHA respiratory fit test, drug screen, and background check.

Corequisite(s): FRP 261 or prior completion of an NFPA 1072 Hazardous Materials Awareness course.

Course Description: Introduces basic training, including the use of small tools and equipment, practice in forcible entry, use of breathing apparatus, salvage and overhaul techniques, and hose and ladder skills. Meets Department of Public Safety Standards and Training and National Fire Protection Association standards for NFPA 1001 Firefighter 1. Hands-on experiences will focus on simulated emergencies and experiences in the fire service.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Complete the donning, doffing, use, and maintenance of firefighting protective clothing. (ILO: Critical Thinking)
- CLO\#2: Identify rope types, knots, and rope hardware as it pertains to their use and describe the appropriate care and inspection of ropes.
- CLO\#3: Perform a basic building search with a potential for victim rescue.
- CLO\#4: Practice the appropriate use, storage, loading techniques, maintenance, and testing of fire hose and associated equipment.


## FRP 252 - Firefighter Essentials II

## 4 Credit(s)

Prerequisite(s): FRP 251 or approval of Instructor.

Course Description: Covers firefighting skills required to perform proficiently on the fire scene. Meets National Fire Protection Association 1001 Standards for Firefighter II.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize signs of building collapse and actions to prevent injury. Utilizes information and observations to make assumptions and decisions. (ILO: Critical Thinking)
- CLO\#2: Demonstrate low-angle rope rescue techniques. Adapts skills into solution-based actions.
- CLO\#3: Demonstrate vehicle extrication techniques. Uses established procedures and innovative solutions to solve problems.
- CLO\#4: Demonstrate application of Class B foam to a simulated flammable liquid fire. Applies past and new knowledge and skills to accomplish the fire suppression objective.


## FRP 256 - Fire Behavior and Combustion

## 3 Credit(s)

Prerequisite(s): FRP 251 or approval of Instructor, or concurrent enrollment in FRP 251.

Course Description: Assists students in gaining an understanding of the theories and fundamentals of how and why fires start and spread, as well as how they are controlled. Students will develop and enhance their knowledge of combustion reactions in solids, liquids, and gasses. Students will demonstrate an understanding of English and System International (SI) measurements, the physical and chemical properties of combustion, terminology associated with fire and combustion, and demonstrate an applied knowledge of fire suppression and fire dynamics.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Work effectively as an individual and in a team to research current Underwriters Laboratory studies and documents to evaluate current data concerning fire behavior and suppression techniques. (ILO: Critical Thinking)
- CLO\#2: Explain the importance of measurement in understanding fire behavior.
- CLO\#3: Name and explain the modes of heat transfer and how they impact fire behavior and combustion.
- CLO\#4: Describe the two main types of smoke aerosols and explain why they are important in fires.


## FRP 258 - Pumper Operator

## 2 Credit(s)

Prerequisite(s): ES 171 or approval of Instructor.
Course Description: Covers hydraulic and fluid principles, friction loss, basic fire ground hydraulics, basic fire pump construction and operating principles. This course meets the National Fire Protection Association Standard \#1002 requirements for NFPA Apparatus Equipped with a Fire Pump (Pumper).

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Operate a fire pump and use it in a safe and efficient manner. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Identify the basic types of fire apparatus and their differences and uses.
- CLO\#3: Define the responsibilities of the operator as it pertains to on-scene apparatus positioning based on type and role of apparatus.
- CLO\#4: Recognize how the physical characteristics of water are used to produce fire streams, move water, and meet fire scene objectives.


## FRP 259 - Water Supply Operations

## 2 Credit(s)

Prerequisite(s): ES 171 and FRP 258, or DPSST Driver and DPSST Pumper Operator.
Course Description: This course covers mobile water supply operations, drafting, relay and tandem pumping, apparatus service testing, and advanced troubleshooting and maintenance. This course meets the National Fire Protection Association \#1002 Mobile Water Supply Apparatus.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the apparatus inspection and maintenance procedures used to ensure equipment readiness. (ILO: Critical Thinking)
- CLO\#2: Practice the differences between the various methods of calculating hydraulics and where their uses would be appropriate.
- CLO\#3: Describe the purpose of a water shuttle dump site and how to establish one.
- CLO\#4: Identify basic trouble shooting approaches to avoid common pit falls and equipment failures.


## FRP 261 - Hazardous Materials Awareness and Operations

## 2 Credit(s)

Course Description: Covers recognizing the presence of hazardous materials/weapons of mass destruction and initial actions for the first responder. Meets NFPA 470 requirements for Hazardous Materials Awareness and Operations.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct small group activities relating to hazardous materials incidents.
- CLO\#2: Illustrate the best method of dealing with a hazardous materials incident based on the information collected.
- CLO\#3: Evaluate the information presented and utilize the data to mitigate an incident in the safest, most effective way.
- CLO\#4: Demonstrate the ability to collect information from resources, and to disseminate the information accurately, without altering or deleting important facts. (ILO: Information Literacy)


## FRP 262 - Fundamentals of Fire Prevention

## 3 Credit(s)

Course Description: Presents an overview of fire prevention concepts including public education, public relations, fire inspections, fire investigation, and other topics commonly included in fire and life safety divisions with a correlation to historic and current events.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and categorize common fire hazards. (ILO: Information Literacy)
- CLO\#2: Associate the impact significant fires have had on the fire service, and how they have improved fire prevention.
- CLO\#3: Explain how fire codes are applied to fire prevention activities.
- CLO\#4: Explain the role of public education as it relates to fire prevention.


## FRP 264 - Building Construction for Fire Protection

## 3 Credit(s)

Course Description: Covers building classification and structural features, types of material used in buildings, flame spread and fire retardants, and representative fire loads. Meets Oregon Department of Public Safety Standards and Training \#39-22 Building Construction and \#42-01 Building Construction for Fire Protection.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate understanding of importance of building construction knowledge and terms used to communicate building construction types and features, firefighter limitations and safety concerns with various types of construction. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Describe external forces that act upon a building and what affect these have in both fire and non-fire conditions including: Gravity, wind, concentrated forces, building load types, and the imposition of the various loads.
- CLO\#3: Identify and understand the structural elements of beams, columns, walls, and arches, and how they contribute to structural stability.
- CLO\#4: Understand ordinary construction including associated terms and problems. Relevant topics of ordinary construction include collapse signs and causes, wall forces, connections, floors, roofs, void spaces, fire doors, and risk analysis.


## FRP 272 - Fixed Systems and Extinguishers

## 3 Credit(s)

Course Description: Studies portable and built-in extinguishing equipment including fire alarm and detection systems, sprinkler systems, and stand-pipe protection systems for special hazards. Meets Oregon Department of Public Safety Standards and Training \#25-05 Fire Detection, Alarm, Extinguishing Systems, and \#41-04 Fire Detection and Protection Systems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe sprinkler principles, statistics, types, and classification by occupancy. (ILO: Critical Thinking)
- CLO\#2: Explain the effects of sprinkler systems supply sources and the measures taken to support the system.
- CLO\#3: Identify a wet sprinkler system, its operating principles, alarms and controls, the piping by occupancy, valves, and sprinkler location options.
- CLO\#4: Distinguish the classes of building standpipe and hose systems, the factors that determine their size and number, and the testing and maintenance of these systems.


## FRP 273 - Fire Investigation

## 3 Credit(s)

Corequisite(s): FRP 251

Course Description: Provides an overview of basic fire investigation techniques, chemistry, laws, motives for arson, and interviewing witnesses and suspects.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify key techniques of fire scene preservation and effective methods of crime scene documentation. (ILO: Critical Thinking)
- CLO\#2: Accurately and legally search for, identify, collect, and store physical evidence.
- CLO\#3: Obtain information through interviews and interrogations in order to identify and arrest suspects.
- CLO\#4: Describe the complex nature of death investigations.
- CLO\#5: Utilize appropriate technology including computer applications for conducting investigations and organizing and analyzing information.


## FRP 274 - Firefighting Strategy and Tactics

## 3 Credit(s)

Course Description: Studies fire ground tactics, procedures for developing pre-fire plans, and methods for effectively coping with fire emergency problems. Meets Oregon Department of Public Safety Standards and Training \#35-14 Basic Strategy and Tactics.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Act as a member of a team by participation in group activities that require troubleshooting and problem solving using collective input and consensus. (ILO: Critical Thinking)
- CLO\#2: Collect and evaluates printed or verbal information about a given incident.
- CLO\#3: Organize and maintains information by completion of records and reports regarding incidents and situations used in simulations.
- CLO\#4: Demonstrate the ability to collect information from resources, and to disseminate the information accurately, without altering or deleting important facts.
- CLO\#5: Act as a subordinate receiving instructions and carrying them out as directed. Also demonstrated as a supervisor - receiving progress reports and situation status reports form others.
- CLO\#6: Demonstrate proper verbal and radio communications. Student is placed in stressful scenario situation, requiring clear, concise communication Student demonstrates ability to remain calm and deliver messages clearly.


## FRP 285 - Fire Instructor I

## 3 Credit(s)

Course Description: Studies various instructional techniques and methodologies for teaching diverse learners and addresses critical issues of safety, and the legal aspects of training. Meets Oregon Department of Public Safety Standards and Training, and National Fire Protection Association \#1041 standards for Fire and Emergency Services Instructor I.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Review and adapt prepared instructional materials. Development and use of audio/visual aids and instructional techniques that are built into lesson plans.
- CLO\#2: Describe laws affecting records and disclosure of training information. Demonstrates responsible behavior regarding the legal aspects of instructional duties. (ILO: Communication)
- CLO\#3: Adjust to differences in learning styles, abilities, behaviors. Communicate with understanding, compassion and acceptance - allowing for, and adjusting to the diverse needs of students.
- CLO\#4: Deliver instructional sessions utilizing prepared course materials.


## G 100 - Fundamentals of Geology

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Studies the earth's physical processes and properties with an emphasis on understanding the scientific theories behind the geological principles.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain processes changing the earth's surface over time. (ILO: Communication)
- CLO\#2: Discuss the theory of plate tectonics in relation to the nature and origins of earthquakes.
- CLO\#3: List and describe subdivisions of the geologic time scale.
- CLO\#4: Determine physical properties of rocks and how to use them to identify different rocks.
- CLO\#5: Describe the geologic features characteristic to glacial activity.


## G 101 - Introduction to Geology I

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

## Corequisite(s): G 101L

Course Description: Studies the earth's internal structure and composition as well as the mechanics of plate tectonics. Covers the fundamentals of geology from the beginning of the solar system to the formation and interaction of continents and the ocean floor, igneous rocks including magmatic and volcanic processes, minerals, and the fundamentals of earthquake activity.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Works with teams in lab to analyze rocks and minerals. (ILO: Communication)
- CLO\#2: Read maps, charts, and other written information.
- CLO\#3: Using identification charts, books, and lab materials properly identify and classify mineral samples and igneous rocks.
- CLO\#4: Formulate math and logic problems on earthquake and plate tectonics on exams.
- CLO\#5: Describe the physical characteristics of rocks and how to use them to identify different types of rocks.


## G 101L - Introduction to Geology I Lab

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

## Corequisite(s): G 101

Course Description: Studies the earth's internal structure and composition as well as the mechanics of plate tectonics. Covers the fundamentals of geology from the beginning of the solar system to the formation and interaction of continents and the ocean floor, igneous rocks including magmatic and volcanic processes, minerals, and the fundamentals of earthquake activity.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Works with teams in lab to analyze rocks and minerals. (ILO: Communication)
- CLO\#2: Read maps, charts, and other written information.
- CLO\#3: Using identification charts, books, and lab materials properly identify and classify mineral samples and igneous rocks.
- CLO\#4: Formulate math and logic problems on earthquake and plate tectonics in lab.
- CLO\#5: Describe the physical characteristics of rocks and how to use them to identify different types of rocks.


## G 102 - Introduction to Geology II (Surface Process)

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Corequisite(s): G 102L
Recommended Prerequisite(s): G 101, G 101L

Course Description: Studies the surface processes of geology and the interaction of the internal mechanisms of the earth's dynamics. Covers the fundamentals of sedimentary and metamorphic rocks, their formation, and the surface processes that affect them. Includes the atmosphere, groundwater, running water, oceans, shoreline erosion, fossils, streams, ground water, and glaciers.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain, diagram, draw, evaluate, analyze, predict and describe the sedimentary processes and rocks. (ILO: Critical Thinking)
- CLO\#2: Explain, diagram, draw, evaluate, analyze, predict and describe the metamorphic processes and rocks.
- CLO\#3: Explain, diagram, draw, evaluate, analyze, predict and describe the weathering of rock at the surface of the earth.
- CLO\#4: Explain, diagram, draw, evaluate, analyze, predict and describe the erosion.
- CLO\#5: Explain, diagram, draw, evaluate, analyze, predict and describe the streams and stream dynamics.


## G 102L - Introduction to Geology II (Surface Process) Lab

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Corequisite(s): G 102
Recommended Prerequisite(s): G 101, G 101L

Course Description: Studies the surface processes of geology and the interaction of the internal mechanisms of the earth's dynamics. Covers the fundamentals of sedimentary and metamorphic rocks, their formation, and the surface processes that affect them. Includes the atmosphere, groundwater, running water, oceans, shoreline erosion, fossils, streams, ground water, and glaciers.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Works with teams in lab to analyze rocks and minerals. (ILO: Communication)
- CLO\#2: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of sedimentary processes and rocks.
- CLO\#3: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of metamorphic processes and rocks.
- CLO\#4: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of weathering of rock at the surface of the earth.
- CLO\#5: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of erosion.
- CLO\#6: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of streams and stream dynamics.


## G 103 - Introduction to Geology III (Historical)

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Corequisite(s): G 103L
Recommended Prerequisite(s): G 101, G 101L and G 102, G 102L
Course Description: Covers the history of the evolution of the earth through the ages. Studies the formation of the universe, the solar system, and the beginning of the earth. Looks at the fossil record, glaciers, arid lands, the earth's resources, depositional environments, and the earth's history. Special
emphasis is given to the geology of southern Oregon and various provinces of the in the Pacific Northwest when possible.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of the different types of glaciers as well as their characteristics and activities. (ILO: Communication)
- CLO\#2: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of economic importance/impact of geologic activity.
- CLO\#3: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of geologic evolution and its relationship to paleontology and geologic time.
- CLO\#4: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of geologic history of North America.


## G 103L - Introduction to Geology III (Historical) Lab

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Corequisite(s): G 103
Recommended Prerequisite(s): G 101, G 101L and G 102, G 102L
Course Description: Covers the history of the evolution of the earth through the ages. Studies the formation of the universe, the solar system, and the beginning of the earth. Looks at the fossil record, glaciers, arid lands, the earth's resources, depositional environments, and the earth's history. Special emphasis is given to the geology of southern Oregon and various provinces of the Pacific Northwest when possible.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Works with teams in lab to analyze rocks and minerals. (ILO: Communication)
- CLO\#2: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of the different types of glaciers as well as their characteristics and activities.
- CLO\#3: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of economic importance/impact of geologic activity.
- CLO\#4: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of geologic evolution and its relationship to paleontology and geologic time.
- CLO\#5: Explain, diagram, draw, evaluate, analyze, predict, describe or apply knowledge of geologic history of North America.


## GEOG 100 - Introduction to Physical Geography

## 3 Credit(s)

Prerequisite(s): WR 115 or BT 113 or designated placement.
Course Description: Builds an understanding of physical geography by examining the Earth's dimensions,
energy balance, atmospheric characteristics (air temperature, moisture, precipitation, circulation, weather patterns, climate types and climate change), internal structure (including plate tectonics, earthquakes and volcanoes), weathering and mass wasting processes, fresh water and hydrology, landforms made by various agents (running water, wind, waves, glaciers), global soils, and biogeographic processes.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define and apply the concepts of physical geography in understanding current world events related to processes in the physical environment.
- CLO\#2: Describe geographical concepts, with an emphasis on physical geography. Describe the major concepts and interactions related to the major physical environments: climates, landforms, and ecosystems.
- CLO\#3: Identify and explain possible human impacts on Earth's physical systems and resulting consequences thereof. (ILO: Critical Thinking)
- CLO\#4: Identify sustainable solutions to human-caused effects on Earth's physical systems.


## GEOG 110 - Introduction to Human Geography

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Surveys world patterns of culture, population, migration, language, religion, identity, and political systems. Examines the geographies of human development, including globalization, urban areas, agriculture, industry and services and includes a focus on environmental sustainability. Emphasizes connections through the five themes of human geography: Movement, Region, Human-Environment Interaction, Location, and Place.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define and apply the concepts of human and cultural geography to current world events, including globalization, geopolitics, and developing nations.
- CLO\#2: Explain geographical concepts, with an emphasis on human/environment interaction and physical geography.
- CLO\#3: Discuss and evaluate diverse human values and points of view, including the roles of language, religion, political/economic systems, and geographies of identity in human development. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#4: Identify sustainable practices related to human development, including and recognizing the roles of industry and agriculture in sustainable development.
- CLO\#5: Locate and analyze geographic data for world cultures and regions, including data on world human population growth and comparisons of rural and urban areas.


## GEOG 120 - World Regional Geography

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Examines the eleven regions of the world and their interconnections. Perspectives from physical, political, historical, economic, and cultural geography are used to characterize the individual
regions and the ways in which they are knit together into a spatial framework.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain geographical concepts with an emphasis on human/environment interaction and geopolitics.
- CLO\#2: Discuss and evaluate diverse human values and points of view.
- CLO\#3: Identify and create sustainable practices related to human development.
- CLO\#4: Locate and analyze geographic data for world cultures and regions. (ILO: Information Literacy)


## GS 104 - Physical Science: Physics

## 3 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math or designated placement, and RD 90 or WR 91, or designated placement.

Corequisite(s): GS 104L

Recommended Prerequisite(s): MTH 65

Course Description: This is the first of the general science series and is a prerequisite to many other science courses. Studies the fundamental concepts and principles of physics. Includes topics in scientific reasoning and measurement, forces, motion, energy, gravity, mechanics, heat, electricity, sound, and light. Students must enroll in lecture and laboratory sections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply algebra, dimensional analysis, and logical reasoning to solve physical science problems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Apply concepts of force and motion.
- CLO\#3: Apply concepts of momentum and energy.
- CLO\#4: Apply concepts of electricity and magnetism.
- CLO\#5: Apply concepts of waves and optics.

GS 104L - Physical Science: Physics Lab

1 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or designated placement, and RD 90 or WR 91 or designated placement.

Corequisite(s): GS 104

Recommended Prerequisite(s): MTH 65

Course Description: This is the first of the general science series and is a prerequisite to many other science courses. Studies the fundamental concepts and principles of physics. Includes topics in scientific reasoning and measurement, forces, motion, energy, gravity, mechanics, heat, electricity, sound, and light.

Students must enroll in lecture and laboratory sections.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply algebra, dimensional analysis, and logical reasoning to solve physical science problems. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Demonstrate concepts of force and motion in a laboratory setting.
- CLO\#3: Demonstrate concepts of momentum and energy in a laboratory setting.
- CLO\#4: Demonstrate concepts of electricity and magnetism in a laboratory setting.
- CLO\#5: Demonstrate concepts of waves and optics in a laboratory setting.
- CLO\#6: Interpret laboratory data to draw conclusions about general physics experiments.


## GS 107 - Physical Science: Astronomy

## 3 Credit(s)

Prerequisite(s): GS 104 and GS 104L or MTH 111Z or MTH 112 Z or MTH 251
Corequisite(s): GS 107L

Course Description: Discusses topics of astronomy including comets, moons, planets, stars, the sun, star galaxies, black holes, pulsars, and quasars. Students must enroll in lecture and laboratory sections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply algebra, dimensional analysis and logical reasoning to solve astronomy problems.
- CLO\#2: Apply concepts of force to explain how gravity and heat keep a star stable in hydrostatic equilibrium.
- CLO\#3: Categorize stars into the appropriate class (e.g., black hole vs a supernova)
- CLO\#4: Calculate the expected lifetime of a star. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#5: Compare the rocky planets to the gas planets.


## GS 107L - Physical Science: Astronomy Lab

## 1 Credit(s)

Prerequisite(s): GS 104 and GS 104L or MTH 111Z or MTH 112 Z or MTH 251

Corequisite(s): GS 107

Course Description: Discusses topics of astronomy including comets, moons, planets, stars, the sun, star galaxies, black holes, pulsars, and quasars. Students must enroll in lecture and laboratory sections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Calculate the speed a star is moving away from us using hydrogen spectral lines. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Classify types of exoplanets using data from various space agencies (e.g., NASA, ESA).
- CLO\#3: Compare wavelength range and sensitivity of current major telescopes.


## GS 108 - Physical Science: Oceanography

## 3 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math, or designated placement.

## Corequisite(s): GS 108L

Course Description: Presents a basic understanding of oceanic processes, and a comprehensive overview of the marine sciences. Designed to introduce the history of marine science, surveying ocean physics, chemistry, and biology. Presenting topics including: plate tectonics, surface current patterns, wave dynamics, tides, geologic features of the sea floor, coastlines, the life and ecology of the ocean world (marine animals and communities), marine resources, and environmental concerns. Having successfully completed this course, the student should be able to comprehend and identify the interrelationships and workings of the physical, chemical, botanical, and zoological worlds of the water.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and explain the historical context of oceanography.
- CLO\#2: Explain the geological features of oceans, coasts, and beaches using the theory of plate tectonics.
- CLO\#3: Explain the properties of seawater using physical and chemical principles.
- CLO\#4: Explain the dynamics of atmospheric and oceanic circulation and the relationship between them. (ILO: Critical Thinking)
- CLO\#5: Explain the dynamics of ocean waves, and tides.
- CLO\#6: Explain the biology and ecology of ocean life.


## GS 108L - Physical Science: Oceanography Lab

## 1 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math, or designated placement.

## Corequisite(s): GS 108

Course Description: Presents a basic understanding of oceanic processes, and a comprehensive overview of the marine sciences. Designed to introduce the history of marine science, surveying ocean physics, chemistry, and biology. Presenting topics including: plate tectonics, surface current patterns, wave dynamics, tides, geologic features of the sea floor, coastlines, the life and ecology of the ocean world (marine animals and communities), marine resources, and environmental concerns. Having successfully completed this course, the student should be able to comprehend and identify the interrelationships and workings of the physical, chemical, botanical, and zoological worlds of the water. Coastal day trip included: students should expect to pay for food, transportation, and any entrance fees.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify the organs of a shark via dissection.
- CLO\#2: Determine the geological features a model ocean.
- CLO\#3: Determine the properties of seawater using physical and chemical principles (e.g., pH, density) in a laboratory setting. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Analyze and map selected sediments from around the world.
- CLO\#5: Apply knowledge of oceanic and atmospheric currents by mapping and analyzing satellite and buoy data.
- CLO\#6: Model and interpret wave action in a laboratory setting.
- CLO\#7: Investigate the environmental impacts of invasive species and aquaculture practices.
- CLO\#8: Apply lecture and lab topics in a real world setting by visiting a local coastal region.


## GS 170-Regional Field Studies

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement. Other prerequisites may apply depending on the specific offering.

Corequisite(s): GS 170L

Course Description: Field studies involving hiking, camping, traveling by car, and possible overnight stays. Offers introductory field studies of specific Pacific Northwest regions. Involves both classroom preparation and site visits to familiarize students with the geology and surrounding landforms of the region being studied. May not be offered every year. Please check with the Department Chair.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed for individual field outings.


## GS 170L - Regional Field Studies Lab

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement. Other prerequisites may apply depending on the specific offering.

## Corequisite(s): GS 170

Course Description: Field studies involving hiking, camping, traveling by car, and possible overnight stays. Offers introductory field studies of specific Pacific Northwest regions. Involves both classroom preparation and site visits to familiarize students with the geology and surrounding landforms of the region being studied. May not be offered every year. Please check with the Department Chair.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed for individual field outings.

GS 199-Special Studies: General Science

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending on subject offerings.
Course Description: Offers individual and small group studies in a variety of science topics. May include ecological, biological, geological, and/or climatological emphasis.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, and research papers.


## GS 280-Cooperative Work Experience/General Science

## Var. (1-3) Credit(s)

Prerequisite(s): Prior arrangements with CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrates the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#2: Demonstrates good work performance (student's learning objectives).
- CLO\#3: Demonstrates a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job. (ILO: Communication)
- CLO\#4: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job.


## HC 100 - Community Health Worker

## 6 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Approved by the Oregon Health Authority, this course prepares students to be certified as community health workers in Oregon. Provides training in front-line public health care with an understanding and connection to the communities they serve. Also provides training in facilitating patient access to health and social services and to improve the quality and cultural competence of service delivery. Trains students to provide culturally appropriate health education and information, assist people in receiving the care they need, give informal counseling and guidance on health behaviors, advocate for individuals and community health needs, and provide some direct services such as first aid and blood pressure screening.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate active listening, reflecting, and rephrasing skills when communicating with patients, community partners and medical personnel. (ILO: Communication)
- CLO\#2: Demonstrate the ability to coordinate complex service delivery systems. and knowledge of available community resources, including health and social services. (ILO: Critical Thinking)
- CLO\#3: Demonstrate the ability to provide culturally appropriate health or nutrition education. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#4: Identify findings, patterns, habits, and behaviors that prevent the further development of common diseases/disorders and high-utilization of unnecessary healthcare services and use accepted terminology to describe findings, patterns, habits, and behaviors of clients. (ILO: Critical Thinking)
- CLO\#5: Demonstrate how to conduct home visitations to monitor health needs and reinforce treatment regimens, report and record abnormal findings, patterns, habits, and behaviors of clients. (ILO: Critical Thinking)


## HD 114 - Life Planning

## 2 Credit(s)

Course Description: Designed to provide students with a wide array of useful life planning and management tools. During the course, students try each of the tools to test their applicability and value in managing their own circumstances. As a final assignment, students select tools that are personally valuable and confirm their planned use beyond the course. Course is offered exclusively to TRiO SSS participants.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop strategies to increase personal success. (ILO: Critical Thinking)
- CLO\#2: Demonstrate verbal and nonverbal communication skills.
- CLO\#3: Establish personal goals and objectives.
- CLO\#4: Employ effective interview and job search techniques.
- CLO\#5: Develop networking skills to support individual study and career progression.


## HD 215 - Transfer Success

## 2 Credit(s)

Course Description: Prepares students for transfer to a 4-year college or university. Course content focuses on developing strategies for choosing a program major and a transfer institution, identification of resources to assist in the transfer process, and information for obtaining financial aid and scholarships. Students will utilize the Career Information Systems (CIS) and navigate university websites to aid in the decision-making progress. Course is offered exclusively to TRiO SSS participants.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Research different types of institutions and develop strategies for developing a career plan and the required major needed for that career. (ILO: Critical Thinking)
- CLO\#2: Demonstrate knowledge of Financial I Aid and identify how to fund education. (ILO: Communication)
- CLO\#3: Identify academic systems and where to find resources to assist in making a successful transfer.
- CLO\#4: Complete and submit a University application for transfer purposes.
- CLO\#5: Utilize internet research resources such as CIS and university websites.


## HE 112 - Emergency First Aid

## 1 Credit(s)

Course Description: Teaches students the critical skills necessary to respond to and manage a first aid, choking or sudden cardiac arrest emergency in the first few minutes until emergency medical services (EMS) arrives. Students learn skills such as how to treat bleeding, sprains, broken bones, shock and other first aid emergencies. Course allows more time for in-depth practice and testing in CPR as well as setting a scene for safety, learning about blood borne pathogens, AHA chain of survival, and the Good Samaritan Law. Upon successful completion of the written and practical portions of the course, students will receive an American Heart Association's Emergency First Aid Heartsaver® card.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Acquire and evaluate information about a victim's situation: recognize life- threatening emergencies and determine extent of injuries.
- CLO\#2: Assume a leadership role to serve injured person.
- CLO\#3: Describe the function of a first responder in the first three minutes of a rescue. (ILO: Critical Thinking)
- CLO\#4: Demonstrate the ability to quickly problem solve, allocate time in an efficient manner, and decisively perform tasks.
- CLO\#5: Self-monitor own performance of CPR and first aid techniques and correct performance/methods.
- CLO\#6: Demonstrate knowledge of emergency first aid terms and procedures in writing.


## HE 131 - Introduction to Exercise and Sport Science

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Introduces students to the field of exercise and sport science (EXSS). Upon completion of this class, students should have a good understanding of the history, the need for, current topics in, and careers available in EXSS, as well as education/ certification required for these careers. This course helps many students decide if an educational path in EXSS is something that they wish to pursue. Basic online research will also be covered to allow students to seek out accurate and reliable information about EXSS.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Articulate the history of exercise and sports science.
- CLO\#2: Identify current topics and issues within exercise and sport science.
- CLO\#3: Compare and contrast various career choices within exercise and sports science.
- CLO\#4: Identify impact of the role of parents, athletes, coaches, and teammates within sport. (ILO: Critical Thinking)
- CLO\#5: Articulate personal philosophy of exercise and sport in the context of larger professional goal or mission. (ILO: Communication)


## HE 145 - Stress Management - Healthy Living

## 1 Credit(s)

Course Description: Stress management provides a comprehensive overview of several theories and applications of managing stress. The course involves cognitive, affective, and psychomotor domains with a focus on individual student processing through in-class and out-of-class applications and reflection. Through this course, students are challenged to take responsibility for their health and lifelong learning. Stress Management/Healthy Living will provide students with an overview of key lifestyle behaviors/issues that promote a life of health and wellness: exercise, nutrition, and stress assessment, management and coping techniques will be the key topics of discussion.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Evaluate major stress theories and concepts. (ILO: Critical Thinking)
- CLO\#2: Organize key methods of stress management; interpret and present findings.
- CLO\#3: Create a personal stress management program.
- CLO\#4: Instruct group on own stress management program.


## HE 199 - Special Studies: Health and Wellness Issues

## Var. (1-3) Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Requires students to delve into issues of health that are current and relevant to each individual. Students will be supported in the research process as topics are chosen and explored from of variety of research subjects. The course will conclude with a well researched, well documented final paper that examines the topic in depth using current research as the foundation.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Propose three or more health topic suggestions for in depth research.
- CLO\#2: Articulate personal, national or global concern regarding chosen topic. (ILO: Communication)
- CLO\#3: Present findings of research: communicate written thought in a clear and organized manner to effectively inform, persuade, describe, and convey ideas. (ILO: Critical Thinking)


## HE 208 - HIV and Infectious Diseases

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Introduces students to the epidemiology of HIV/AIDS, hepatitis virus, tuberculosis, and sexually transmitted diseases. Students will examine treatment options, prevention strategies, and legal and policy issues that impact infected individuals as well as the larger community. The course also explores the social, psychological, and ethical issues surrounding these diseases and their impact on present and future generations.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate knowledge of the fundamental cause, nature, methods of prevention, control and treatment of HIV and other STDs.
- CLO\#2: Explain how virulence, dosage, and resistance influence infectious disease.
- CLO\#3: Identify individual responsibility and lifestyle behavior in the disease process. (ILO: Critical Thinking)
- CLO\#4: Communicate the implications of current social, political and economic policies on future HIV and STD transmission and prevention. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## HE 250 - Personal Health

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Examines personal and societal health topics including consumer health issues, major disease patterns, and the elements of good health. Students are required to internalize the topics on a personal level and relate them to daily life.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify the key factors and behaviors that contribute to a healthy lifestyle.
- CLO\#2: List environmental and genetic stressors.
- CLO\#3: Identify common infectious and chronic disease patterns as well as diseases that are sexually transmitted.
- CLO\#4: Evaluate personal health practices/levels of wellness relating to fitness and nutrition: create a "wellness-oriented" diet plan with optimal health practices.
- CLO\#5: Create and implement behavioral modification goals based on student's self-evaluation of personal health practices/levels of wellness in fitness, disease and health risks, personal safety, nutrition and stress levels. (ILO: Critical Thinking)


## HE 252 - First Aid/CPR

## 3 Credit(s)

Prerequisite(s): WR 90 or WR 91 or designated placement.
Course Description: Offers a basic life support plan for emergency care of cardiac victims until EMS arrives. Designed to help students recognize the signs and symptoms of a heart attack and cardiac arrest that pose a threat to life using techniques that emphasize the importance of compressions, airway management, and assisted breathing techniques (CAB). One- and two-rescuer strategies on adults, children
and infants, airway obstruction relief, use of an Automated External Defibrillator (AED) are included. The first aid, CPR, and AED section covers the critical skills needed to respond to and manage a first aid, choking or sudden cardiac arrest. Students learn how to treat bleeding, sprains, broken bones, shock, and other first aid emergencies. Community Emergency Response Team (CERT) training. Provides the basic skills necessary to respond to a community's immediate needs in the aftermath of a disaster when emergency services are not immediately available. Successful completion of the course leads to an American Heart Association's Emergency First Aid Heartsaver® card and either an American Heart Association Basic Life Support Provider card or Heartsaver CPR w/AEDcard. All cards are valid for two years.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Acquire and evaluate information of victim's situation and assume a leadership role to serve triage in a variety of emergencies.
- CLO\#2: Describe the function of a first responder at the health care provider level in the first three minutes of a rescue. (ILO: Critical Thinking)
- CLO\#3: Allocate time in an efficient, decisive manner that addresses each unique situation, and demonstrate the ability to quickly problem solve and perform tasks.
- CLO\#4: Self-monitor own performance of Community Emergency Response Team (CERT) methods, CPR and first aid techniques; correct performance/methods.
- CLO\#5: Participate as a team member and display leadership qualities by demonstrating speaking and listening skills while performing the required first responder skills.
- CLO\#6: Demonstrate knowledge of emergency first aid terms and procedures in writing.
- CLO\#7: Thinking critically, write research paper in a clear and organized manner that incorporates authoritative sources to communicate written emergency procedures and protocol for a variety of natural and manmade disasters when EMS is not forthcoming must make decisions to save lives. (ILO: Information Literacy)


## HE 253 - Wilderness First Aid

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement. Physical abilities to allow hiking and lifting equipment. Previous basic first aid knowledge and CPR useful.

Course Description: Provides individuals with foundational first aid principles and skills to be able to respond to emergencies in areas without access to immediate emergency medical services. Highlights the importance of critical thinking and decision making and provides hands-on learning using delayed-help situations. Students are trained to deal with many situations that may be encountered in the wilderness or remote location. Training focuses on teaching students to assess situations, improvise solutions using available resources to stabilize patients, and identify the best way to get patients to definitive medical treatment. Includes an overview of wilderness issues and allows students to be certified in basic wilderness first aid with successful completion of the course (in effect for two years).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the differences between the responsibilities and expectations of a wilderness remote responder as compared to an urban responder.
- CLO\#2: Describe the issues surrounding the wilderness rescuer, negligence and legal considerations. (ILO: Communication)
- CLO\#3: Describe and demonstrate the function and responsibility of a wilderness remote rescuer in the first few minutes of a medical or physical emergency event: prioritize care and properly assess a patient in the backcountry.
- CLO\#4: Demonstrate prevention and care for injuries within the full range of possibilities covered in the wilderness course including environmental injuries, physical and biological hazards, and medical issues/problems in a variety of wilderness settings.
- CLO\#5: Demonstrate evacuation and survival techniques while maintaining EMS protocols in a prolonged wilderness setting. (ILO: Critical Thinking)


## HE 259 - Care and Prevention of Athletic Injury

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Recommended Prerequisite(s): BI 121 and BI 211L

Course Description: Introduces students to prevention, treatment, and management of athletic injuries. Basic musculoskeletal anatomy will be reviewed. Students will learn to assess, treat and rehabilitate various athletic injuries. Practical skill sessions for hands-on experience will be included in the course. Physical Contact Note: Due to the nature of this course, students are advised that physical contact between Instructor-to-student or student-to-student is required (example: taping of an ankle). If you do not think you will be able to participate to the extent required by the course, students are encouraged to speak to their advisors and consider an alternative course substitution.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Perform a primary and secondary assessment of victim to determine next steps. (ILO: Communication)
- CLO\#2: Demonstrate basic risk management techniques prior to and during athletic activities including training practices, environmental considerations, protective equipment, and taping and bandaging skills (safe preparation).
- CLO\#3: Summarize a basic pathology of an injury (analysis of an injury) and demonstrate immediate and short-term care protocols.
- CLO\#4: Demonstrate how to use therapeutic exercise techniques for injuries and rehabilitation (rehabilitation and re-entry).


## HE 261 - CPR/Basic Life Support Provider

## 1 Credit(s)

Course Description: Offers a basic life support plan for emergency care of cardiac victims until EMS takes responsibility for the victim. Designed to help students recognize the signs and symptoms of a heart attack and cardiac arrest that pose a threat to life. Includes scene safety assessment, in-depth coverage of the signs and symptoms of cardiac arrest and heart attack, how an Automated External Defibrillator (AED) functions, blood borne pathogens, the Good Samaritan Law and chain of survival. Using techniques that emphasize the importance of compressions, airway management, and assisted breathing techniques (CABs), students are taught assessment skills to evaluate one- and two-rescuer strategies on adults, children and infants (excluding newborns), airway obstruction relief, and how to appropriately use an AED. Manikins are used in all intensive skill areas with ample time to practice and learn lifesaving skills. The
course is intended to introduce and enhance existing skills and concepts and leave students with a firm understanding of both their limitations as first responders and their ability to provide basic lifesaving care. Repeatable every two years, with a limit of two occurrences. The course is taught at the provider level through the American Heart Association and results in either an American Heart Association Basic Life Support Provider card or Heartsaver CPR w/AED card. All cards are valid for two years.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Acquire and evaluate information of victim's situation toassume a leadership role to triage and serve injured persons in a variety of emergency situations. (ILO: Critical Thinking)
- CLO\#2: Evaluate life threatening symptoms of heart attack, cardiac arrest, circulation issues and agonal/nonexistent breathing.
- CLO\#3: Describe the function of a first responder at the provider level in the first 3 minutes of a rescue.
- CLO\#4: Allocate time in an efficient, decisive manner that addresses each unique situation, and demonstrate the ability to quickly problem solve and perform tasks.
- CLO\#5: Self-monitor own performance of CPR and AED techniques and correct performance/methods.
- CLO\#6: Demonstrate knowledge of CPR and AED terms and procedures in writing. (ILO: Communication)
- CLO\#7: Participate as a team member and display leadership qualities by demonstrating speaking and listening skills while performing the required CPR skills.


## HE 280 - Cooperative Work Experience/Health Science

## Var. (1-2) Credit(s)

Prerequisite(s): Permission of CWE Instructor or Department Chair

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process. (ILO: Communication)
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives).


## HPE 295 - Health and Fitness for Life

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 (WR 91 substitutes for bothRD 90 and WR 90), or designated placement.

Course Description: Prepares students with the foundation needed to be successful health/PE majors and in other majors as well. Dominant topics include disease projections, essential nutrients, behavior modification, body composition, strength and endurance training, cardio-respiratory health, flexibility, the mechanics of stress and stress relief, and relationship building. Students assess lifestyles, wellness, fitness, nutrition, and risk for illness/disease as part of the course.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain demographic health changes and trends in chronic and acute diseases in the U.S. over the last 100 years. (ILO: Critical Thinking)
- CLO\#2: Explain best practices for addressing nutritional requirements for health.
- CLO\#3: Explain how lifestyle choice progressions initiate and advance cardiovascular disease, cancer, and all other diseases.
- CLO\#4: Describe the connection between stress/emotional well-being and physical wellness. (ILO: Communication)
- CLO\#5: Evaluate his/her current state of general health and wellness, risk and personal safety and make progress toward a healthy lifestyle.


## HS 100 - Introduction to Human Services

## 3 Credit(s)

Prerequisite(s): Admission to the Human Services program.
Course Description: Provides general introduction to the field of Human Services and related helping professions. Invites students to explore their own biases, values, and beliefs as they relate to choosing Human Services as a profession. Course is a required class for any Human Services degree or certificate and is a prerequisite to practicum placement.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss the broad dimensions of human services and its history.
- CLO\#2: Identify the essential skills that are required for effective and efficient delivery of services. (ILO: Communication)
- CLO\#3: Identify personal characteristics as they relate to success in the Human Services field and selection of an appropriate practicum site.
- CLO\#4: Recognize the complexities of human and social problems.


## HS 115 - Principles of Client Record Management

## 1 Credit(s)

Prerequisite(s): Admission to Human Services program
Course Description: Familiarizes students with the key concepts of clinical documentation related to screening and intake processes, assessments, treatment plans, reports, progress notes, discharge summaries, and other client-related data. Oregon Department of Human Services, American Society of

Addiction Medicine, and other professionally relevant criteria will be introduced. Students will learn to respect clients' right to privacy and confidentiality, and to appreciate the importance of accurate, timely documentation and the necessity of safeguarding client records.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the rationale for accurate record keeping.
- CLO\#2: Describe the basic contents of client records, including industry terminology, common abbreviations, etc.
- CLO\#3: Identify and describe the client's right to privacy and the importance of confidentiality.
- CLO\#4: Recognize ASAM criteria, Mini-mental Status exam, and DSM. (ILO: Informaion Literacy)
- CLO\#5: Demonstrate the use of outcome measures.


## HS 144 - Introduction to Assertiveness

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Examines assertiveness and its relationship to personality development. Focuses on responsible assertive behavior in everyday life; emphasizing communication which respects self and others.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the difference between non-assertive, aggressive, and assertive behaviors, and the dynamics each play in interpersonal communication. (ILO: Communication)
- CLO\#2: Evaluate own communication style, identifying areas to improve.
- CLO\#3: Demonstrate assertive communication skills and techniques. (ILO: Communication)
- CLO\#4: Demonstrate commitment through class attendance and active participation in class activities and assignments.


## HS 152 - Stress Management

## 1 Credit(s)

Course Description: Provides an experiential learning experience geared to developing an understanding of personal stress levels. The course provides a variety of tools to develop stress management strategies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify physiological aspects of stress.
- CLO\#2: Demonstrate and practice skills in assertive behavior including making requests, setting limits and giving feedback.
- CLO\#3: Identify the process for setting and achieving short- and long-term stress management goals. (ILO: Critical Thinking)


## HS 155 - Interviewing Theory and Techniques

## 4 Credit(s)

Prerequisite(s): HS 100 and HS 170, and admission to either a Human Services or a Family Support Services program.

Course Description: Provides theory and practice in basic counseling skills. This course is based on Carl Rogers' active listening approach. The course also helps students begin to think critically about their own counseling skills and to document the process in written format.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the phenomenological world of the client. (ILO: Critical Thinking)
- CLO\#2: Demonstrate reflection in counselor-client communication.
- CLO\#3: Demonstrate active listening skills.
- CLO\#4: Use self-evaluation skills to reflect on identification of the phenomenological world of the client and reflection in counselor-client communication.


## HS 158 - Trauma-informed Care: Theory and Practice

## 3 Credit(s)

Prerequisite(s): PSY 201

## Recommended Prerequisite(s): PSY 202

Course Description: Introduces students to the phenomenon of psychological trauma as well as the impact of physical trauma on the psychological functioning of individuals, couples and families. The course will include the history and current theories in the field, the nature of trauma, and its impact on the developing individual across various domains of functioning. Also included in this class is a survey of emerging promising practices in the healthcare field, including an exploration of the effects of working with trauma survivors on service providers and the unintended re-traumatization of survivors by social service systems. Students will explore the concept of trauma-informed care and be introduced to examples of traumainformed systems.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss the prevalence and types of trauma that impact individuals at various stages of development.
- CLO\#2: Describe the consequences of trauma for the individual and society, from a cognitive, neurobiological/physiological, and systems perspective including signs and symptoms indicative of a trauma history. (ILO: Critical Thinking)
- CLO\#3: Articulate the distinction between trauma-informed care and trauma specific services, including definitions and diagnostic criteria for PTSD and complex trauma.
- CLO\#4: Define the important elements of trauma-informed services and organizational systems, including characteristics and practices within organizations that are re-traumatizing.
- CLO\#5: Recognize an array of effective screening and assessment tools for identifying trauma history, as well as interventions designed to treat current traumatic symptoms and mediate the influence of previous trauma history on current services.
- CLO\#6: Identify vicarious trauma and of ways to minimize and manage the impact of working with trauma survivors on service providers.


## HS 170 - Introduction to Practicum

## 3 Credit(s)

Prerequisite(s): Acceptance into a Human Services Program.

Course Description: Provides background and specific skills needed to select and succeed in a practicum placement. It also provides information and a foundation for employment in the human services field by helping develop information and contacts for community agencies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define the role of practicum in the Human Services program.
- CLO\#2: Articulate interests, values, and limits as they relate to practicum and career goals. (ILO: Communication)
- CLO\#3: Identify community agencies and their mission.
- CLO\#4: Select a practicum site.
- CLO\#5: Write appropriate practicum objectives.
- CLO\#6: Catalogue and maintain course information for future reference in practicum and career placement.


## HS 175 - Ethics for Counselors

## 1 Credit(s)

Prerequisite(s): HS 100 and acceptance to the Human Services program.
Course Description: Prepares students for ethical decision making in the human services field. Includes study of selected professional Codes of Ethics. Case studies will be utilized for additional practice and integration.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the assumptions and rationale underlying the Code of Ethics for Human Services professionals and ACCBO ethical standards.
- CLO\#2: Describe the differences between law, morality and professional ethics utilizing case studies.
- CLO\#3: Define client rights and responsibilities and the legal and ethical ramifications of violating client's rights within the helping relationship.
- CLO\#4: Define confidentiality regulations and the legal and ethical ramifications of both compliance and non-compliance. (ILO: Critical Thinking)
- CLO\#5: Demonstrate an ability to recognize when a dilemma has ethical dimensions.
- CLO\#6: Outline a process for making decisions that can be used when confronted with ethical dilemmas.


## HS 185 - Equity, Diversity, and Inclusion in the Workplace

## 2 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: This community-centered course is open to businesses, non-profits, county and state agencies, or individuals who desire to develop their skills in the practices of equity, diversity and inclusion. This course consists of highly interactive sessions to help participants better understand our diverse community's complexity. The curriculum focuses on practicing self-discovery, integrating equitable practices, developing inclusive spaces, embracing anti-racist actions, fostering cultural humility, and creating a plan of action.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain how systemic oppressions impact the workplace, and identify how they impact the self.
- CLO\#2: Describe the impact of implicit biases and micro-aggressions based on race, ethnicity, age, gender, sexual orientation, social class, (dis)ability, and nationality and demonstrate tools to interrupt them. (ILO: Equity, Diversity, Inclusion and Global Consciousness )
- CLO\#3: Foster cultural humility by explaining the importance of diverse perspectives and practicing cultural self-discovery.
- CLO\#4: Create a plan of action to implement at least one new practice that will nurture equity and inclusion.


## HS 199 - Special Studies: Human Services

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending upon specific offering.
Course Description: Presents introductory special topics in human services including, but not limited to, trauma, drug and alcohol abuse, client record management, and client contact.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed.


## HS 200 - Child Abuse and Neglect

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Examines historical and contemporary perspectives on child maltreatment, including neglect, physical, sexual, and emotional abuse, and ritualistic abuse of children. The course will also touch on various type of elder abuse. Students will study the psycho-social impact of maltreatment on victims and their families, along with treatments available for survivors, abusers and their families. Students will be acquainted with the developmental, medical and legal aspects of the different types of abuse and will study the indicators of abuse, intervention, prevention, reporting criteria, and legal procedures. Formerly offered as HDFS260.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize the historical factors contributing to our current perspectives on abuse \& neglect.
- CLO\#2: Recognize basic indicators of child maltreatment.
- CLO\#3: Identify the dynamics of both familial and extra-familial abuse.
- CLO\#4: Recognize myths and facts about abuse victims, survivors and offenders. (ILO: Critical Thinking)
- CLO\#5: Delineate requirements and procedures for reporting child maltreatment.
- CLO\#6: Identify the process and rationale for termination of parental rights in child abuse cases.
- CLO\#7: Describe survivor \& offender treatment programs.


## HS 201 - Family Dynamics

## 3 Credit(s)

Prerequisite(s): Acceptance into Human Services AAS Program or Family Support Program(s) and HS 155 and PSY 201.

Course Description: Explores the dynamics of the family and its role in shaping the lives of its members. It offers a framework of understanding the influences of family, focusing on both effective and maladaptive responses to stressors such as poverty, addictions, divorce, etc. This understanding is central to the further study of how social services are designed and delivered to individuals and families in need. It is a required course in the Human Services AAS program and an elective for transfer students in human services.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe family systems models, including characteristics, structural properties and rules. (ILO: Critical Thinking)
- CLO\#2: Identify strategies employed by families for accomplishing tasks such as identity development, maintaining boundaries and managing stress/anxiety.
- CLO\#3: Delineate models of family interaction, taking into account ethnic, cultural and gender diversity issues.
- CLO\#4: Discuss the impact on the family system of internal and external stressors such as domestic violence, substance abuse, child abuse and neglect, single parenting, step-parenting etc.
- CLO\#5: Recognize the issues which impact non-traditional families, including single parent, step and blended families, same-sex parented families, and families without children.


## HS 202 - Counseling Chemically Dependent Client

## 3 Credit(s)

Prerequisite(s): HS 155 and SOC 243 or CJ 243

Course Description: Provides an overview of the scope of chemical dependency issues, including demographics of alcohol and drug use, the brain and drugs, addiction definitions, theories and dynamics, treatment modalities, denial and other psychological defenses, counseling techniques, functions and techniques of interventions and confrontations, pharmacotherapy, countertransference, codependency dynamics, relapse dynamics, psychoeducation, and self-help.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the basic theories and dynamics of chemical dependency and addiction.
- CLO\#2: Identify the basic theories and techniques of counseling chemically dependent clients.
- CLO\#3: Recognize the role and function of counselors in an addiction counseling setting. (ILO: Communication)
- CLO\#4: Identify the chemical dependency treatment system and the advantages and disadvantages of the various options.
- CLO\#5: Recognize the various influences upon chemical dependency concepts and treatment including political, economic, familial, social and cultural.
- CLO\#6: Discuss issues and intervention strategies specific to diverse populations of clients (e.g. culturally diverse people, people with disabilities, older adults, children, people who are gay or lesbian, etc.).


## HS 210 - Motivational Interviewing

## 3 Credit(s)

Prerequisite(s): HS 155 and HS 202

Course Description: Designed as the second in a two-course sequence (See HS 155) designed to introduce students to intentional interviewing and as a foundation for developing basic counseling skills. Focus will be on developing more intensive counseling skills with significant opportunity for hands-on practice.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Design and conduct an interview/counseling session to motivate client change through appropriate use of motivational interviewing and stages of change. (ILO: Critical Thinking)
- CLO\#2: Demonstrate motivational interviewing.
- CLO\#3: Discuss the concept of stages of change.
- CLO\#4: Demonstrate use of motivational interviewing as an approach to confrontation and conflict management in working with clients.
- CLO\#5: Develop realistic goals, an action plan, and a way to measure collaborating with a client.


## HS 260 - Group Counseling

## 4 Credit(s)

Prerequisite(s): HS 202 and HS 210 and HS 155
Course Description: Provides students with the theory and skills of small group dynamics. Focuses on group formation, development of norms, conflicts and controversy, and performance and evaluation. Includes group leader competencies; skills and attitudes; therapeutic factors; group goals and structure; client screening, stages; rules and client roles; phases of group, group problems and issues; opening and closing techniques; group ethics and client termination processes; the role of values, catharsis, transference and counter transference; self-disclosure; and working with a co-leader and counselor.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify principles of group dynamics, including group process components, developmental stage theories, group members' roles and behaviors, and therapeutic factors of group work. (ILO: Communication)
- CLO\#2: Demonstrate understanding of group leadership styles and approaches, including characteristics of various types of group leaders and leadership styles.
- CLO\#3: Identify group counseling methods, including group counselor orientations and behaviors, appropriate selection criteria and ongoing methods, and methods of client evaluation.
- CLO\#4: Recognize approaches used for other types of group work, including task groups, psychoeducational groups, and therapy groups.
- CLO\#5: Develop ethical and culturally relevant strategies for designing and facilitating groups.
- CLO\#6: Direct experiences in which students participate as co-facilitator and as members in a small group.


## HS 261A - Human Services Practicum and Seminar

## 1 Credit(s)

Prerequisite(s): Acceptance into Human Services Program(s) or Family Support Program(s) and HS 100 and HS 170

Course Description: Provides on-site clinical and community experience with human service organizations plus weekly seminars. Students are expected to arrange for a field placement with an approved agency prior to the start of class. Seminars are designed to provide supervision and help students integrate field, classroom experiences and interviewing skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop, practice, and evaluate personal skills needed to be a human service worker.
- CLO\#2: Develop and practice service skills necessary to work with clients served by the participating agency.
- CLO\#3: Develop system skills, including an awareness of the philosophy, activities, and practices of the participating agency.
- CLO\#4: Develop and implement appropriate learning objectives related to program competencies. Include coping, survival and stress management skills.
- CLO\#5: Develop active listening skills. (ILO: Communication)


## HS 261B - Human Services Practicum and Seminar

## 2 Credit(s)

Prerequisite(s): Acceptance into Human Services Program(s) or Family Support Program(s) and HS 100 and HS 170

Course Description: Provides on-site clinical and community experience with human service organizations plus weekly seminars. Students are expected to arrange for a field placement with an approved agency prior to the start of class. Seminars are designed to provide supervision and help students integrate field, classroom experiences and interviewing skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop, practice, and evaluate personal skills needed to be a human service worker.
- CLO\#2: Develop and practice service skills necessary to work with clients served by the participating agency.
- CLO\#3: Develop system skills, including an awareness of the philosophy, activities, and practices of the participating agency.
- CLO\#4: Develop and implement appropriate learning objectives related to program competencies. Include coping, survival and stress management skills.
- CLO\#5: Develop active listening skills. (ILO: Communication)


## HS 261C - Human Services Practicum and Seminar

## 3 Credit(s)

Prerequisite(s): Acceptance into Human Services Program(s) or Family Support Program(s) and HS 100 and HS 170

Course Description: Provides on-site clinical and community experience with human service organizations plus weekly seminars. Students are expected to arrange for a field placement with an approved agency prior to the start of class. Seminars are designed to provide supervision and help students integrate field, classroom experiences and interviewing skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop, practice, and evaluate personal skills needed to be a human service worker.
- CLO\#2: Develop and practice service skills necessary to work with clients served by the participating agency.
- CLO\#3: Develop system skills, including an awareness of the philosophy, activities, and practices of the participating agency.
- CLO\#4: Develop and implement appropriate learning objectives related to program competencies. Include coping, survival and stress management skills.
- CLO\#5: Develop active listening skills. (ILO: Communication)


## HS 261D - Human Services Practicum and Seminar

## 4 Credit(s)

Prerequisite(s): Acceptance into Human Services Program(s) or Family Support Program(s) and HS 100 and HS 170

Course Description: Provides on-site clinical and community experience with human service organizations plus weekly seminars. Students are expected to arrange for a field placement with an approved agency prior to the start of class. Seminars are designed to provide supervision and help students integrate field, classroom experiences and interviewing skills.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop, practice, and evaluate personal skills needed to be a human service worker.
- CLO\#2: Develop and practice service skills necessary to work with clients served by the participating agency.
- CLO\#3: Develop system skills, including an awareness of the philosophy, activities, and practices of the participating agency.
- CLO\#4: Develop and implement appropriate learning objectives related to program competencies. Include coping, survival and stress management skills.
- CLO\#5: Develop active listening skills. (ILO: Communication)


## HS 261E - Human Services Practicum and Seminar

## 5 Credit(s)

Prerequisite(s): Acceptance into Human Services Program(s) or Family Support Program(s) and HS 100 and HS 170

Course Description: Provides on-site clinical and community experience with human service organizations plus weekly seminars. Students are expected to arrange for a field placement with an approved agency prior to the start of class. Seminars are designed to provide supervision and help students integrate field, classroom experiences and interviewing skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop, practice, and evaluate personal skills needed to be a human service worker.
- CLO\#2: Develop and practice service skills necessary to work with clients served by the participating agency.
- CLO\#3: Develop system skills, including an awareness of the philosophy, activities, and practices of the participating agency.
- CLO\#4: Develop and implement appropriate learning objectives related to program competencies. Include coping, survival and stress management skills.
- CLO\#5: Develop active listening skills. (ILO: Communication)


## HS 261F - Human Services Practicum and Seminar

## 6 Credit(s)

Prerequisite(s): Acceptance into Human Services Program(s) or Family Support Program(s) and HS 100 and HS 170

Course Description: Provides on-site clinical and community experience with human service organizations plus weekly seminars. Students are expected to arrange for a field placement with an approved agency prior to the start of class. Seminars are designed to provide supervision and help students integrate field, classroom experiences and interviewing skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop, practice, and evaluate personal skills needed to be a human service worker.
- CLO\#2: Develop and practice service skills necessary to work with clients served by the participating agency.
- CLO\#3: Develop system skills, including an awareness of the philosophy, activities, and practices of the participating agency.
- CLO\#4: Develop and implement appropriate learning objectives related to program competencies. Include coping, survival and stress management skills.
- CLO\#5: Develop active listening skills. (ILO: Communication)


## HS 261G - Human Services Practicum and Seminar

## 7 Credit(s)

Prerequisite(s): Acceptance into Human Services Program(s) or Family Support Program(s) and HS 100 and HS 170

Course Description: Provides on-site clinical and community experience with human service organizations plus weekly seminars. Students are expected to arrange for a field placement with an approved agency prior to the start of class. Seminars are designed to provide supervision and help students integrate field, classroom experiences and interviewing skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop, practice, and evaluate personal skills needed to be a human service worker.
- CLO\#2: Develop and practice service skills necessary to work with clients served by the participating agency.
- CLO\#3: Develop system skills, including an awareness of the philosophy, activities, and practices of the participating agency.
- CLO\#4: Develop and implement appropriate learning objectives related to program competencies. Include coping, survival and stress management skills.
- CLO\#5: Develop active listening skills. (ILO: Communication)


## HS 265 - Introduction to Counseling Theories

## 3 Credit(s)

Prerequisite(s): HS 155
Course Description: An introductory course covering the theoretical concepts and practical applications of counseling intervention strategies for the beginning helping professional. Specific topics: the helper as a person and as a professional including values, attitudes and ethics; an understanding of cultural issues that create barriers to helping; and the counseling intervention models of Psychoanalytical, Gestalt, Existential, Cognitive-behavioral and Family therapies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify strengths and blind spots as a helping professional i.e., values and ethics.
- CLO\#2: Recognize concepts of compassion, suffering, and burnout inherent within the helping field. (ILO: Critical Thinking)
- CLO\#3: Identify and apply the basic concepts of Psychoanalytical, Gestalt, Existential, Cognitivebehavioral and Feminist therapies.
- CLO\#4: Apply the intervention modalities as well as recognize and distinguish between all methods of intervention studied.


## HS 266 - Crisis Intervention Strategies

## 3 Credit(s)

Prerequisite(s): HS 155 and HS 210

Course Description: Part of a sequence of courses teaching theory and practice in assessment, intervention, and case handling strategies for the helping professional. The current course focuses on crisis situations, including assessment of function and lethality, appraisal of the individual, intervention strategies, case management, referral resources, ethical and professional issues, and specific situational stressors which may lead to a crisis state. Emphasis is on defusing the crisis situation, enhancing mobility and selfdetermination and ensuring the safety of the client and community. Suicide and other dangers to self and others are of particular concern, as well as the personal and social implications of involuntary hospitalization, civil commitment, and follow-up treatment, including delayed stress reactions and other consequences of crisis events.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify characteristics of crisis, intervention models, and assessment of individuals in crisis situations.
- CLO\#2: Identify strengths and positive coping behaviors in their clients and to collaborate with clients for resolution of crisis situations.
- CLO\#3: Identify signs of decompensation and immobility and recognize the responsibility of the helping professional in assisting individuals to move through these states to a greater level of functioning and coping. (ILO: Communication)
- CLO\#4: Develop skills to assist individuals in finding and using appropriate resources to reduce or manage the urgency of crisis situations.
- CLO\#5: Recognize emotional intensity inherent in crisis intervention work, including personal triggers, signs of burnout and vicarious traumatization.


## HS 268-Co-occurring Disorders: Introductory Theory and Counseling

## 3 Credit(s)

Prerequisite(s): HS 155 and HS 210 and HS 202
Course Description: Designed to provide entry level scope and depth of information relative to those human services helpers who are working with clients with a dual diagnosis, to specifically mean clients with both a mental health and an addictions diagnosis. Historical assessment and treatment processes as well as current, state of the art models and systems will be studied. Relevant terminology from both the mental health and addictions arenas will be examined. Professional preparation, systems proficiencies and barriers will be evaluated. Primary field data for mental health and addictions will be surveyed for dual diagnosis context. Pharmacotherapy of the dual diagnosed client will be reviewed. Special assessment, diagnosis, and treatment issues will be examined, as well as family and community system variables. Specific dyads of mental health diagnoses with addictions diagnoses will be studied for case dynamics and special, individual considerations. Networking, team application, and multiagency collaboration will be studied. Lastly, participants will examine personal perspectives, beliefs, concerns, anxieties, and attitudes about mental health and addictions concepts and dual diagnosis clients.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop a working terminology from the mental health and addictions arenas to form a basis for dual diagnosis application.
- CLO\#2: Describe personal perspective of dual diagnoses clients and related attitudes about dual diagnosis systems issues/problems.
- CLO\#3: Research available dual diagnosis care systems locally and at state levels, to include staff interviews (small group project). (ILO: Information Literacy)
- CLO\#4: Recognize dual diagnosis treatment systems and barriers to proficient care, describe professional roles, and systems components and developmental processes, including historical and current paradigms of treatment.
- CLO\#5: Recognize primary elements and typical processes of both mental health and addictions treatment systems to understand dual diagnosis perspectives of each.
- CLO\#6: Identify standard array of pharmacological interventions used with dual diagnosis clients.
- CLO\#7: Properly describe the most common assessment, diagnostic, and treatment barriers, and offer available efficacious solutions to each barrier. (ILO: Communication)
- CLO\#8: List the cogent variables of dual diagnosis client care relative to family issues and dynamics.
- CLO\#9: Describe and plan for effective utilization of community resources for dual diagnosis clients and be aware of mental health and addictions priorities by community leaders and treatment professionals.
- CLO\#10: Verbalize an initial and "entry level" comforts with their contact and work with dual diagnosis clients within the context of appropriate support of supervision.


## HS 299 - Special Studies: Human Services

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending upon specific offering.

Course Description: Presents advanced special topics in human services including, but not limited to, trauma, drug and alcohol abuse, client record management, and client contact.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed.


## HST 104 - World Civilizations: Prehistory - Middle Ages

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Provides a survey of various aspects of civilization in regions around the world. In addition to discussion of western civilizations originating from the Near East and Europe, this course includes the civilizations of India, Africa, East Asia (China/Japan) Russia, Southeast Asia, and Latin America. Included in the reading and discussion are historical, cultural, religious, social, economic, and
political developments in the various civilizations.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the similarities among civilizations through identifying conditions which allow civilizations to develop and discuss why civilizations change or collapse.
- CLO\#2: Identify reasons for differences in culture, attitude, and religion among civilizations.
- CLO\#3: Analyze governmental and class structures, revolutions and religious movements.
- CLO\#4: Identify historical motives and actions affecting the present and identify opportunities for the future.
- CLO\#5: Identify the major world religions and political theories and their places in the growth of civilizations, politics, and culture in various locations. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## HST 105 - World Civilizations: Byzantium - Present

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Provides a survey of various aspects of civilization in regions around the world. In addition to discussion of western civilizations originating from the Near East and Europe, this course includes the civilizations of India, Africa, East Asia (China/Japan) Russia, Southeast Asia, and Latin America. Included in the reading and discussion are historical, cultural, religious, social, economic, and political developments in the various civilizations.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Analyze governmental and class structures, colonialism, racial and ethnic relations and inequalities, revolutions and religious movements. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Identify diverse human values and points of view.
- CLO\#3: Identify the challenges facing the human race in the 21 st century with a global perspective.
- CLO\#4: Identify the major world religions and political theories and their places in the growth of civilizations, politics, and culture in various locations.
- CLO\#5: Identify historical context of current tensions in key regions in the world.


## HST 199 - Special Studies: History

## Var. (1-3) Credit(s)

Prerequisite(s): Permission of instructor. Other prerequisites may vary depending on subject offerings.

Course Description: Selected topics of study in history are offered on demand through workshops, seminars, lecture, lab, and/or independent study format.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, and research papers.


## HST 201 - U.S. History through Reconstruction

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Surveys American history from early Indigenous societies through Reconstruction after the Civil War. Presents a detailed coverage of influences - political, social, ethnic, racial, colonial, religious, cultural, technical, and geographical - that have affected the history of the United States.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and explain the events and people influencing political and social change as well as contributions in culture and religious movements among the various groups within the United States.
- CLO\#2: Identify and analyze settler colonialism, racial, governmental and class structures and their impacts. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Discuss and evaluate diverse human values, and recognize historical motives and actions affecting the present and identify opportunities for the future.
- CLO\#4: Trace the historical roots of current institutions, attitudes, race relations and inequalities, political activism, and Constitutional ramifications.


## HST 202 - U.S. History: Post-Reconstruction to Present

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Surveys American history from the Progressive Era to the present. Presents a detailed coverage of influences - political, social, ethnic, racial, colonial, religious, cultural, technical, and geographical - that have affected the history of the United States.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and explain the events and people influencing political and social change as well as contributions in culture and religious movements among the various groups within the United States.
- CLO\#2: Identify and analyze settler colonialism, racial, governmental and class structures and their impacts. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Discuss and evaluate diverse human values, and recognize historical motives and actions affecting the present and identify opportunities for the future.
- CLO\#4: Identify the challenges facing the human race, American sense of democracy, legal, and environmental issues in the 21st century with a global perspective.
- CLO\#5: Identify historical context of current tensions in key regions in the world and the role of the United States in the international community.


## HST 259 - The Chicano/Latino Historical Experience

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Examines the diversity that resides within the Chicano, Mexicano, Latino, Hispanic and Caribbean cultural experience in the Americas, beginning from pre-Columbian times to the present. Covers pre-Columbian heritage, Spanish colonization, American conquest in the Mexican-American War and the Spanish American War, the Mexicans' role in American labor, Bracero Program, and the Chicano Movement. The class will provide a framework for understanding the ways in which distinctive social and cultural patterns arose, bringing awareness of contemporary expressions of identity and their historical origins. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree. Crosslisted with SOC 235.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and discuss significant events that shaped the history of the Chicana/o and Latina/o experience in the U.S.
- CLO\#2: Evaluate the difference between personal opinions and sociological explanations through the use of scientific research and the sociological imagination. (ILO: Critical Thinking)
- CLO\#3: Examine the historical and social forces which create and define contemporary Latina/o social identity, including common stereotypes and misinformed conceptualizations found in both majority and minority cultures.
- CLO\#4: Illustrate acquired knowledge regarding the social histories and cultures of Chicana/o and Latina/o peoples, including the cultural foundation and traditions of Spain and the Americas, and their influence on the experiences of Chicana/o and Latina/o peoples as residents and citizens of the United States.


## HST 280 - Cooperative Work Experience/History

## Var. (1-3) Credit(s)

Prerequisite(s): Prior arrangements with CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives. (ILO: Communication)
- CLO\#3: Demonstrate productive work performance (student's learning objectives).
- CLO\#4: Apply program knowledge, theories, principles, methods and technology.
- CLO\#5: Develop contacts which will help in obtaining employment.


## HUM 101 - Introduction to Humanities: Classical to Medieval

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.

Course Description: Provides a survey of important achievements in a variety of disciplines as they emerged during the classical periods and the medieval era, in Europe and beyond: visual arts, architecture, literature, philosophy, religions, music, theater, and criticism. This course covers the period from the first civilizations to the middle ages and is designed to help students trace the origin of the nature of human thought and creativity as they emerged and manifested themselves in the pre-industrial era. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare and contrast the major works of art, architecture, drama, literature, music, philosophy, and religions of the periods covered, and describe their effects on humankind in subsequent centuries as well as the present. (ILO: Communication)
- CLO\#2: Explain significant movements and developments in the arts and connect them with pertinent social and historical events.
- CLO\#3: Describe the conflicts between the expressive needs of the culture at large, as seen in the role that gender, race, religion, philosophy/ideology, economic status, political climate, and censorship play in the arts.
- CLO\#4: Critically examine how our own experiences and expectations help shape our responses to the arts and the views of others.


## HUM 102 - Introduction to Humanities: Renaissance to Enlightenment

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.

Course Description: Provides a survey of important achievements in a variety of disciplines as they emerged during the Renaissance and the Age of Global Encounters: visual arts, architecture, literature, philosophy, religions, music, theater, and criticism. This course covers the period from the ProtoRenaissance to the Age of Reason and is designed to help students trace the origin of the nature of human thought and creativity as they emerged and manifested themselves in the pre-industrial era. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare and contrast the major works of art, architecture, drama, literature, music, philosophy, and religions of the periods covered, and describe their effects on humankind in subsequent centuries as well as the present. (ILO: Communication)
- CLO\#2: Explain significant movements and developments in the arts and connect them with pertinent social and historical events.
- CLO\#3: Describe the conflicts between the expressive needs of the culture at large, as seen in the role that gender, race, religion, philosophy/ideology, economic status, political climate, and censorship play in the arts.
- CLO\#4: Critically examine how our own experiences and expectations help shape our responses to the arts and the views of others.


## HUM 103 - Introduction to Humanities: Romanticism to 20th Century

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.
Course Description: Provides a survey of important achievements in a variety of disciplines as they emerged during the periods of Romanticism and Realism and shaped the world of the twentieth century: visual arts, architecture, literature, music, philosophy, religions, theater, and criticism. This course covers the period from Romanticism to the present and is designed to help students trace the nature of human thought and creativity, prepare them for further study and appreciation of the arts, and encourage them to look to the humanities for insights necessary to themselves and society. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare and contrast the major works of art, architecture, drama, literature, music, philosophy, and religions of the periods covered, and describe their effects on humankind in subsequent centuries as well as the present. (ILO: Communication)
- CLO\#2: Explain significant movements and developments in the arts and connect them with pertinent social and historical events.
- CLO\#3: Describe the conflicts between the expressive needs of the culture at large, as seen in the role that gender, race, religion, philosophy/ideology, economic status, political climate, and censorship play in the arts.
- CLO\#4: Critically examine how our own experiences and expectations help shape our responses to the arts and the views of others.


## HUM 199-Special Studies: Humanities

## Var. (1-3) Credit(s)

Prerequisite(s): Varies by course.
Course Description: Offered in a number of formats: workshop, seminar, or independent study.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Varies based on course focus.

HUM 215 - Native American Arts/Cultures (Eskimo/Inuit)

4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.
Course Description: Studies the art and culture of the Eskimo/Inuit of the Arctic area from the past to the present. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the historical and geographic context of the native Eskimo/Inuit peoples. (ILO: Communication)
- CLO\#2: Describe the relationship between the peoples, their environment, and the resultant art forms.
- CLO\#3: Describe the process of acculturation: the exchange and adoption of ideas between two different cultures.
- CLO\#4: Explain how art reveals the creative person's potential and responsibilities in their culture, leading to greater self-esteem and awareness of community.


## HUM 216 - Native American Arts/Cultures (First Nations of the Northwest Coast)

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.
Course Description: Studies the art and culture of the native people of the Northwest coast from the past to the present. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the historical and geographic context of the native peoples of the Northwest coast. (ILO: Communication)
- CLO\#2: Describe the relationship between the peoples, their environment, and the resultant art forms.
- CLO\#3: Describe the process of acculturation: the exchange and adoption of ideas between two different cultures.
- CLO\#4: Explain how art reveals the creative person's potential and responsibilities in their culture, leading to greater self-esteem and awareness of community.


## HUM 217 - Native American Arts/Cultures (Nations of the Plains)

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.
Course Description: Studies the art and culture of the native people of the Great Plains from the past to the present. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the historical and geographic context of the peoples of the Great Plains. (ILO: Communication)
- CLO\#2: Describe the relationship between the peoples, their environment, and the resultant art forms.
- CLO\#3: Describe the process of acculturation: the exchange and adoption of ideas between two different cultures.
- CLO\#4: Explain how art reveals the creative person's potential and responsibilities in their culture, leading to greater self-esteem and awareness of community.


## HUM 218 - Native American Arts/Cultures (Nations of the Southwest)

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.
Course Description: Studies the art and culture of the native people of the Southwest from the past to the present. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the historical and geographic context of the native peoples of the Southwest. (ILO: Communication)
- CLO\#2: Describe the relationship between the peoples, their environment, and the resultant art forms.
- CLO\#3: Describe the process of acculturation: the exchange and adoption of ideas between two different cultures.
- CLO\#4: Explain how art reveals the creative person's potential and responsibilities in their culture, leading to greater self-esteem and awareness of community.


## HUM 219 - Native American Arts Cultures (Peoples of Mexico)

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Studies the art and culture of Pre-Columbian Mexico from the past to the present with an emphasis in placing the cultures in a historical and geographical time frame. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the historical and geographic context of the native peoples of Mexico. (ILO: Communication)
- CLO\#2: Describe the relationship between the peoples, their environment, and the resultant art forms.
- CLO\#3: Describe the process of acculturation: the exchange and adoption of ideas between two different cultures.
- CLO\#4: Explain how art reveals the creative person's potential and responsibilities in their culture, leading to greater self-esteem and awareness of community.


## HUM 280-Cooperative Work Experience/Humanities

## 1 Credit(s)

Prerequisite(s): Cooperative education is open to all students who have completed at least one-half of the required classes for their program of study, and have the recommendation of the Department Cooperative Education advisor.

Course Description: Cooperative education is a supervised program of on-the-job training for college credit in an English-related area. Students are placed in a related industry, business, agency or organization which has been approved by the College as having the interest, personnel and resources to serve as a training center. The goal of cooperative education is to provide a learning experience which enriches and strengthens the student's education, personal development, and vocational preparation. It joins educators and employers in developing the community's greatest asset-its human resources.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Gain college credit for a valid learning experience to fulfill degree or certificate requirements.
- CLO\#2: Apply classroom theory to real world job experience. (ILO: Critical Thinking)
- CLO\#3: Apply skills, gain experience, and make contacts which will help in obtaining a job after graduation.


## IS 110 - Introduction to International Studies I

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score.
Course Description: Explores various cultures of the world with an emphasis on definition of culture, values, cross-cultural communication, and ethnocentrism. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the many differences among a range of cultures.
- CLO\#2: Explain the problems encountered in cross-cultural communication.
- CLO\#3: Analyze the differences and similarities between and among other cultures as well as our own culture. (ILO: Critical Thinking)


## MEC 102 - Mechanical Fabrication

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91, or designated placement, and MTH 20 or designated placement.
Corequisite(s): CIS 120 (formerly offered as CS120), or documented proficiency.
Course Description: Introduces learners to the basic knowledge needed for assembly and the proper and safe application of hand tools. Coursework builds knowledge in the many types of bolts, wrenches, and
other fittings commonly used in industry and how to properly apply them, including pneumatic fabrication fittings. Focuses on proper techniques for checking connections and testing fittings with an emphasis on safety. Proper tool use helps in many ways, including injury avoidance, fewer product quality issues, and lower tool breakage costs.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply the basics of threaded fasteners and the proper use of fixed and adjustable wrenches. Identify bolt types, grades and threads.
- CLO\#2: Identify wrench safety rules and proper techniques in wrench usage.
- CLO\#3: Describe the basic components of a pneumatic system. (ILO: Critical Thinking)
- CLO\#4: Describe the function of types of screws and screwdrivers. Apply safe and correct usage of clamping mechanisms.
- CLO\#5: Define torque and proper application. Demonstrate safe use of portable hand tools.


## MEC 103 - Industrial Safety

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Covers the importance of workplace safety, OSHA regulations, and practicing safety in the workplace. Learners will study topics like the importance of safety policies, common causes of workplace injuries and accidents, and OSHA regulations for general workplace safety, personal protective equipment, tools, and machines.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply basic workplace concepts and practices as it applies to safety.
- CLO\#2: Demonstrate the proper use of personal protective equipment.
- CLO\#3: Identify common causes of workplace accidents and how to mitigate them. (ILO: Critical Thinking)
- CLO\#4: Perform the four factors and requirements of an effective energy-control program (ECP).


## MEC 110 - AC/DC Electrical Systems for Manufacturing

## 3 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math.
Recommended Prerequisite(s): EET 101 or EET 104

Course Description: Introduces the fundamentals of AC/DC electrical systems used for power and control in the manufacturing industry as well as commercial, agricultural and residential applications. Students learn industry-relevant skills included in subject areas such as basic electrical circuits, electrical measurement, circuit analysis, inductance and capacitance, combination circuits, and transformers. Topics covered in subject areas will include but not be limited to: safety, electrical components and wiring, electronic test instruments, tools and fasteners, electrical units and nomenclature, and parallel / series-parallel circuits. Dual listed as MFG 210.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge of AC/DC electrical terminology and theory including calculating voltage, current, resistance and power distribution in series, parallel and series/parallel circuits.
- CLO\#2: Demonstrate proper operation of electrical components and test equipment including analog meters, digital multi meters (DMMs) and DC power supplies. (ILO: Critical Thinking)
- CLO\#3: Demonstrate proper procedures for personal protection equipment (PPI), and components safety when building and troubleshooting basic circuit applications.


## MEC 114 - Safety for Industry

## 3 Credit(s)

Prerequisite(s): WR 90 or WR 91 or designated placement, and MTH 20 or designated placement.

Course Description: This course covers general shop safety for manufacturing environments and awareness of hazards. Safety topics covered include SDS sheets, personal protective equipment, lockout tag out procedures, and material handling among others.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify 7 types of Personal Protective Equipment.
- CLO\#2: Define a Hazardous Material Identification System.
- CLO\#3: Describe how to interpret a Safety Data Sheet (SDS).
- CLO\#4: Perform an electrical lockout/tagout. (ILO: Critical Thinking)
- CLO\#5: Complete the final exam with a minimum score of $76 \%$ to receive the module certificate.


## MEC 115 - Electrical Control Systems and Sensors for Manufacturing

## 3 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math.
Recommended Prerequisite(s): EET 101 or EET 104
Course Description: Introduces the functions of relay logic control circuits used in industrial, commercial and residential applications. Describes functions and application of functions covered in control logic including logic elements such as AND, OR, NOT, NOR, and NAND. Ladder diagrams are explained and learners connect, operate, and design a ladder diagram using one or more logic elements. Additional concepts include electro-pneumatic solenoid valves; sequencing control including relay operation, relay application, limit switch operation and application; and timers and advanced systems including time-delay relays, multiple cylinder control, and machine modes of operation. Electrical sensors teaches the operation of non-contact sensors and their applications in industry, such as sensing movement, detecting metal versus non-metal, and determining speed. This course covers sensors such as inductive, capacitive, magnetic reed, hall-effect and photoelectric. Dual numbered with MFG 215.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge, use, and terminology of current industry standard electrical controls and sensors.
- CLO\#2: Demonstrate proper operation of electrical components and test equipment including analog meters, digital multi meters (DMMs) and DC power supplies. (ILO: Critical Thinking)
- CLO\#3: Demonstrate proper procedures for personal protection equipment (PPI), and components safety when building and troubleshooting basic circuit applications.


## MEC 116-Quality Practices and Measurement

## 3 Credit(s)

Prerequisite(s): WR 90 or WR 91 or designated placement, and MTH 20 or designated placement.

Course Description: Examines the employee's role in producing a quality product including the benefits of quality and the costs of quality, and problem-solving tools for continuous improvement.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate competency of multi-view drawing techniques used on blueprints in industry where descriptions of size, shape, and arrangement are used to produce, service, or sell a product.
- CLO\#2: Determines which set of procedures and tools are required to gather relevant data.
- CLO\#3: Identifies need for numerical data, collects it from existing sources or creates it, and examines its relevance and accuracy. Employs computers organize, analyze, and communicate information.
- CLO\#4: Correctly identify part components.
- CLO\#5: Complete the final exam with a minimum score of $75 \%$ to receive the module certificate. (ILO: Critical Thinking)


## MEC 118 - Manufacturing Processes and Production

## 3 Credit(s)

## Prerequisite(s): MEC 116

Course Description: Investigates how to improve quality, eliminate waste, reduce lead-time and inventory, develop productive customer and supplier relationships, cycle time, Kanban, demand-pull, and order push techniques to reduce inventory in the supply chain.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the shape of common metal stock shapes.
- CLO\#2: Interpret a bill of materials.
- CLO\#3: Calculate the mechanical advantage of a lever.
- CLO\#4: Describe the function and operation of a machine tool. (ILO: Critical Thinking)
- CLO\#5: Complete the final exam with a minimum score of $74 \%$ to receive the module certificate.


## MEC 120 - Maintenance Awareness

## 4 Credit(s)

Prerequisite(s): WR 90 or WR 91 or designated placement, and MEC 110, MEC 116, MEC 118, and MTH 20 or designated placement.

Course Description: Covers the basic mechanical skills needed by a technician, including use and care of hand tools and small power tools, drilling, tapping, removal of broken bolts, studs, and helicoil insertion. Basic measuring tools and techniques are covered, as well as type and use of fasteners, lubricants and adhesives used in repair, and assembly.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of programmable logic theory, applications, and functions. Calculate and convert through various number systems and codes.
- CLO\#2: Describe the principles of hydraulic pressure and flow. Identify hydraulic leverage and fluid friction. (ILO: Critical Thinking)
- CLO\#3: Explain single acting cylinders, basic pneumatic motor circuits, and pneumatic circuit schematics.
- CLO\#4: Complete the final exam with a minimum score of $73 \%$ to receive the module certificate.


## MEC 124 - Hoisting and Rigging I

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 91), or designated placement, and MTH 63 and MEC 102.

Course Description: Teaches how to safely move loads of different shapes and sizes using a variety of methods. Rigging skills are required in many industries including manufacturing, construction, and transportation.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate hoisting and rigging principles safely.
- CLO\#2: Describe and demonstrate how to inspect a hoist.
- CLO\#3: Demonstrate how to find the center of gravity for various objects. (ILO: Critical Thinking)
- CLO\#4: Describe and demonstrate the proper use of slings, chains, spreader beams, wire and fiber rope.


## MEC 125 - Pneumatics I

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), and CIS 120 (formerly offered as CS120), or document proficiency, and MTH 63 and MEC 102.

Recommended Prerequisite(s): MFG 116

Course Description: Prepares learners to work intelligently in industry with pneumatic applications. It introduces pneumatic power and takes learners through key topics and skills in pneumatic power and safety,
pneumatic circuits, pneumatic schematics, the principles of pneumatic pressure and flow, and pneumatic speed control circuits. It covers pressure regulation, air filtration, how to connect pneumatic circuits, pneumatic cylinders, valves, and actuators, a wide array of pneumatic applications, pressure and cylinder force, pneumatic leverage, pressure and volume, and air flow resistance.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe and explain pneumatics, pneumatic safety, pressure regulators, filter function, circuit connection, branch circuits, and basic cylinders.
- CLO\#2: Explain single acting cylinders, basic pneumatic motor circuits, and pneumatic circuit schematics.
- CLO\#3: Calculate force output. Measure force, calculate retraction force, pressure and volume. State Boyle's law, calculate pressure and volume, air flow and resistance, and delta P pneumatic resistance. (ILO: Critical Thinking)
- CLO\#4: Explain air flow control and measurement. Define flow rates, flow control valves, actuator loads, speed control, and exhaust ports.
- CLO\#5: Discuss cam valves and cam-operated DCVs. Explain rapid traverse-slow feed and twoway valves.
- CLO\#6: Describe externally-piloted valves and pneumatic DCV construction. Introduction to air logic. Describe the operation of air logic cylinder sequence circuit. Describe the shuttle valve and reciprocating cylinder.


## MEC 130 - Hydraulics I

## 3 Credit(s)

## Recommended Prerequisite(s): MFG 116

Course Description: Introduces hydraulic power use and application, allowing learners to develop skills and knowledge needed to apply hydraulics in modern industry. Takes learners through key topics and skills in hydraulic power and safety, hydraulic circuits, hydraulic schematics, the principles of hydraulic pressure and flow, and hydraulic speed control circuits. Includes pumps, fluid friction, how to connect hydraulic circuits, hydraulic cylinders and valves (including needle valves), and a wide array of hydraulic applications.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define hydraulics and give an application. Describe the operation of a hydraulic power unit. Describe the function of a hydraulic schematic and basic cylinder circuits.
- CLO\#2: Describe the principles of hydraulic pressure and flow. Identify hydraulic leverage and fluid friction.
- CLO\#3: Describe the function of relief valves, check valves and flow control valves. Identify pressure control circuits. Explain sequence, pressure reducing valves.
- CLO\#4: Describe the function of a pressure sequence valve and give an application. Describe the function of a pressure reducing valve and give an application. (ILO: Critical Thinking)


## MEC 135 - Mechanical Drives I

## 4 Credit(s)

Recommended Prerequisite(s): MFG 116

Course Description: Introduces mechanical systems and develops fundamental knowledge of mechanical systems and practices. Covers basic safety, installation, key fasteners, power transmission systems, v-belt drives, chain drives, spur gear drives, and multiple shaft drives. Topics covered include learning how to select, install, adjust, troubleshoot, and repair a range of mechanical systems which are commonly found in both automated and manual machines used in every industry around the world.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper procedures for personal protection equipment (PPE), and components safety when working with mechanical drive components.
- CLO\#2: Describe the function of mechanical power transmission, rotary power, and motor foundation installation. Installing motor mounts. Measure shaft speed.
- CLO\#3: Describe the function of keyseats. Explain key assembly and key specifications. Perform work loading on a mechanical drive system. Calculate rotary power, mechanical efficiency, motor torque, and electric motor current.
- CLO\#4: List shaft specification and types of bearings, couplings and applications. Perform competency in shaft alignment. (ILO: Critical Thinking)
- CLO\#5: Describe belt drive function. Define pitch circle, pitch diameter and pitch length of belt drive systems. Learn belt tensioning, measurement and installation.
- CLO\#6: Describe chain drive function. Calculate sprocket ratios, shaft torque, and speed. Show competency in chain tensioning and sprocket alignment and chain sag.
- CLO\#7: Describe the function of spur gear drives. Define gear pitch, circle and pitch diameter. Calculate shaft and torque speeds. Spur gear operation and installation. Calculate backlash. Perform gear analysis.
- CLO\#8: Describe multi-shaft drives. Calculate the speed and torque output. Explain gear rotation alignment and installation. Name types of couplings. Perform alignment and installation.


## MEC 140 - Green Production

## 2 Credit(s)

Prerequisite(s): MEC 120
Course Description: Introduces students to workplace activities across all industries within the manufacturing sector that require the use of equipment, technologies, and processes that will improve the environmental performance of manufacturing companies.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the benefits both economically and environmentally of Green Production technologies.
- CLO\#2: Identify the 4 R's of waste. (ILO: Critical Thinking)
- CLO\#3: Complete the final exam with a minimum score of $78 \%$ to receive the module certificate.


## MEC 149 - Electrical Motor Control

4 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math.
Recommended Prerequisite(s): MEC 110 or MFG 210

Course Description: Introduces the fundamentals of electric relay control of AC electric motors found in industrial and commercial manufacturing applications. Students will gain an understanding of the operation, installation, design, and control of AC electric motor control circuits, transformers, ladder logic controls, and control relays for many common applications. Students will also develop skills in interpreting schematics, system design, motor start/stop circuits, and motor sequence control. In addition, students will be introduced to systems troubleshooting, reversing motor controls, automatic input devices and basic timer controls. Students will continue to develop skills in interpreting schematics, system design, motor start/stop circuits, and motor sequence control. Safety is emphasized throughout, highlighting motor safety, lockout/ tagout and safety interlocks.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper procedures for personal protection equipment (PPI), and components safety when building and troubleshooting basic motor control applications.
- CLO\#2: Demonstrate proper operation of AC electrical motor control components (transformers, relays, and starters) and test equipment including digital multi meters (DMMs), and AC power supplies.
- CLO\#3: Demonstrate applied knowledge of AC electrical terminology and theory including calculating voltage, current, resistance and power distribution in series, parallel and series/parallel circuits as applied to electric motor control.
- CLO\#4: Demonstrate industry-relevant skills including how to operate, install, design, and troubleshoot AC electric motor control circuits for various applications. (ILO: Critical Thinking)


## MEC 150 - PLC Motor Control

## 3 Credit(s)

Prerequisite(s): EET 104 or MEC 110 or approval of Instructor.

Course Description: Covers programmable logic controllers (PLCs) in programming and control of AC electric motors found in industrial, commercial, and residential applications. Hands-on training using the Amatrol Motor Control System 85-MT5 allows learners to gain understanding of the operation, installation, design, and troubleshooting of AC electric motor control circuits and many common applications. Students develop skills in interpreting schematics, ladder logic diagrams, system design, motor start/stop circuits, motor sequence control, reversing motor control and motor jogging. Safety is emphasized throughout, highlighting motor safety, lockout/tagout and safety interlocks.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of programmable logic theory, applications, and functions. Calculate and convert through various number systems and codes.
- CLO\#2: Demonstrate monitoring input and output operations using the PLC software to control sequencing and timing.
- CLO\#3: Demonstrate Motor Control, Interlock Process, and Seal-In Programming Control when developing PLC coding for applications. (ILO: Critical Thinking)
- CLO\#4: Document functions and operation through proper data collection and troubleshooting procedures using explanatory descriptions (verbal and written) that meet laboratory standards.
- CLO\#5: Write and interpret PLC programming code. Develop ladder logic, flowcharts, and pseudocode that reflect function, time, and process for developing PLC programming code.
- CLO\#6: Demonstrate safety practices in the work place including personal protection, equipment, component (ESD) and ROHS compliant standards for leadless and green processes for electronics manufacturing.


## MEC 151 - Programming PLCs I

## 3 Credit(s)

Prerequisite(s): MEC 150 or approval of Instructor.
Course Description: Programming PLC's I is the first of a two course series in which students learn PLC (Programmable Logic Controller) programming, operation, and applications used in industry. This course covers a wide variety of program commands, ranging from timers and contacts, stepper motor control, and PWM control that will quickly develop relevant and critical skills to be job ready in modern industry environments.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of digital logic theory, devices, and PLC systems. Calculate and convert through various number systems and codes.
- CLO\#2: Demonstrate operation of PLC system and programming operations and memory organization.
- CLO\#3: Create a project with Compact Logix and describe how to configure the I/O modules to communicate with the processor to run outputs.
- CLO\#4: Document program function using ladder logic, truth table, oral to written instructions that will be used to develop a PLC project.
- CLO\#5: Demonstrate and develop PLC projects to control motors including seal-in programming, interlock functions, and discrete control of variable speed drives. (ILO: Critical Thinking)
- CLO\#6: Create PLC projects that use control instructions, math \& logic instructions, event sequencing, motor and process functions.
- CLO\#7: Apply Factory Talk Software to monitor and interact with automated systems. View and interact for alarm conditions, publish to mobile devices, and manage human machine interactions (HMIs).
- CLO\#8: Demonstrate a working knowledge of analog inputs and outputs including variable output applications (e.g. PWM, Stepper Motors, and Absolute v Relative modes). Describe how to configure, enter, and operate a PLC project that scales a particular application.
- CLO\#9: Demonstrate safety practices in the work place including personal protection, equipment, component (ESD) and ROHS compliant standards for leadless and green processes for electronics manufacturing.


## MEC 154 - Computer Control

3 Credit(s)
Prerequisite(s): MEC 110

## Recommended Prerequisite(s): MEC 149

Course Description: Begins by introducing programmable controller (PLC) topics like PLC orientation, operation, and programming languages, and then moves on to more advanced topics like basic PLC programming, PLC motor control, and event sequencing. Specifically within this curriculum, learners will study topics including: the function of seven types of processor files; how input instructions can be controlled by output instructions; and the operation of a basic multiple actuator sequence program.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe PLC components and explain PLC ladder logic.
- CLO\#2: Create a PLC project using Rockwell automation software and write PLC program code. (ILO: Critical Thinking)
- CLO\#3: Define event driven sequencing and operate a continuous cycle actuator reciprocating program.


## MEC 199 - Mechatronics: Special Studies

## Var. (1-3) Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91substitutes for both RD 90 and WR 90) or designated placement, and MTH20 or designated placement, or permission of Instructor.

Course Description: Provides study for students in technical programs to areas linked to industry. State-of-the-art equipment is used for industry standard-level instruction.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge of mechatronics terminology and theory.
- CLO\#2: Demonstrate proper operation of electronic test equipment.
- CLO\#3: Calculate, build, test and troubleshoot components, circuits and mechanical systems.
- CLO\#4: Provide an understanding of the role of mechatronics-based technology in industry.
- CLO\#5: Demonstrate proper safety procedures for personal, lab equipment, and components. (ILO: Critical Thinking)
- CLO\#6: Document mechanical or electronic functions, data collection procedures, troubleshooting procedures, and descriptions (verbal and written) that meet program standards.


## MEC 210 - Variable Frequency AC Drives

## 2 Credit(s)

## Prerequisite(s): MEC 149

Course Description: Teaches variable frequency AC solid-state control of 3-phase electric motors. Learners develop knowledge in the operation, installation, performance analysis, troubleshooting, and design of AC solid state control using 2-wire, 3-wire, manual, and open-loop speed control. Highlights motor jogging and dynamic braking as well as programmable acceleration and deceleration.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify variable speed AC drive systems and operate a motor using a programming keyboard.
- CLO\#2: Describe how frequency affects speed on an AC Induction motor. Demonstrate proper programming of a VFD.
- CLO\#3: Explain ramping, special acceleration and braking using variable AC drive.
- CLO\#4: Troubleshoot parameter and fault code. (ILO: Critical Thinking)


## MEC 226 - Pneumatics II

## 2 Credit(s)

## Prerequisite(s): MEC 125

Course Description: Builds on the basic pneumatics skills to teach intermediate pneumatic components and system applications. Learners will gain industry-relevant skills related to these new topics including operation, installation, performance analysis, maintenance, and design. These topics include cam-operated valves, cylinder sequencing with cam valves, cylinder deceleration circuits, pilot-operated DCVs, shuttle valves, air logic components, air logic design, air filters, filter selection, filter maintenance, water removal techniques, air dryers, after-coolers, water traps, air lubricators, and component maintenance.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Design a pneumatic Circuit to sequence two cylinders.
- CLO\#2: Connect and operate an Air Logix circuit to control a reciprocating cylinder.
- CLO\#3: Disassemble, inspect and service a pneumatic cylinder. (ILO: Critical Thinking)


## MEC 227 - Pneumatics III

## 2 Credit(s)

Prerequisite(s): MEC 226
Course Description: Along with advanced pneumatic principles students will also learn about pneumatic cylinder loads, cylinder applications, quick exhaust valves, motor loads, air bearings, component sizing, air compressor types, air compressor operation, flow measurement, compressor performance, and pneumatic component maintenance.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain how a regulator and a 3-way valve can be used in a double-acting cylinder application.
- CLO\#2: Describe converting between units of water column and units of water pressure.
- CLO\#3: Describe two methods of measuring air compressor flow rates. (ILO: Critical Thinking)


## MEC 228 - Pneumatic Troubleshooting

## 3 Credit(s)

Prerequisite(s): MEC 226

Course Description: Covers major topics like troubleshooting air preparation, actuators, valves, vacuum systems, and pneumatic systems. Specifically, learners will study objectives such as pressure test points; symptoms and causes of regulator failure; inspection and troubleshooting a vacuum cup; and troubleshooting zero pressure.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define pneumatic troubleshooting and explain its importance.
- CLO\#2: Identify schematic symbols of a pneumatic system.
- CLO\#3: Troubleshoot a pneumatic cylinder using an in-circuit test. (ILO: Critical Thinking)
- CLO\#4: Demonstrate proper safety practices in the lab and workplace.


## MEC 231 - Hydraulics II

## 4 Credit(s)

## Prerequisite(s): MEC 130

Course Description: Builds on basic hydraulic skills teaching hydraulic components and system applications. Students will learn industry-relevant skills related to new topics including operation, installation, performance analysis and design. These topics include accumulator sizing, system design, circuit applications, component operation/installation, pilot-operated directional control valves (DCVs), two-stage directional control valves, cam-operated directional control valves (DCVs), DCV spool center types and applications, cylinder types and mountings, pressure-compensated flow control valves, pilot-operated check valves, direct-operated relief valves, non-compensated flow control valves, rapid traverse slow feed circuits, cylinder sequencing, remote pressure control, pump unloading circuits, and p-port check valves.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe and explain the terms used to specify hydraulic DCVs. Describe the function of two positions, cam and pilot operated DCVs.
- CLO\#2: Identify regeneration, pressure-compensated flow control valves.
- CLO\#3: Describe the function of relief valves, check valves and flow control valves.
- CLO\#4: Explain pressure port check valve and pilot-operated valve applications. List accumulator circuits, sizing and applications. (ILO: Critical Thinking)


## MEC 232 - Hydraulics III

## 2 Credit(s)

Prerequisite(s): MEC 231
Course Description: Adds to the basic and intermediate hydraulic skills teaching advanced applications. Students will learn industry-relevant skills related to these new topics including operation, installation, performance analysis, maintenance, and design. These topics include heat exchangers, reservoirs, fluid conductors, fluid conditioning, filtration, motor performance, pump performance, system design, and
maintenance.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate selecting a hydraulic motor for a given application. (ILO: Critical Thinking)
- CLO\#2: Calculate the theoretical pump flow rate for a given displacement.
- CLO\#3: Describe the function, the construction and sizing of a reservoir.


## MEC 233 - Hydraulic Troubleshooting

## 4 Credit(s)

Prerequisite(s): MEC 231
Course Description: Teaches hydraulic troubleshooting by providing a hands-on learning station that models a real world hydraulically-powered machine and includes over 40 faults that can be inserted into the system.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Define hydraulic troubleshooting and explain its importance.
- CLO\#2: Identify schematic symbols of a hydraulic system.
- CLO\#3: Troubleshoot a cylinder using an in-circuit test. (ILO: Critical Thinking)
- CLO\#4: Demonstrate proper safety practices in the lab and workplace.


## MEC 236 - Mechanical Drives II

## 4 Credit(s)

## Prerequisite(s): MEC 135

Course Description: Covers heavy duty V-belt drives including conventional, multiple, wedge, and variable speed $V$-belt drives. This course describes $V$-belt selection and maintenance by covering V-belt size specification, component identification, and troubleshooting. Learners will develop fundamental knowledge of synchronous belt drives, lubrication concepts, precision shaft alignment, and coupling. Also covered is heavy duty chain drives which describes silent chain drives, multiple strand systems, chain selection, chain lubrication, chain maintenance and troubleshooting.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to install heavy duty V-belt drives, including conventional, multiple, and variable speed. V-belt maintenance, specification, identification, and selection. Identify synchronous belt drives.
- CLO\#2: Describe the six functions of lubrication including oils, greases, and lubrication maintenance.
- CLO\#3: Perform precision shaft alignment. Describe the function and installation of elastomeric, flange, chain and grid and gear couplings. Perform coupling maintenance.
- CLO\#4: Explain shaft specification and types of bearings, couplings and applications. Show competency in shaft alignment.
- CLO\#5: Describe the operation and function of four types of sprockets and list an application of each, including silent and multiple-strand chain drives.
- CLO\#6: Perform proper chain selection. Perform chain lubrication maintenance and troubleshooting. (ILO: Critical Thinking)


## MEC 238 - Mechanical Drives III

## 4 Credit(s)

Prerequisite(s): MEC 236

Course Description: Includes the lubrication, selection, maintenance and troubleshooting of plain ball bearings. Introduces antifriction bearings by describing the two types and teaching the fundamental skills of how to identify, mechanically install, thermally install and troubleshoot those bearings. Also covered is gasket and seals such as O-ring seal, lip seal and mechanical seal, and advanced gear drives such as helical gear drives, right angle gear drives, speed reducers, and gear drive selection and maintenance.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to install solid plain, ball and roller bearings. Perform lubrication and selection of solid, plain and roller bearings
- CLO\#2: Describe antifriction bearing selection and maintenance. Explain antifriction bearing maintenance and troubleshooting.
- CLO\#3: Describe gaskets, O-rings, lip seals and mechanical seals.
- CLO\#4: Interpret advanced gear drives, helical gear drives and right angle gear drives. Describe the function of speed reducers and speed reducer maintenance.
- CLO\#5: Explain how to calculate diametrical pitch. Describe gear drive selection, gear lubrication, maintenance, and troubleshooting. (ILO: Critical Thinking)


## MEC 240 - Robotics and Computer Programming

## 3 Credit(s)

Prerequisite(s): WR 90 or WR 91, or designated placement, and MTH 60 or MTH 63 or designated placement, and CIS 120 (formerly offered as CS120)

Course Description: Provides an overview of robotic and automated systems technology. Students will be introduced to basic manufacturing techniques, robot terminology, differing types of automation, safety, basic robotic programming, interfacing robotic communications, automated work cells, and robotic applications. Robot operations and programming fundamentals will be applied by the students. Safety is emphasized throughout, highlighting operator and robot safety, lockout/tagout and safety interlocks.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper personal safety, Power up and shutdown, Manual Operation homing and end effector.
- CLO\#2: Demonstrate teaching points basic programming, movement and end effector commands.
- CLO\#3: Demonstrate looping speed control, interfacing and material handling.
- CLO\#4: Demonstrate CNC machining loading, work cell and robot application along with basic conveyor operation.
- CLO\#5: Demonstrate use of conditional commands. Flexible manufacturing cells. Subroutine commands and servo conveyor operation.
- CLO\#6: Explain Cartesian coordinate programming. Go/No-Go Inspection. Robot operator interface and parts measurement.
- CLO\#7: Demonstrate Operator input interface, relational, and arithmetic loop commands. (ILO: Critical Thinking)


## MEC 251 - Programming PLC's II

## 3 Credit(s)

## Prerequisite(s): MEC 150

Course Description: Programming PLC's II is the second of a two-course series in which students learn PLC (Programmable Logic Controller) programming, operation, and applications used in industry. This course continues with programming commands, ranging from timers and contacts, stepper motor control, and PWM control that will quickly develop relevant and critical skills to be job ready in modern industry environments. Students will also be introduced to application circuits and components for thermostatic temperature control, analog temperature control, reversing constant-speed motor control, variable speed motor control with feedback, and stepper motor homing and commissioning. These circuits include basic and advanced applications starting with discrete I/O projects and extending to projects involving analog I/O. These projects enhance a student's experience because they can actually see how a program controls real systems.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a knowledge of digital logic theory, devices, and PLC systems and codes.
- CLO\#2: Demonstrate PLC system and programming operations.
- CLO\#3: Create a project and configure the I/O modules for processor communication.
- CLO\#4: Document program function using ladder logic.
- CLO\#5: Demonstrate and develop PLC projects to control motors. (ILO: Critical Thinking)
- CLO\#6: Demonstrate use control instructions, math \& logic.
- CLO\#7: Demonstrate a working knowledge of analog inputs and outputs including variable output applications. Demonstrate proper PPE and safety practices in the work place.


## MEC 254 - PLC Troubleshooting

## 3 Credit(s)

Prerequisite(s): MEC 251
Course Description: Covers PLC (Programmable Logic Controller) programming, operation, and applications used in industry, as well as PLC troubleshooting skills, such as PLC input and output testing, software testing, and application troubleshooting. This course covers a wide variety of program commands, ranging from timers and contacts, stepper motor control, and PWM control that will quickly develop relevant and critical skills to be job ready in modern industry environments.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe two levels of troubleshooting and give an application of each.
- CLO\#2: Describe five methods of PLC troubleshooting and give an application of each.
- CLO\#3: Troubleshoot a PLC routine that performs an on/off control using an analog input. (ILO: Critical Thinking)
- CLO\#4: Describe how to troubleshoot a stepper motor.


## MEC 260A - Mechatronics: Automation Operations

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.

Course Description: This course will cover the basics such as automation operations and basic components and build to more advanced topics like pick and place feeding, gauging, and indexing. In addition, learners will look at sequencing controls systems, discrete logic, operator safety and automates machine operations.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260B - Mechatronics: Basic Component Adjustments

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.
Course Description: This course will cover the basics such as automation operations and basic components and build to more advanced topics like pick and place feeding, gauging, and indexing. Also manually overriding an electro-pneumatic valve and a magnetic motor starter.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260C - Mechatronics: Pick and Place Feeding

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.

Course Description: The Mechatronics Pick and Place Feeding teaches interfacing, problem solving, programming, sequencing and operation for pneumatic robots, material feeding systems, powered parts feeders, vacuum grippers, hall-effect sensors, and magnetic sensors. This station starts the process of assembling a working industrial directional control valve.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260D - Mechatronics: Gauging

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.
Course Description: The Mechatronics Gauging teaches interfacing, problem solving, programming, sequencing and operation for go/no-go gauging, analog sensor adjustment, non-servo electric traverse axis, synchronous belt drive, ball screw drives and part rejection/transfer. The learner performs a number of quality inspections in the process of assembling a working industrial directional control valve.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260E - Mechatronics: Indexing

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.
Course Description: Many high-speed machine processes use a rotary indexing machine to rotate the work pieces to various positions, where a different operation can be performed on each work piece and multiple work pieces can be processed at the same time.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260F - Mechatronics: Sorting and Queing

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.

Course Description: The Sorting-Queuing training station teaches interfacing, problem solving, programming, sequencing and operation for sorting, queuing, flat belt conveyors, photoelectric sensors, and inductive sensors. This station performs the role of sorting parts by material type in the process of assembling a working industrial control valve.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260G - Mechatronics: Servo Robotic Assembly

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.

Course Description: The Servo Robotic Assembly station trains students for pick and place assembly, and teaches interfacing, problem solving, programming, sequencing and operation for servo robotics, gravity feeders, pneumatic screw feeders, and part insertion. This station performs the role of assembling a working industrial directional control valve using a combination of servo robotic and pick and place technologies.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260H - Mechatronics: Torquing

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.

Course Description: Mechatronics-Torquing teaches interfacing, problem solving, programming, sequencing and operation for an automated torque assembly system, electric traverse slide, DC motor torque, variable speed motors and clutches. Covers assuring that the assembly components are properly tightened in the process of assembling a working industrial directional control valve.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 2601 - Mechatronics: Parts Storage

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.
Course Description: This Mechatronics Learning System allows learners to gain valuable skills used in inventory storage processes by studying operation, adjustment, and programming of an inventory storage system. This learning system will allow learners to practice and study operating a programmable parts storage station, adjusting a phototransistor optical interrupter switch, and designing a PLC program that provides manual/auto/ reset functions for a programmable parts storage station.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260J - Mechatronics: Electro-Hyraulic Testing

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.
Course Description: Mechatronics Electro-Hydraulic Training allows learners to gain valuable product testing skills used in automated processes by studying topics like station operation and adjustment, module sequencing, and station sequencing. This learning system will allow learners to practice and study how products are tested on an automated line, how these skills are integrated within a larger automated process, and an example of how hydraulics are utilized on an automated line.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MEC 260K - Mechatronics: Multiple Station Control

## 2 Credit(s)

Prerequisite(s): MEC 228, MEC 233, MEC 238, MEC 240, MEC 254, or permission of Instructor.

Course Description: This course will cover the basics such as automation operations and basic components and build to more advanced topics like pick and place feeding, gauging, and indexing. Discrete I/O Handshake, system startup/halt and system stop/reset.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to adhere to industry Safety procedures.
- CLO\#2: Create a plan to improve the identified skill set the student wished to work on including: Accomplish tasks, troubleshoot and complete assignment list. (ILO: Critical Thinking)
- CLO\#3: Use industry practices to facilitate Labs and learning activity packets and quizzes.


## MET 101 - Mechanical Drafting

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91

Course Description: Introduces manual mechanical drafting techniques. Focuses on drawing layout, dimensioning standards, and sectional views through a series of practical problems.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Improve basic and cognitive skills by identifying the proper use of drafting tools and material.
- CLO\#2: Identify graphic language symbols, line construction, and the rules for presentation.
- CLO\#3: Practice geometry as it applies to the preparation of drawings.
- CLO\#4: Develop techniques in preparing accurate and legible drawings and to learn dimensioning standards and techniques. (ILO: Critical Thinking)
- CLO\#5: Identify freehand sketching for graphic presentations and for preparations for drafting.
- CLO\#6: Develop supplementary views sections, pictorials and auxiliaries for better graphic presentations.


## MET 104 - Applied Shop Practices

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91, MTH 60 or MTH 63
Course Description: Covers calculation, layout, and procedure standards in applied topics in manufacturing and machining technologies. An understanding of mathematical concepts is stressed in all topics ranging from general arithmetic processes to oblique trigonometry, compound angles and numerical control.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Use mathematical problem solving techniques involving exponential, logarithmic and trigonometric functions. These techniques include data fitting and the use of graphical, symbolic, narrative and tabular methods of analysis.
- CLO\#2: Use applied technical mathematics in a variety of applications in manufacturing and engineering.
- CLO\#3: Solve analytic geometry problems involving trigonometry. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Identify the need for data, obtain it from existing sources, and evaluate its relevance and accuracy for problem solving.
- CLO\#5: Use inductive and deductive reasoning to develop and verify mathematical arguments.


## MET 105 - Blueprint Reading: Mechanical

## 3 Credit(s)

Prerequisite(s): MTH 20 and RD 90 or WR 91

## Recommended Prerequisite(s): MTH 63

Course Description: Introduces mechanical blueprints using multi-view projection, sectional views, auxiliary views, title blocks, and drawing formats which are the basis for all graphical communication in the manufacturing industry today. Knowledge of the techniques used on blueprints is necessary in the industry whenever descriptions of size, shape, and arrangement are used to produce, service, or sell a product. This course also introduces students to blueprint and drawing techniques which will be built upon with additional modules in the program. Dual numbered as WLD 104.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of words commonly used in drawings and identify their definitions as well as their abbreviations on standard industry blueprints.
- CLO\#2: Demonstrate ability to derive missing linear and/or angular dimensional values on an industry standard blueprint.
- CLO\#3: Demonstrate competency of multi-view drawing techniques used on blueprints in industry where descriptions of size, shape, and arrangement are used to produce, service, or sell a product. (ILO: Critical Thinking)
- CLO\#4: Demonstrate a working knowledge of sectional and auxiliary views, which are the two common methods used to show hidden features, and/or surfaces that are at angles other than 90 degrees.
- CLO\#5: Demonstrate a working knowledge of various standard-drawing title block notes and drawing formats used in industry.
- CLO\#6: Identify structural shapes, other views: i.e. conventional brakes, auxiliary, enlarged, alternate, developed and revolved views.
- CLO\#7: Identify and use welding symbols and abbreviations for basic joints.


## MET 111 - Computer Aided Drafting I: Mechanical (Autodesk Inventor)

## 3 Credit(s)

Prerequisite(s): CS120 or CIS 120
Course Description: Introduces students to the basic concepts of computer aided design (CAD) and drafting. These include but are not limited to: set-up workspace, sketches, features, and drawings. Working in both two- and three-dimensions as well as in solids, students will learn the operating system, command
codes, file menu, and symbol library of an industry standard, computer aided design and drafting system.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate simple sketches and extrusions.
- CLO\#2: Demonstrate ability to create industry level drawings.
- CLO\#3: Displays knowledge on 3D part model assemblies. (ILO: Critical thinking)
- CLO\#4: Determines which set of software tools will produce the desired results and understands the intent and the proper procedures for setting up the 3D CAD model and drawing.
- CLO\#5: Displays ability to use the design accelerator tools.


## MET 112 - Computer Aided Drafting II: Mechanical (Autodesk Inventor)

## 3 Credit(s)

## Prerequisite(s): MET 111

Course Description: This course provides the foundation for a hand on course that covers basic and advanced Autodesk Inventor features used to create, edit, document, and print parts and assemblies. Learners will be able to assemble advanced models through real world exercises moving the student toward an industry recognized certificate in 3D CAD design.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate sketching, constraining and dimensioning.
- CLO\#2: Demonstrate creating placed features.
- CLO\#3: Identifies ability to create and document assemblies.
- CLO\#4: Demonstrate knowledge and Advanced Modeling Techniques. (ILO: Critical Thinking)


## MET 113 - Computer Aided Drafting III: Mechanical (Autodesk Inventor)

## 3 Credit(s)

Prerequisite(s): MET 112, MET 111
Course Description: Prepares students for the Autodesk Inventor Certified User Exam. Course is designed for users who are already familiar with Inventor. It provides a series of hands on exercises and tutorial in the use of Inventor to help you prepare for the Autodesk Inventor Certified Users Exam. The text covers all the exam objectives. Each topic is covered in detail, and then is followed up with tutorials and quizzes to reinforce the material covered.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify reasons for Certification.
- CLO\#2: Demonstrate reasoning for holding a certificate.
- CLO\#3: Demonstrate User interface and Navigation objectives.
- CLO\#4: Determines part modeling objectives.
- CLO\#5: Demonstrate readiness to take User Exam. (ILO: Critical Thinking)


## MET 121 - Computer Aided Drafting I: Mechanical (SolidWorks)

## 3 Credit(s)

## Prerequisite(s): CS120 or CIS 120

Course Description: First in a three-term series introducing students to the basic concepts of computer aided design (CAD) and drafting. Course studies will be completed using SolidWorks CAD software. Studies include set-up workspace, sketches, features, and drawings. Working in both two- and three-dimensions as well as in solids, students will learn the operating system, command codes, file menu, and symbol library of an industry standard, computer aided design and drafting system.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Selects relevant goals-related activities, ranks them in order of importance, allocates time to activities, and prepares and follows schedule.
- CLO\#2: Works cooperatively with others and contributes to group with ideas, suggestions, and effort to help others learn. (ILO: Information Literacy)
- CLO\#3: Identifies need for mathematical data, obtains it from existing sources or creates it, and evaluates its relevance and accuracy. Employs computers to acquire, organize, analyze, and communicate information.
- CLO\#4: Determines which set of software tools will produce the desired results and understands the intent and the proper procedures for setting up the 3D CAD model and drawing.
- CLO\#5: Prevents, identifies, or solves problems in Solidworks 3D models, drawings and computers.


## MET 122 - Computer Aided Drafting II: Mechanical (SolidWorks)

## 3 Credit(s)

Prerequisite(s): MET 121

Course Description: Second in a three-term series, this course continues with the basic concepts of computer aided design (CAD) and drafting. Course studies will be completed using SolidWorks CAD software. Studies include set-up workspace, sketches, features and drawings. Working in both two- and three dimensions as well as in solids, students will learn the operating system, command codes, file menu, and symbol library of an industry standard, computer aided design and drafting system. Focus will be on sheet metal, weldments, and gears and gear-mates as used in manufacturing.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Selects relevant goals-related activities, ranks than in order of importance, allocates time to activities, and understands, prepares and follows schedule.
- CLO\#2: Works cooperatively with others and contributes to group with ideas, suggestions, and effort to help others learn.
- CLO\#3: Identifies mathematical data using existing sources to create accurate 3D models and analysis with FEA. (ILO: Quantitative Literacy and Reasoning)
- CLO\#4: Determines which set of software tools will produce the desired results and understands the intent and the proper procedures for setting up the 3D CAD model and drawing.
- CLO\#5: Prevents, identifies, or solves problems in Solidworks drawings and computers.


## MET 123 - Computer Aided Drafting III: Mechanical (SolidWorks)

## 3 Credit(s)

Prerequisite(s): MET 122

Course Description: As the third course in a three-term series, this is an elective in the Manufacturing Engineering Technology program. Students will use the techniques learned in MET 121 and MET 122 to reverse engineer an advanced part/project, creating solid models and modifying those models as needed; and the creation of assemblies, and industry standard mechanical drawings. Coursework will focus on continuing to develop techniques in preparing industry standard accurate, legible drawings and solid models. Students will have the opportunity to take the SolidWorks CSWA (Certified SolidWorks Associate) exam at the end of the term.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Selects relevant goals-related activities, ranks than in order of importance, allocates time to activities, and understands, prepares and follows schedule.
- CLO\#2: Works cooperatively with others and contributes to group with ideas, suggestions, and effort to help others learn.
- CLO\#3: Identifies mathematical data using existing sources to create accurate 3D models and analysis with FEA.
- CLO\#4: Determines which set of software tools will produce the desired results and understands the intent and the proper procedures for setting up the 3D CAD model and drawing.
- CLO\#5: Prevents, identifies, or solves problems in 3D model, drawings and computers.
- CLO\#6: Prepare for Certified SolidWorks Associate Exam. (ILO: Critical Thinking)


## MET 160 - Materials and Metallurgy

## 3 Credit(s)

Prerequisite(s): MTH 20 and RD 90 or WR 91, or designated placement

Recommended Prerequisite(s): MFG-101

Course Description: Studies basic metallurgy as it relates to manufacturing processes. Course introduces the identification of ferrous metals and non-ferrous metals, as well as other materials used in the manufacturing industry. Study includes mechanical and physical properties, powder metallurgy, heat treatment, alloying, crystalline structures, effects of machining, casting processes, and testing processes.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify basic components and manufacturing processes of carbon (ferrous) materials.
- CLO\#2: Identify basic components and manufacturing processes of non-ferrous materials. (ILO: Critical Thinking)
- CLO\#3: Identify basic components and manufacturing processes of non-metallic materials such as polymers and composites.
- CLO\#4: Differentiate between basic metallurgical compositions of steels, alloys and non-ferrous metals.
- CLO\#5: Identify when treatment processes are to take place and consequences of incorrect application of process.
- CLO\#6: Identify material testing procedures and their application in industry.


## MET 165 - Materials Engineering and Metallurgy

## 3 Credit(s)

Course Description: Introduces students to the characteristics of materials that are important in design, and the role of quality control in working with materials. Topics include: material quality control, tensile strength analysis, data acquisition systems, materials design, compression testing and analysis, shear and hardness testing and analysis, and design evaluation. Course also covers the principles of non-ferrous and ferrous metals, and introduces the properties, elements, and types of nonferrous and ferrous materials commonly employed in metal manufacturing. Lessons cover the basics of the non-ferrous and ferrous material manufacturing process, the elements used to create these materials, the main types of non-ferrous and ferrous materials and their properties, and the common tests used to measure metal properties.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify basic components and manufacturing processes of ferrous non-ferrous materials.
- CLO\#2: Differentiate between basic metallurgical compositions of ferrous and non-ferrous metals.
- CLO\#3: Identify steps of treatment processes and recognize consequences of incorrect application of process.
- CLO\#4: Demonstrate material testing procedures and their application in industry. (ILO: Critical Thinking)


## MFG 101 - Introduction to Manufacturing

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and MTH 20 or designated placement.

Course Description: This course is designed to develop an understanding of various manufacturing processes, materials, and possible career opportunities in manufacturing-related disciplines. The course includes an orientation to the use of personal computers in manufacturing and various industry standard software programs; introduction to problem solving and laboratory procedures, a survey of common manufacturing processes, including a history of manufacturing technology; economic considerations associated with manufacturing; the influence of product design on process selection on manufacturing taxonomy, surface finish, tolerances, and functional specifications.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the nature of manufacturing, the organizational structure of manufacturing, and what types of materials are used.
- CLO\#2: Recognize the various processes and machinery required for manufacturing.
- CLO\#3: Work cooperatively with others and contributes to group with ideas, suggestions, and effort to solve manufacturing problems. (ILO: Communication)
- CLO\#4: Locate manufacturing careers based on skill requirements and occupational opportunities.


## MFG 116 - Metrology

## 2 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or equivalent, and RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Covers basic measurement, precision measurement, direct gauging, indirect gauging, and dimensional measurements using both the U.S. customary system and the SI metric system. Course content covers the study of quality assurance through measurements taken by mechanical, electronic and optical methods as related to industrial dimensional conformance requirements.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply the fundamentals and principals of dimensional metrology. (ILO: Critical Thinking)
- CLO\#2: Work cooperatively with others and contribute to the group with suggestions and ideas to help others learn.
- CLO\#3: Identify the need for data, obtain it from existing sources or create it, and evaluates its relevance and accuracy.
- CLO\#4: Determine correct set of procedures and tools to gather relevant data.
- CLO\#5: Prevent, identify, or solve possible problems with CNC machines and other manufacturing technologies.


## MFG 121 - Manufacturing Processes I

## 4 Credit(s)

Prerequisite(s): MTH 60 or MTH 63, and MFG 116
Course Description: First of a three-term series designed to develop both an understanding of manufacturing concerns and limitations of industry as well as developing the hands-on skills needed for machining jobs in manufacturing. This course covers basic manufacturing skills and machine tooling practices. Emphasizes safety, bench work, engine lathes, vertical and horizontal mills, precision grinding, tool room operations, and production work through a series of projects.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an introductory working knowledge of manual machine usage and safe operation.
- CLO\#2: Demonstrate improved mathematics, as derived points must be calculated for project completion.
- CLO\#3: Demonstrate spatial thinking skills focusing on three-dimensional projects. (ILO: Critical Thinking)
- CLO\#4: Demonstrate proper safety practices in the lab and workplace.


## MFG 122 - Manufacturing Processes II

## 4 Credit(s)

Prerequisite(s): MFG 121

Course Description: Second of a three-term series designed to continue the development of both an understanding of manufacturing concerns and limitations of industry as well as developing the hands-on skills needed for machining jobs in manufacturing. This course continues and expands basic manufacturing skills and machine tooling practices. Continues emphasis on safety, bench work, engine lathes, vertical and horizontal mills, precision grinding, tool room operations, and production work through a series of projects.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an advanced working knowledge of manual machine usage and safe operation.
- CLO\#2: Demonstrate improved mathematics, as derived points must be calculated for project completion.
- CLO\#3: Demonstrate spatial thinking skills focusing on three-dimensional projects. (ILO: Critical Thinking)
- CLO\#4: Demonstrate proper safety practices in the lab and workplace.


## MFG 123 - Manufacturing Processes III

## 4 Credit(s)

Prerequisite(s): MFG 122
Course Description: As the third of a three-term series designed to continue the development of both an understanding of manufacturing concerns and limitations of industry as well as developing the hands-on skills needed for machining jobs in manufacturing, this course continues and expands basic manufacturing skills and machine tooling practices. This class re-emphasizes safety, bench work, lathe work, vertical mill operations, precision grinding, tool room operations, and production work through completion of a project in a prototype production run using the multiple manufacturing processes. Students will work to build, document, and evaluate all phases of a prototype production run.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an advanced working knowledge of manual machine usage and safe operation.
- CLO\#2: Demonstrate improved mathematics, as derived points must be calculated for project completion.
- CLO\#3: Demonstrate spatial thinking skills focusing on three-dimensional projects Demonstrate expanded critical thinking skills focusing on three-dimensional thinking.
- CLO\#4: Design mechanical blueprint to produce parts and develop capstone project. (ILO: Critical Thinking)
- CLO\#5: Demonstrate proper safety practices in the lab and workplace.


## MFG 140 - CNC Controls

## 2 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement, and MTH 20 or deisgnated placement.

Recommended Prerequisite(s): MTH 63 or MTH 60, and MFG 121

Course Description: This course is designed to develop an understanding as well as the capabilities and limitations of the Haas VF-Series Mill CNC Control. Basic functions and operating modes of the control are also covered as well as safety and maintenance.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe and correct steps to setup a CNC milling machine for production.
- CLO\#2: Demonstrate operation modes of the Haas controller.
- CLO\#3: Demonstrate the ability to make appropriate offsets to the controller to maintain part tolerance.
- CLO\#4: Analyze setup sheets to judge which sets of tools and/or procedures are required to complete projects. (ILO: Critical Thinking)
- CLO\#5: Safely perform routine machine maintenance according to established procedures.


## MFG 199 - Special Studies: Manufacturing

## Var. (1-3) Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement, and MTH 20 or deisgnated placement.

Course Description: Provides specialized study for students in technical programs to areas linked to industry. State-of-the-art equipment is used for industry standard-level instruction.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "Culture of safety".
- CLO\#2: Create a plan to improve the identified skill set the student wishes to work on including: process details, WPS (if applicable), timeframe and practical assignment list.
- CLO\#3: Document mechanical or manufacturing functions, data collection procedures, troubleshooting procedures, and descriptions (verbal and written) that meet specialized study standards. (ILO: Communication)


## MFG 210 - AC/DC Electrical Systems for Manufacturing

## 3 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math.

Recommended Prerequisite(s): EET 101 or EET 104
Course Description: Introduces the fundamentals of AC/DC electrical systems used for power and control in the manufacturing industry as well as commercial, agricultural and residential applications. Students learn
industry-relevant skills included in subject areas such as basic electrical circuits, electrical measurement, circuit analysis, inductance and capacitance, combination circuits, and transformers. Topics covered in subject areas will include but not be limited to: safety, electrical components and wiring, electronic test instruments, tools and fasteners, electrical units and nomenclature, and parallel / series-parallel circuits. Dual numbered as MEC 110.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge of AC/DC electrical terminology and theory including calculating voltage, current, resistance and power distribution in series, parallel and series/parallel circuits.
- CLO\#2: Demonstrate proper operation of electrical components and test equipment including analog meters, digital multi meters (DMMs) and DC power supplies. (ILO: Critical Thinking)
- CLO\#3: Demonstrate proper procedures for personal protection equipment (PPI), and components safety when building and troubleshooting basic circuit applications.


## MFG 215 - Electrical Control Systems and Sensors for Manufacturing

## 3 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math.

Course Description: Introduces the functions of relay logic control circuits used in industrial, commercial and residential applications. Describes functions and application of functions covered in control logic including logic elements such as AND, OR, NOT, NOR, and NAND. Ladder diagrams are explained and learners connect, operate, and design a ladder diagram using one or more logic elements. Additional concepts include electro-pneumatic solenoid valves; sequencing control including relay operation, relay application, limit switch operation and application; and timers and advanced systems including time-delay relays, multiple cylinder control, and machine modes of operation. Electrical sensors teaches the operation of non-contact sensors and their applications in industry, such as sensing movement, detecting metal versus non-metal, and determining speed. This course covers sensors such as inductive, capacitive, magnetic reed, hall-effect and photoelectric. Dual numbered as MEC 115.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate applied knowledge, use, and terminology of current industry standard electrical controls and sensors.
- CLO\#2: Demonstrate proper operation of electrical components and test equipment including analog meters, digital multi meters (DMMs) and DC power supplies. (ILO: Critical Thinking)
- CLO\#3: Demonstrate proper procedures for personal protection equipment (PPI), and components safety when building and troubleshooting basic circuit applications.


## MFG 220 - Research and Development Prototyping

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement, and second year standing in the program or permission of Instructor.

Course Description: A capstone project class that introduces the process of prototype development and design. Emphasizes the research and documentation required to take an idea from concept to production. Incorporates industrial design build team concepts. Designed prototypes are built in MFG 255.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Ability to allocate resources, such as time, money, and materials in order to design and complete the project(s) in an orderly fashion.
- CLO\#2: Application of interpersonal skills by students working together in teams for accomplishment of a single goal.
- CLO\#3: Demonstrate information gathering skills as research must be accomplished in order to determine the feasibility of the project. (ILO: Information Literacy)
- CLO\#4: Discover and apply the proper technology to the task required to produce the prototype.
- CLO\#5: Demonstrate critical thinking and organizational skill.
- CLO\#6: Demonstration of speaking and presentation skills as final presentations will be given to a group of their peers.


## MFG 230 - Statistics and Quality Control

## 3 Credit(s)

Prerequisite(s): MET 104 or MTH 112 Z or higher-level math.
Course Description: Introduces ISO 9000 concepts of basic gauging, inspection, elementary statistics, and statistical process control (SPC).

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Acquires relevant goals-related activities, lists them in order of importance, allocates time to activities, and understands, prepares and follows schedule.
- CLO\#2: Works cooperatively with others and contributes to group with ideas, suggestions, and effort to helps others learn.
- CLO\#3: Identifies need for numerical data, collects it from existing sources or creates it, and examines its relevance and accuracy. Employs computers organize, analyze, and communicate information. (ILO: Critical Thinking)
- CLO\#4: Identify which set of procedures, tools or software will produce the desired results and describes the intent and the proper procedures for setting up numerical analysis of data.
- CLO\#5: Using standard quality control tools to prevent, identify or solve production problems.


## MFG 240 - Robotics and Computer Programming

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120), and MTH 60 or MTH 63 or higher-level math, and WR 90 or WR 91 or designated placement.

Course Description: Provides an overview of robotic and automated systems technology. Students will be introduced to basic manufacturing techniques, robot terminology, differing types of automation, safety, basic
robotic programming, interfacing robotic communications, automated work cells, and robotic applications. Robot operations and programming fundamentals will be applied by the students. Safety is emphasized throughout, highlighting operator and robot safety, lockout/tagout and safety interlocks. Course is dual numbered with MEC 240.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper personal safety, Power up and shutdown, Manual Operation homing and end effector.
- CLO\#2: Demonstrate teaching points basic programming, movement and end effector commands.
- CLO\#3: Demonstrate looping speed control, interfacing and material handling.
- CLO\#4: Demonstrate CNC machining loading, work cell and robot application along with basic conveyor operation.
- CLO\#5: Demonstrate use of conditional commands. Flexible manufacturing cells. Subroutine commands and servo conveyor operation.
- CLO\#6: Explain Cartesian coordinate programming. Go/No-Go Inspection. Robot operator interface and parts measurement.
- CLO\#7: Demonstrate Operator input interface, relational, and arithmetic loop commands. (ILO: Critical Thinking)


## MFG 241 - Computer Numerical Control Programming - Mill (Haas)

## 4 Credit(s)

Prerequisite(s): MTH 60 or MTH 63, and MFG 121 and MFG 140, or permission of Instructor.

Course Description: Covering basic Computer Numerical Control (CNC) programming of the Haas vertical mill as well as machine setup and operation, this course emphasizes manual data input programming and manual program editing. Provides training in the operation and part programming of the modern vertical machining center. Students learn safe manufacturing methods by completing a series of assignments using one of two Haas vertical machining centers. Students will gain experience reading, writing and editing part programs using industry standard $G \& M$ code programming.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of introductory CNC Mill programming.
- CLO\#2: Demonstrate improved mathematics, as derived points must be calculated from industry standard blueprints. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Apply improved technology applications as programs must be written and tested on machinery.
- CLO\#4: Demonstrate expanded critical thinking skills and focuses three-dimensional thinking, as to how cutter paths are determined.
- CLO\#5: Demonstrate proper safety practices in the lab and workplace.


## MFG 242 - Computer Aided Manufacturing I: Mastercam 2D

## 4 Credit(s)

Prerequisite(s): MFG 241 or permission of Instructor.

Course Description: Introducing Mastercam CAD/CAM software to students, with training to design parts and toolpaths for a modern CNC vertical machining center, this course has a primary focus on Haas machines. Covering the creation of two- and three-dimensional wire frame geometry, relevant to PC based CAD/CAM work, the course includes topics such as hardware familiarity, system operation, folders, file types and structure, Mastercam menu structure and system management. Emphasis is on proper geometry creation, manipulation and management of toolpaths, relevant utilities and C-hooks, terminology, and toolbar and menu functions. Safety and efficient machining will be stressed throughout the course.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Selects relevant goals-related activities, ranks them in order of importance, allocates time to activities, and understands, prepares and follows schedule.
- CLO\#2: Works cooperatively with others and contributes to group with ideas, suggestions, and effort to help others learn.
- CLO\#3: Identifies need for mathematical data, obtains it from existing sources or creates it, and evaluates its relevance and accuracy. Employs computers to acquire, organize, analyze, and communicate information.
- CLO\#4: Determines which set of software tools will produce the desired results and understands the intent and the proper procedures for setting up the 2D CAD/CAM model and posting code for CNC mill. (ILO: Critical Thinking)
- CLO\#5: Prevents, identifies, or solves problems in 2D CAD/CAM models, code, and computers.
- CLO\#6: Demonstrate proper safety practices in the lab and workplace.


## MFG 243 - Computer Aided Manufacturing II: Mastercam 3D

## 4 Credit(s)

Prerequisite(s): MFG 242 or permission of Instructor.
Course Description: As the second of two courses for Mastercam CAD/CAM software, this course teaches students how to construct advanced 3D geometric models using geometric, free form, and derived surface types. Emphasis is on surface creation and mathematical category, applicability, association, Open-GL, shading and curves, C-hooks, terminology and analyzing. All aspects of roughing and finishing machining cycles are covered with focus on safe and correct application and use of parameters.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Selects relevant goals-related activities, ranks them in order of importance, allocates time to activities, and understands, prepares and follows schedule.
- CLO\#2: Works cooperatively with others and contributes to group with ideas, suggestions, and effort to help others learn.
- CLO\#3: Identifies need for mathematical data, obtains it from existing sources or creates it, and evaluates its relevance and accuracy. Employs computers to acquire, organize, analyze, and communicate information. (ILO: Critical Thinking)
- CLO\#4: Determines which set of software tools will produce the desired results and understands the intent and the proper procedures for setting up the 3D CAD/CAM model and posting code for CNC mill.
- CLO\#5: Prevents, identifies, or solves problems in 3D CAD/CAM models, code, and computers.
- CLO\#6: Demonstrate proper safety practices in the lab and workplace.


## MFG 244 - Computer Numerical Control Programming - Lathe (Haas)

## 3 Credit(s)

Prerequisite(s): MFG 121 and MFG 140, and MTH $112 Z$ or MET 104

Course Description: Covering basic Computer Numerical Control (CNC) programming of the Haas turning center (lathe) as well as machine set-up and operation, this course emphasizes personal and machine safety, manual data input programming, and manual program editing. Students learn safe manufacturing methods by completing a series of assignments using a Haas SL10 turning center. Students will gain experience reading, writing and editing part programs using industry standard $G \& M$ code programming.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of introductory CNC Lathe programming.
- CLO\#2: Demonstrate improved mathematics, as derived points must be calculated from industry standard blueprints. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Apply improved technology applications as programs must be written and tested on machinery.
- CLO\#4: Demonstrate expanded critical thinking skills and focuses three-dimensional thinking, as to how cutter paths are determined.
- CLO\#5: Demonstrate proper safety practices in the lab and workplace.


## MFG 245 - Mastercam 4th Axis Programming

## 3 Credit(s)

Prerequisite(s): MFG 242 or permission of Instructor.

Course Description: Introduces students to the basic fundamentals of learning how to use Mastercam software to program 4th axis parts for Haas vertical machining centers.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate an introductory working knowledge of Haas rotary indexer usage and safe operation. (ILO: Critical Thinking)
- CLO\#2: Demonstrate expanded critical thinking skills focusing on three-dimensional thinking.
- CLO\#3: Demonstrate improved mathematics, as derived points must be calculated for project completion.
- CLO\#4: Select appropriate cutting tools from Mastercam library to complete projects.
- CLO\#5: Demonstrate skills necessary to create industry standard toolpaths for 4th axis programming.
- CLO\#6: Demonstrate an proper safety practices in the lab and workplace.


## MFG 255 - Computer Integrated Manufacturing

## 4 Credit(s)

Prerequisite(s): MFG 220 or permission of Instructor.

Course Description: A capstone project course that emphasizing the design-build process as it applies to the production, documentation, and implementation of a prototype production run using multiple manufacturing processes. Students work to design, manufacture, document, and evaluate all phases of a prototype production run for a part of their own design and creation.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Allocate resources, such as time, money, materials and human resources in order to manufacture prototype parts in an orderly fashion.
- CLO\#2: Application of interpersonal skills by students collaborating together towards accomplishment of a single goal.
- CLO\#3: Apply the proper technologies required to effectively produce the prototype part student has designed. (ILO: Critical Thinking)


## MFG 262 - Lean Manufacturing

## 3 Credit(s)

Prerequisite(s): MFG 230 and MET 104 or MTH $112 Z$ or higher-level math.
Course Description: Developing an understanding of, including the limitations of, lean manufacturing as it applies to the manufacturing industry and business, this course covers the basics of lean; TAKT time; value stream mapping; current and future state; KanBan systems; tracking and removing production wastes; running effective meetings; and team building.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the process/applications of Lean Manufacturing.
- CLO\#2: Apply Lean Manufacturing to create and examine value stream maps (current and future state).
- CLO\#3: Recognize errors and potential problems and use critical thinking skills to judge which sets of tools and/or procedures are required. (ILO: Critical Thinking)


## MFG 280 - Cooperative Work Experience / Manufacturing

## 3 Credit(s)

Prerequisite(s): Permission of CWE Instructor or Department Chair.
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, students should complete this course within the last 2 terms of their certificate or degree.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process. (ILO: Communication)
- CLO\#2: Accurately and meeting deadlines.
- CLO\#3: Demonstrate an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job.
- CLO\#5: Make contacts which will help in obtaining employment.


## MFG 291 - Laser Cutting and Engraving Fundamentals

## 3 Credit(s)

Prerequisite(s): CIS 120 (formerly offered as CS120) or documented proficiency, and MTH 63 or higherlevel math.

Course Description: Introduces students on how to safely setup and operate a Trotec laser engraving machine using CorelDraw software as the print driver. A strong emphasis is place on proper selection of materials that can be safely cut or engraved. Along with required curriculum, the course also includes time for student project work on two dimensional projects as well as three dimensional projects. This course is recommended for anyone interested in laser cutting and engraving for industry applications or artwork.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper safety practices in the lab and workplace.
- CLO\#2: Demonstrate a working knowledge of introductory laser engraving and cutting using CorelDraw as print driver. (ILO: Critical Thinking)
- CLO\#3: Demonstrate improved mathematics, as derived points must be calculated when creating drawing to that laser will cut or engrave.
- CLO\#4: Apply improved technology applications as projects must be tested on machinery.
- CLO\#5: Demonstrate expanded critical thinking skills and focuses three-dimensional thinking, as to how laser cutting/engraving paths are determined.


## MT 100-Massage I-Basic Swedish

## 2 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement, and acceptance into the Massage Therapy Career Pathway Certificate program.

Corequisite(s): MT 100L, and BI 121, BI 121L or BI 231, BI 231L
Course Description: Provides instruction in the history, techniques, treatment procedures, structure of the body parts, and practical application of Swedish massage for each area. Students will learn about massage equipment, sanitation, professional hygiene, and client communication including client history, indications, and contraindications for massage. Objectives and benefits of massage will also be covered.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize techniques, goals, and reactions of Swedish massage. Identify research literacy, pain, endangerments, and contraindications.
- CLO\#2: Demonstrate knowledge of the history of massage.
- CLO\#3: Demonstrate effective listening communication skills to establish a rapport and understanding client's requests. (ILO: Communication)
- CLO\#4: Identify professional appearance, communications, conduct and work ethic. Understand transference and countertransference. Understand legal requirements and ethical decision making.
- CLO\#5: Identify and demonstrate safe, effective body mechanics in the use of massage tables based on the size and shape of the client to prevent injury of the therapist while providing treatment.
- CLO\#6: Identify good hygiene and standard sanitary precautions and practices for infection control for individuals, the massage treatment room environment and equipment.


## MT 100L - Massage I-Basic Swedish Lab

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement, and acceptance into the Massage Therapy Career Pathway Certiifcate program.

Corequisite(s): MT 100, and BI 121, BI 121L or BI 231, BI 231L
Course Description: Provides instruction in the history, techniques, treatment procedures, structure of the body parts, and practical application of Swedish massage for each area. Students will learn about massage equipment, sanitation, professional hygiene, and client communication including client history, indications, and contraindications for massage. Objectives and benefits of massage will also be covered.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate competence in application of Swedish massage techniques for each area of the body.
- CLO\#2: Demonstrate safe application of Swedish massage and endangerment site areas.
- CLO\#3: Use proper functional draping procedures and safe, appropriate positioning techniques based on client needs.
- CLO\#4: Conduct a thorough client health history interview and determine client's expectations for the massage.
- CLO\#5: Implement self-care activities to support well-being for and prevent injury to the therapist. (ILO: Communication)
- CLO\#6: Demonstrate safe, effective body mechanics in the use of massage on massage tables based on the size and shape of the client to prevent injury of the therapist.
- CLO\#7: Demonstrate good hygiene and standard sanitary precautions and practices for infection control for individuals, the environment and equipment.
- CLO\#8: Demonstrate safe and effective use of massage equipment and supplies such as massage tables, linens, lubricants and gloves.


## MT 101-Asian Bodywork I

1 Credit(s)
Prerequisite(s): Acceptance into the Massage Therapy Career Pathway Cerificate program.

Course Description: Introduces fundamental methods and the philosophical background of Asian Bodywork utilizing Acupressure and Shiatsu.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Trace the 14 regular energy channels (meridians) in Chinese medicine. Describe their properties, source points and additional important points. (ILO: Communication)
- CLO\#2: Identify and apply aspects of Yin and Yang Theory and Five Element Theory.
- CLO\#3: Identify activities that stimulate the meridians and acupoints.


## MT 101L - Asian Bodywork I Lab

## 1 Credit(s)

Prerequisite(s): Acceptance into the Massage Therapy Career Pathway Certificate program.
Course Description: Introduces fundamental methods and the philosophical background of Asian Bodywork utilizing Acupressure and Shiatsu.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Trace the 14 regular energy channels (meridians) in Chinese medicine. (ILO: Communication)
- CLO\#2: Identify and apply aspects of Yin and Yang Theory and Five Element Theory.
- CLO\#3: Locate and apply pressure to acupoints on themselves and others.
- CLO\#4: Show a basic shiatsu kata using professional hygiene, sanitation, verbal and nonverbal communication with the client prior to, during and after treatment.
- CLO\#5: Demonstrate safe, effective body mechanics in the use of shiatsu on a mat based on the size and shape of the client to prevent injury of the client and therapist.
- CLO\#6: Utilize proper sanitation processes.


## MT 102 - Massage II - Swedish

## 2 Credit(s)

Prerequisite(s): MT 100, MT 100L and BI 121, BI 121L or BI 231, BI 231L
Course Description: Emphasizes assessment, the philosophical and psychological aspects of massage, and working with special populations.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate verbal and written communication to create a rapport, obtain, inform and summarize health history and assessments, massage and bodywork modalities, the goals and future self-care activities, negotiate time allotment for problem areas to satisfy client expectations and obtain signed written consent.
- CLO\#2: Provide an exit interview to determine the efficacy of the treatment and modify future plan if needed.
- CLO\#3: Charting to document subjective information obtained, performed assessments, goals, services provided plus future plan. (ILO: Critical Thinking)
- CLO\#4: Identify and describe the use of proprioceptive neuromuscular facilitation, massage for special populations and chair massage application. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#5: This course will include experiential sessions that deepen focus and sensitivity in personal connection, assessments and the massage experience.


## MT 102L - Massage II-Swedish Lab

## 1 Credit(s)

Prerequisite(s): MT 100, MT 100L and $\mathrm{BI} 121, \mathrm{BI} 121 \mathrm{~L}$ or $\mathrm{BI} 231, \mathrm{BI} 231 \mathrm{~L}$

Course Description: Emphasizes assessment, documentation, the philosophical and psychological aspects of massage, and working with special populations.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate good personal hygiene, maintain a clean practice environment, sanitization of equipment and the ability to develop and maintain professional boundaries.
- CLO\#2: Demonstrate appropriate verbal and written communication to create a rapport, obtain, inform and summarize health history and assessments, massage and bodywork modalities, the goals and future self-care activities, negotiate time allotment for problem areas to satisfy client expectations and obtain signed written consent.
- CLO\#3: Provide an exit interview to determine the efficacy of the treatment and modify future plan if needed.
- CLO\#4: Charting to document subjective information obtained, performed assessments, goals, services provided plus future plan. (ILO: Critical Thinking)
- CLO\#5: Demonstrate the ability to conduct a physical evaluation of client including; posture, symmetry, compensatory movement patterns, range of motion using passive, active and resistive actions and palpation of tissue for the purpose of assessment to develop and modify the treatment plan.
- CLO\#6: Demonstrate the use of proprioceptive neuromuscular facilitation, massage for special populations and chair massage application. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#7: Develop a one-hour full body massage with a connecting sequence and flow for a safe and individualized massage based on client goals.
- CLO\#8: Demonstrate professional communication within the parameters of the exit interview protocol. Discuss the effects and assessment of the treatment with the client.
- CLO\#9: This course will include experiential sessions that deepen focus and sensitivity in personal connection, assessments and the massage experience.


## MT 103 - Massage III-Swedish

## 1 Credit(s)

Prerequisite(s): MT 102, MT 102L and $\mathrm{BI} 121, \mathrm{BI} 121 \mathrm{~L}$ or $\mathrm{BI} 231, \mathrm{BI} 231 \mathrm{~L}$

Course Description: Prepares students for the written examination for state board licensure and practical demonstration interviews. Reflexology, side lying massage, massage tools, trigger point, deep tissue, and myofascial release techniques will be covered.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate appropriate written communication summarizing health history, assessments, massage and bodywork treatment, goals, self-care, future sessions planned and referrals. Obtain signed legal written informed consent prior to massage treatment and maintain the written records.
- CLO\#2: Demonstrate the ability to acquire and interpret client's medical history and conduct a physical evaluation of client including; posture, symmetry, compensatory movement patterns, range of motion and palpation assessment.
- CLO\#3: Demonstrate effective verbal communication to develop a rapport, interpret and explain assessment findings and techniques to be utilized, areas to be addressed, intended outcomes, risks and benefits.
- CLO\#4: Decide treatment protocol for short- and long-term goals and modify treatment plan during subsequent session based on changes in client's health and desired outcomes.
- CLO\#5: Identify and recognize goals and perform a variety of techniques to meet the client's needs utilizing Swedish massage, massage tools, reflexology, deep tissue, myofascial release proprioceptive neuromuscular techniques/muscle energy techniques, trigger point therapy and stretching. (ILO: Critical Thinking)
- CLO\#6: Apply techniques directly along the muscles and fascial lines without causing excessive discomfort to address specific issues and monitoring verbal and nonverbal communication while using caution in endangerment areas.
- CLO\#7: Apply current information and research to determine safe massage and bodywork treatment options for pathologies commonly encountered in the practice of massage and bodywork. Identify pain patterns, pain pathways and relevant pain control practices as they relate to application of massage/bodywork.
- CLO\#8: Identify the components of a wellness plan and psychological defense mechanisms.


## MT 103L - Massage III-Swedish Lab

## 1 Credit(s)

Prerequisite(s): MT 102, MT 102L and BI 121, BI 121L or BI 231, BI 231L
Course Description: Prepares students for the written examination for state board licensure and practical demonstration interviews. Reflexology, side lying massage, massage tools, trigger point, deep tissue, and myofascial release techniques will be covered.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate good personal hygiene, maintain a clean practice environment, maintain sanitization of equipment and the ability to develop and maintain professional boundaries.
- CLO\#2: Identify and demonstrate safe and effective use of massage equipment and supplies such as massage tables, linens, lubricants and gloves. Use proper functional draping, bolstering and techniques for client needs during side lying massage, pregnancy massage, reclined reflexology, myofascial release and deep tissue massage.
- CLO\#3: Identify and recognize goals. Perform a variety of techniques to meet the client's needs utilizing Swedish massage, massage tools, reflexology, deep tissue, myofascial release proprioceptive neuromuscular techniques/muscle energy techniques, trigger point therapy and stretching. (ILO: Critical Thinking)
- CLO\#4: Apply techniques directly along the muscles and fascial lines without causing excessive discomfort to address specific issues and monitoring verbal and nonverbal communication while using caution in endangerment areas.
- CLO\#5: Demonstrate ability to develop and maintain professional boundaries and professional manners including being on time, focused, providing treatment within a time frame and allow the client to concentrate $100 \%$ on relaxation and rehabilitation.
- CLO\#6: Demonstrate professional communication within the parameters of the exit interview protocol. Discuss the effects of the session with the client and perform assessments to determine the efficacy of the treatment.
- CLO\#7: Demonstrate competence in application of skills and build confidence to pass a practical exam or demonstration interview.


## MT 105 - Massage Therapeutics: Hydrotherapy and Oncology Massage

## 1 Credit(s)

Prerequisite(s): MT 100, MT 100L

Corequisite(s): MT 105L

Course Description: Covers hydrotherapy modalities and education for oncology massage therapy and treatment for elders.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and describe thermal and physical properties of water (buoyancy, resistance, pressure, steam, and evaporation). (ILO: Communication)
- CLO\#2: Analyze the appropriate application of hydrotherapy techniques for pain control, injury rehabilitation and relaxation for differing areas of the body.
- CLO\#3: Discuss known causes of cancer and how cancer develops in the body.
- CLO\#4: Identify physical and psychological benefits of oncology massage and massage for elderly or terminally ill patients.


## MT 105L - Massage Therapeutics: Hydrotherapy and Oncology Massage Lab

## 1 Credit(s)

Prerequisite(s): MT 100, MT 100L

## Corequisite(s): MT 105

Course Description: Covers hydrotherapy modalities and education for oncology massage therapy and treatment for elders.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Communicate the contraindications and benefits prior to safely applying hot and cold hydrotherapy applications using various techniques on one another. (ILO: Communication)
- CLO\#2: Explain self-care activities to the client including purpose and benefit, instructions for selfcare activity, and addressing client's questions and concerns.
- CLO\#3: Demonstrate safe and appropriate sanitation, draping methods, and personal hygiene in the performance of massage and bodywork treatment including the use of universal precaution.
- CLO\#4: Orally acquire client medical history, physically assess client tissue, and evaluate the information according to the indications and contraindications associated with different pathologies.
- CLO\#5: Determine appropriate treatment based on intake and consultation, assess client's reactions during treatment and adjust treatment accordingly. Assess post treatment reactions and give post treatment instructions.
- CLO\#6: Communicate with clients and safely apply massage techniques used for oncology massage and the elderly. State considerations, complications, and massage therapy contraindications for safely applying techniques with modifications.


## MT 106 - Integrated Studies in Massage I - Upper Body

## 1 Credit(s)

Prerequisite(s): MT 100, MT 100L and MT 108, MT 108L and BI 121, BI 121L or BI 231, BI 231L

Corequisite(s): MT 106L
Course Description: Provides in-depth study of applications of massage on specific muscle groups, integrating musculoskeletal anatomy, pathology, acupressure, and basic Swedish massage techniques. Students will learn home exercise programs to assist their clientele.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply current information and research to determine safe massage and bodywork treatment options for pathologies commonly encountered in the practice of massage and bodywork. Identify pain patterns, pain pathways and relevant pain control practices as they relate to application of massage/bodywork.
- CLO\#2: Instruct and demonstrate appropriate range of motion (active, passive and active assistive ROM) and identify correct modalities for a home exercise plan.
- CLO\#3: Demonstrate appropriate written communication summarizing health history, assessments, massage and bodywork treatment, goals, self-care, future sessions planned and referrals. Obtain signed legal written informed consent prior to massage treatment and securely maintaining the written records. (ILO: Communication)


## MT 106L - Integrated Studies in Massage I - Upper Body Lab

## 1 Credit(s)

Prerequisite(s): MT 100, MT 100L and MT 108, MT 108L and BI 121, BI 121L or BI 231, BI 231L
Corequisite(s): MT 106
Course Description: Provides in-depth study of applications of massage on specific muscle groups, integrating musculoskeletal anatomy, pathology, acupressure, and basic Swedish massage techniques. Students will learn home exercise programs to assist their clientele.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Students will hone their skills working with upper-body landmarks, muscle origins and insertions, actions, and applied muscles group actions including range of motion to muscles of the upper body while applying massage/bodywork to obtain intended physiological outcomes.
- CLO\#2: Identify pathophysiological terms and processes resulting from injury and disease as they relate to massage and bodywork.
- CLO\#3: Demonstrate the ability to acquire client's medical history and conduct a physical evaluation of client including posture, symmetry, compensatory movement patterns, range of motion and palpation assessment. Demonstrate effective verbal communication to develop a rapport, explain assessment findings and techniques to be used, including areas to be addressed and their intended outcomes. (ILO: Communication)


## MT 107 - Integrated Studies in Massage II - Lower Body

## 1 Credit(s)

Prerequisite(s): MT 106, MT 106L

Corequisite(s): MT 107L
Course Description: Continues the study of applications of massage on specific muscle groups, integrating musculoskeletal anatomy, pathology, acupressure, and basic Swedish massage techniques. Students will learn home exercise programs to assist their clientele.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Apply current information and research to determine safe massage and bodywork treatment options for pathologies commonly encountered in the practice of massage and bodywork. Understand pain patterns, pain pathways, and relevant pain control practices as they relate to application of massage/bodywork.
- CLO\#2: Instruct and demonstrate appropriate range of motion (active, passive and active assistive ROM) and identify correct modalities for a home exercise plan.
- CLO\#3: Demonstrate understanding of appropriate written communication summarizing health history, assessments, massage and bodywork treatment, goals, self-care, future sessions planned and referrals. Obtain signed legal written informed consent prior to massage treatment and securely maintaining the written records. (ILO: Communication)


## MT 107L - Integrated Studies in Massage II - Lower Body Lab

## 1 Credit(s)

Prerequisite(s): MT 106, MT 106L

Corequisite(s): MT 107

Course Description: Continues the study of applications of massage on specific muscle groups, integrating musculoskeletal anatomy, pathology, acupressure, and basic Swedish massage techniques. Students will learn home exercise programs to assist their clientele.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and palpate the lower-body landmarks, muscle origins and insertions, actions, and applied muscles group actions. Includes range of motion to muscles of the lower body while applying massage/bodywork to obtain intended physiological outcomes. (ILO: Critical Thinking)
- CLO\#2: Identify pathophysiological terms and processes resulting from injury and disease as they relate to massage and bodywork.
- CLO\#3: Demonstrate the ability to acquire client's medical history and conduct a physical evaluation of client including; posture, symmetry, compensatory movement patterns, range of motion and palpation assessment. Demonstrate effective verbal communication to develop a rapport, explain assessment findings and techniques to be used, including areas to be addressed and their intended outcomes.


## MT 108 - Kinesiology for Massage Therapists

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and acceptance into the Massage Therapy Career Pathway Certificate program.

Corequisite(s): MT 108L, and BI 121, BI 121L or BI 231, BI 231L
Course Description: Studies the branch of physiology that relates to the mechanics and anatomy of human movement. Students will learn the joints of the body and their actions, the muscles that create specific actions, muscle attachment sites, how to palpate, shorten, and lengthen the muscles.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and discuss major components of the musculoskeletal system: bones, muscle attachment sites, origin, insertion and belly of the muscles, planes, axis of movements and actions of the joints. (ILO: Communication)
- CLO\#2: Understand physiological concepts of a muscle contraction, compare and contrast different types of muscle contractions; their uses and precautions.
- CLO\#3: Classify joints by function and structure with knowledge of type and location.
- CLO\#4: Identify the components of posture.


## MT 108L - Kinesiology for Massage Therapists Lab

## 1 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and acceptance into the Massage Therapy Career Pathway Certificate program.

Corequisite(s): MT 108 and BI 121 , BI 121 L or $\mathrm{BI} 231, \mathrm{BI} 231 \mathrm{~L}$
Course Description: Studies the branch of physiology that relates to the mechanics and anatomy of human movement. Students will learn the joints of the body and their actions, the muscles that create specific actions, muscle attachment sites, how to palpate, shorten, and lengthen the muscles.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and discuss major components of the musculoskeletal system: bones, muscle attachment sites, origin, insertion and belly of the muscles, planes, axis of movements and actions of the joints. (ILO: Communication)
- CLO\#2: Demonstrate safe movement through normal range of motion.
- CLO\#3: Locate, palpate and describe muscles in terms of attachments, actions, and sensitive/ local endangerment areas.


## MT 109 - Pathology for Massage Therapists

## 4 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement, and BI 121, BI 121L or BI 231, BI 231L

Course Description: Provides student with the definitions of syndromes, symptoms, prognostics, treatment concepts and contraindications for massage therapists.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Review the function of the body systems and recognize health and non-health in each system of the body in terms of visual, auditory, olfactory, and palpation assessment.
- CLO\#2: Describe inflammatory process including stages of soft tissue healing and relevance to massage and bodywork treatment plan.
- CLO\#3: Identify pathophysiological terms, etiology, signs, symptoms, and complications of common pathologies and processes resulting in/from injury and disease as they relate to massage and bodywork.
- CLO\#4: Explain when massage is indicated or contraindicated due to physiological and pathological conditions of the client and safe application of modalities that may be used for pathologies. Outline strategies for determining safe treatment options for individuals with pathologies.
- CLO\#5: Research current information about physiological and pathological conditions. Prepare a presentation and communicate findings of research on pathologies. (ILO: Communication)


## MT 111 - Sports Massage

## 1 Credit(s)

Prerequisite(s): MT 100, MT 100L and MT 108, MT 108L and BI 121, BI 121L or BI 231, BI 231L
Corequisite(s): MT 111L
Course Description: This course will provide knowledge about how to prevent injury, improve performance, relieve sore muscles, speed recovery, and reduce stress. This course provides instruction and understanding of sports-related injuries and ailments. Hands on application will be required to demonstrate Sports massage techniques.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate knowledge and understanding about athletic performance and related injury.
- CLO\#2: Demonstrate sport-specific massage on muscles involved with each sport. (ILO: Critical Thinking)


## MT 111L - Sport Massage Lab

1 Credit(s)
Prerequisite(s): MT 100, MT 100L and MT 108, MT 108L and BI 121, BI 121L or BI 231, BI 231L

## Corequisite(s): MT 111

Course Description: This course will provide knowledge about how to prevent injury, improve performance, relieve sore muscles, speed recovery, and reduce stress. This course provides instruction and understanding of sports-related injuries and ailments. Hands on application will be required to demonstrate Sports massage techniques.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Practice sports massage techniques on each other. Recognize goals and reactions of Sports massage techniques. (ILO: Communication)
- CLO\#2: Acquire client's medical history.
- CLO\#3: Demonstrate good hygiene by utilizing universal precautions. Maintain a clean facility and equipment.


## MT 112 - Massage for Pregnancy and the Infant/Child

1 Credit(s)
Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.
Corequisite(s): MT 112L
Course Description: Provides instruction in full-body massage that can be done in a side lying position for pregnant women. This technique is also ideal for people with neck and back problems. Massage techniques for infants and children will also be covered as well as the importance of touch for children with special needs.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify considerations and contraindications of pregnancy massage as well as safe application of modalities.
- CLO\#2: Identify and state benefits and goals of infant/child massage as well as considerations and contraindications. (ILO: Communication)


## MT 112L - Massage for Pregnancy and the Infant/Child Lab

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.

## Corequisite(s): MT 112

Course Description: Provides instruction in full-body massage that can be done in a side lying position for pregnant women. This technique is also ideal for people with neck and back problems. Massage techniques for infants and children will also be covered as well as the importance of touch for children with special needs.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe application of massage techniques to use during pregnancy and with babies and children. (ILO: Critical Thinking)


## MT 113 - Myofascial Release

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.

Corequisite(s): MT 113L
Course Description: Teaches gentle and non-invasive techniques. Therapeutically works with restrictions in the fascia resulting in the reduction of pain and increased range of motion. Hands-on application is required.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and explain the fundamental theory and principles of myofascial release and principles of basic craniosacral therapy holds.
- CLO\#2: Identify, explain and perform soft tissue mobilization techniques. (ILO: Communication)


## MT 113L - Myofascial Release Lab

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.

Corequisite(s): MT 113
Course Description: Teaches gentle and non-invasive techniques. Therapeutically works with restrictions in the fascia resulting in the reduction of pain and increased range of motion. Hands-on application is required.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform myofascial release stretches.
- CLO\#2: Identify, explain and perform soft tissue mobilization techniques.
- CLO\#3: Integrate myofascial release into current massage routine to meet client needs. (ILO: Critical Thinking)


## MT 114 - Massage Therapy Study Skills Lab

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.
Course Description: Provides knowledge and hands-on instruction in the theory and massage techniques of new topics that have evolved. Through Instructor observation and guidance, students will gain the appropriate study skills and the awareness of the amount of time and effort required to obtain their academic goals.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify indications and contraindications for massage.
- CLO\#2: Apply safe application of massage techniques using specific strokes, appropriate draping and sanitation.
- CLO\#3: Communicate post treatment instructions and suggestions to client.
- CLO\#4: Identify bones and muscles and confidently use appropriate terminology. (ILO: Communication)
- CLO\#5: Describe the physiological benefits and effects of massage on the body.


## MT 115 - Trigger Point Therapy

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.
Corequisite(s): MT 115L
Course Description: Provides history and instruction in trigger point therapy, the anatomical locations of the muscles that have trigger points, their pain referral patterns and techniques to treat them.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the history and theory of trigger point therapy. (ILO: Communication)
- CLO\#2: Identify differing trigger point therapy techniques and when each is appropriate to incorporate into treatment.


## MT 115L - Trigger Point Therapy Lab

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.
Corequisite(s): MT 115

Course Description: Provides instruction in the understanding of trigger points, the anatomical locations of the muscles that have trigger points and techniques to treat them. Hands-on application is required.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Map out trigger points using anatomical charts and learn palpation to locate and apply trigger point therapy to relevant muscles in the body to provide relief of pain. (ILO: Critical Thinking)
- CLO\#2: Identify common areas of pain in the body and referred pain patterns utilizing sanitation, hygiene and draping for client comfort and safety.


## MT 116 - Massage Exam Review

## 2 Credit(s)

Prerequisite(s): Course is designed for students who have completed the required coursework and will be taking exams to become licensed by the Oregon Board of Massage Therapists.

Course Description: Prepares students for the Oregon Board of Massage Therapists Licensing Exams by reviewing the entire years' worth of study.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Review target areas that need to be studied for the Oregon Board of Massage Therapists Licensing, the MBLEx and NCE certification exams.
- CLO\#2: Build self-esteem by demonstrating new skills (massage, ROM, locating muscle attachments and demonstrating actions and endangerment sites) acquired during the program. (ILO: Communication)
- CLO\#3: Discuss the state board examination formats and practice successful exam-taking protocol.


## MT 117 - Body Maintenance for Massage Therapists

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.
Corequisite(s): MT 117L
Course Description: Provides knowledge and hands-on techniques to show how to recognize, prevent, and treat injuries for bodywork professionals. Students will learn how and why injuries happen and information that will help to protect their own health and better understand their clients' complaints.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify the reasons for injury and how to prevent them. (ILO: Critical Thinking)
- CLO\#2: Apply proper body maintenance techniques to help insure their goal of an injury free career as a bodywork professional.


## MT 117L - Body Maintenance for Massage Therapists Lab

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.

## Corequisite(s): MT 117

Course Description: Provides knowledge and hands-on techniques to show how to recognize, prevent, and treat injuries for bodywork professionals. Students will learn how and why injuries happen and information that will help to protect their own health and better understand their clients' complaints.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Utilize good ergonomics and body mechanics while doing massage therapy. (ILO: Critical Thinking)


## MT 118 - Deep Tissue Massage

## 1 Credit(s)

Prerequisite(s): MT 108, MT 108L and BI 121, BI 121L or BI 231, BI 231L

Corequisite(s): MT 118L

Course Description: Provides knowledge and hands-on instruction in the theory of deep tissue massage, reviews anatomy of muscles and relevant structures, and treatment plans for pain symptoms throughout the body. Deep tissue massage can provide instant results for patients suffering with pain due to musculoskeletal dysfunction. Hands on practice will be included.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss major components of muscles. (ILO: Communication)
- CLO\#2: Identify pain symptoms and why they occur.
- CLO\#3: Discuss Deep Tissues relevancy in today's society and why it has become an important clinical modality.


## MT 118L - Deep Tissue Massage Lab

## 1 Credit(s)

Prerequisite(s): MT 108, MT 108L and $\mathrm{BI} 121, \mathrm{BI} 121 \mathrm{~L}$ or $\mathrm{BI} 231, \mathrm{BI} 231 \mathrm{~L}$
Corequisite(s): MT 118
Course Description: Provides knowledge and hands-on instruction in the theory of deep tissue massage, reviews anatomy of muscles and relevant structures, and treatment plans for pain symptoms throughout the body. Deep tissue massage can provide instant results for patients suffering with pain due to musculoskeletal dysfunction. Hands on practice will be included.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Create and safely apply Deep Tissue treatment plans. (ILO: Critical Thinking)
- CLO\#2: Communicate effectively with client's pretreatment, during and post treatment.


## MT 119 - Introduction to Craniosacral Therapy

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.

## Corequisite(s): MT 119L

Course Description: Introduces craniosacral therapy including palpation of the craniosacral rhythm at the listening stations, diaphragms and cranial structures. Students will learn the 10-point protocol of craniosacral therapy.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and explain the theory and structures of the craniosacral system. (ILO: Critical Thinking)


## MT 119L - Introduction to Craniosacral Therapy Lab

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.
Corequisite(s): MT 119
Course Description: Introduces craniosacral therapy including palpation of the craniosacral rhythm at the listening stations, diaphragms and cranial structures. Students will learn the 10-point protocol of craniosacral therapy.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Palpate the craniosacral rhythm and assess the range of motion, amplitude and strength of the craniosacral rhythm. (ILO: Critical Thinking)
- CLO\#2: Perform diaphragm and hyoid releases.
- CLO\#3: Perform a 10-step craniosacral therapy protocol.


## MT 120A - Business for Massage Therapists - Part A

## 1 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Focuses on the concept of professionalism, ethics, boundaries, and the legal issues associated with massage/bodywork therapy.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Function as a professional and identify Oregon laws and regulations for massage therapy.
- CLO\#2: Discuss legal and ethical issues associated with massage/bodywork therapy. (ILO: Information Literacy)
- CLO\#3: Relate Oregon laws and regulations to real and hypothetical practice situations.
- CLO\#4: Identify legal and ethical responsibilities involved in a professional massage therapy practice.


## MT 120B - Business Practices for Massage Therapists - Part B

## 2 Credit(s)

Prerequisite(s): WR 90 or WR 91 or designated placement.
Course Description: Focuses on business practices, marketing, record keeping, and insurance billing for a massage therapy practice.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify appropriate business principles to apply toward setting up a massage therapy practice. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Construct a two-year business plan implementing appropriate business principles.
- CLO\#3: Analyze records to be kept for taxes (Revenue, expenses, cost of goods sold, utilities, rent, payroll...).
- CLO\#4: Identify and discuss rules and regulations for doing medical massage insurance billing.
- CLO\#5: Discuss CPT and ICD coding. Demonstrate how to complete a HCFA-1500 form.
- CLO\#6: Identify and compare computer programs for the massage office.


## MT 121 - Asian Bodywork II

## 1 Credit(s)

Prerequisite(s): MT 101, MT 101L

Corequisite(s): MT 121L
Course Description: Students will learn the fundamental methods and philosophical background of Ayurveda and Touch For Health. Introduces assorted styles and techniques of acupressure and energy balancing.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and describe the 8 strange flow energy channels used in Traditional Chinese Medicine
- CLO\#2: Discuss the history of the Ayurveda healing tradition of India and Ayurvedic massage. Describe principles of Ayurveda: the Tridoshas, 3 Gunas, Prakrti, chakra qualities and traditional signs of dysfunction.
- CLO\#3: Discuss effects and recognize goals of the application of Strange Flow treatment patterns and Touch for Health. (ILO: Communication)
- CLO\#4: Identify how manual massage skills combine (Touch for Health, acupressure and massage) to balance the body's energy.


## MT 121L - Asian Bodywork II Lab

1 Credit(s)
Prerequisite(s): MT 101, MT 101L

## Corequisite(s): MT 121

Course Description: Students will learn the fundamental methods and philosophical background of Ayurveda and Touch For Health. Introduces assorted styles and techniques of acupressure and energy balancing.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate competence in applying a basic treatment pattern, adjusting application for client's comfort level.
- CLO\#2: Demonstrate ergonomic body mechanics, good hygiene, and maintain a clean facility and equipment.
- CLO\#3: Chart to accommodate to the session plan for individuals presenting health issues in terms of referring out, positioning, precautions and applying techniques. (ILO: Critical Thinking)
- CLO\#4: Locate energy chakras on themselves and others.


## MT 180 - Cooperative Work Experience / Massage Therapy

## 3 Credit(s)

Prerequisite(s): Permission of CWE Instructor or Department Chair.
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives).
- CLO\#5: Follow instructions and meeting deadlines.
- CLO\#6: Demonstrate a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job.
- CLO\#7: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job. (ILO: Critical Thinking)
- CLO\#8: Make contacts which will help in obtaining employment.


## MT 180S - Cooperative Work Experience / Massage Seminar

## 1 Credit(s)

Prerequisite(s): Acceptance into a Massage Therapy program, or permission of Instructor.

## Corequisite(s): MT 180

Course Description: Provides students with strategies for successful experiential learning, including techniques for self-monitoring and tracking progress; sustaining positive relationships with co-workers and supervisors; working with mentors; and basic conflict resolution. Presents information regarding the role played by non-verbal communication, written and unwritten workplace policies, and positive work ethics. Course includes practical instruction regarding the integration of reflective learning with experiential learning and the process of integrating relevant theory and/or outside learning resources with experiential learning. Students will be provided with basic strategies for career advancement, and the theory and practical application of techniques for writing a skills-based resume, effective employment application, and interview skills.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Share different massage therapy work environments. Integrating reflection on experiences and personal growth in the work environment.
- CLO\#2: Identify the theory of differing treatment plans for differing clientele.
- CLO\#3: Discuss serving clients and the employer in a positive and professional manner to meet industry standards.
- CLO\#4: Design a skills-based resume. (ILO: Communication)


## MT 199-Special Studies: Massage Therapy

## Var. (1-3) Credit(s)

Prerequisite(s): Varies according to specific offering.
Course Description: This course provides knowledge and hands-on instruction in new theory and massage techniques.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss theory of the modality.
- CLO\#2: Identify indications and contraindications of using the modality.
- CLO\#3: Describe the benefits and effects of using the modality.
- CLO\#4: Safe application of the modality.
- CLO\#5: Students will be able to communicate effectively with clients regarding the modality. (ILO: Communication)
- CLO\#6: Students will learn post treatment information for the clients who receive this modality.


## MTH 15A - Math Fast Track

## 3 Credit(s)

Prerequisite(s): Designated placement score into MTH 20 or MTH 60 or MTH 65. Students should also be familiar with computers.

Course Description: Offers students the chance to improve math placement more than one level in one term. It is designed for students who need to take several math courses before entering a program and who have seen the material before and need to "fill in the gaps." It is offered as an emporium-style math class that meets six hours per week in a computer lab using computer software that covers material from MTH 20 through MTH 95 (depending on the math level at which students enter the class and through which they are trying to complete). Class attendance is mandatory. Students work on online homework and take proctored online tests. Each student will be assigned a new math placement determined by in-person, proctored test score(s) at the end of the course. Course is graded on a pass/no pass basis. Course does not transfer. May not be offered every year. Please check with Department Chair.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Demonstrate proficiency in the topics for which placement is received: MTH 60: Fundamental operations with whole numbers, fractions, decimals, integers, percentages, ratios, basic geometry and measurement. MTH 65: Use mathematical problem solving techniques involving rational numbers, exponents, order of operation, linear equations, and systems of equations. MTH 95: Use mathematical problem solving techniques involving polynomial and rational expressions and equations. (ILO: Quantitative literacy \& reasoning)


## MTH 20 - Pre-algebra

## 4 Credit(s)

## Corequisite(s): RD 90 or WR 91

Course Description: Reinforces skills in whole number, fractions, and decimals while introducing computation with rational numbers, exponents, order of operation, and the use of variables, expressions, formulas, and equations. Ratio and proportions, percent, and topics in measurement are also studied. Working with real data, formulas, and applications will be stressed. Course is graded on a pass/no pass basis. Course does not transfer. A scientific calculator is required. There is a significant online component in this class.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Gain number sense by estimating and calculating in arithmetic operations with whole numbers, integers, fractions, and decimals.
- CLO\#2: Use measurement as a model in a variety of arithmetic problems; using number sense to judge the reasonableness of their results.
- CLO\#3: Use whole numbers, integers, fractions, decimals, and percentages appropriately and effectively in all the arithmetic operations. (ILO: Quantitative literacy \& reasoning)
- CLO\#4: Solve application problems that require determining the appropriate arithmetic operations.
- CLO\#5: Use a variable to represent an unknown quantity and solve one-step algebraic equations.


## MTH 60 - Fundamentals of Algebra I

## 4 Credit(s)

Corequisite(s): MTH 20 and RD 90 or WR 91
Course Description: Introduces the study and application of the real numbers, operations with real numbers, exponents, order of operations, mathematical modeling, solving linear equations, methods of problem solving, rates, slope, graphs of lines, equations of lines, and systems of linear equations. Working with real data, formulas, and applications will be stressed. Course is graded on a pass/no pass basis. Course does not transfer. A scientific calculator is required. There is a significant online component in this class.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Apply the powerful concept of a variable in linear relationships (patterns) in the form of tables, graphs, equations and verbal descriptions; and be able to move comfortably between each form. (ILO: Quantitative literacy \& reasoning)
- CLO\#2: Investigate, model, and solve real world algebra problems that require an understanding of linear relationships.
- CLO\#3: Use appropriate technology to solve linear problems and applications and judge the reasonableness of their results.


## MTH 60R - Fundamentals of Algebra I Recitation

1 Credit(s)
Prerequisite(s): MTH 20 or designated placement.

Corequisite(s): MTH 60
Course Description: Designed for students currently enrolled in MTH 60, this optional course provides additional help with the material presented in MTH 60, which introduces the study and application of the real numbers, operations with real numbers, exponents, order of operations, mathematical modeling, solving linear equations, methods of problem solving, rates, slope, graphs of lines, equations of lines, and systems of linear equations. Working with real data, formulas, and applications will be stressed. Course is graded on a pass/no pass basis. Course does not transfer.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Apply the powerful concept of a variable in linear relationships (patterns) in the form of tables, graphs, equations and verbal descriptions; and be able to move comfortably between them. (ILO: Quantitative literacy \& reasoning)
- CLO\#2: Investigate, model, and solve real world algebra problems that require an understanding of linear relationships.
- CLO\#3: Use appropriate technology to solve linear problems and applications and judge the reasonableness of their results.


## MTH 63 - Applied Algebra I

## 4 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and MTH 20 or designated placement.
Course Description: Introduces the use of formulas and equations in an entirely practical and applied context. Topics include mathematical operations with real numbers, measurement, ratios, proportions, percentages, dimensional analysis, order of operations, solving equations numerically and symbolically, Pythagorean Theorem, trigonometry, area, perimeter, surface area and volume. Course is graded on a P/NP basis.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Use mathematical problem solving techniques involving real numbers, exponents, order of operation, and linear equations.
- CLO\#2: Create models of real world situations.
- CLO\#3: Make mathematical connections to, and solve problems from, other disciplines that can be represented using real numbers, algebraic notation, and linear models.
- CLO\#4: Use appropriate technology to enhance conceptual understanding of real numbers and algebraic expressions; and judge the reasonableness of their results.
- CLO\#5: Complete projects that encourage independent, non-trivial exploration of situations that are best modeled by algebraic expressions.
- CLO\#6: Solve problems using geometric formulas (perimeter, area, and volume) and dimensional analysis (unit conversion). (ILO: Quantitative literacy \& reasoning)


## MTH 65 - Fundamentals of Algebra II

## 4 Credit(s)

Prerequisite(s): RD 90 or WR 91 or deisgnated placement, and MTH 60 or designated placement.

Course Description: Includes the study and application of exponents, polynomial operations, factoring polynomial expressions, solving polynomial equations, rational expression operations, and solving rational equations. Course is graded A through F. Course does not transfer. A graphing calculator is required. There is a significant online component in this class.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Add, subtract, multiply, and divide polynomials and rational expressions.
- CLO\#2: Factor polynomials efficiently, using appropriate methods.
- CLO\#3: Apply quadratic and rational models to solve real world problems. (ILO: Quantitative literacy \& reasoning)
- CLO\#4: Apply the rules of exponents in a variety of contexts.
- CLO\#5: Use appropriate technology to graph equations, solve problems, and judge the reasonableness of the results.


## MTH 65R - Fundamentals of Algebra II Recitation

## 1 Credit(s)

Prerequisite(s): MTH 60 or designated placement.
Corequisite(s): MTH 65
Course Description: Designed for students currently enrolled in MTH 65, this optional course provides more help with the material presented in MTH 65, including the study and application of exponents, polynomial operations, factoring polynomial expressions, solving polynomial equations, rational expression operations, and solving rational equations. Course is graded on a pass/no pass basis. Course does not transfer.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Add, subtract, multiply, and divide polynomials and rational expressions.
- CLO\#2: Factor polynomials efficiently, using appropriate methods.
- CLO\#3: Apply quadratic and rational models to solve real world problems. (ILO: Quantitative literacy \& reasoning)
- CLO\#4: Apply the rules of exponents in a variety of contexts.
- CLO\#5: Use appropriate technology to graph equations, solve problems, and judge the reasonableness of the results.


## MTH 95 - Intermediate Algebra

## 4 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and MTH 65 or designated placement.
Course Description: Concluding the developmental mathematics sequence, MTH95 includes an introduction to the study and application of quadratic, radical, exponential, and logarithmic expressions and functions. Working with real data and the mathematics of curve fitting will be developed using a graphing calculator. Course is graded A through F. Course does not transfer. Graphing calculator required. There is a significant online component in this class.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Recognize and apply the concept of a function in the larger context of algebra.
- CLO\#2: Simplify and solve problems involving radical, quadratic, exponential, and logarithmic expressions and equations. (ILO: Quantitative literacy \& reasoning)
- CLO\#3: Apply radical, quadratic, exponential, and logarithmic models to solve real world problems.
- CLO\#4: Use appropriate technology to graph radical, quadratic, exponential, and logarithmic functions and perform regression, judging the reasonableness of the results.


## MTH 95R - Intermediate Algebra Recitation

1 Credit(s)

Prerequisite(s): MTH 65 or designated placement.

## Corequisite(s): MTH 95

Course Description: Designed for students currently enrolled in MTH 95, this optional course provides more help with the material presented in MTH 95, including the study and application of quadratic, radical, exponential, and logarithmic expressions and functions. Working with real data and the mathematics of curve fitting will be developed using the graphing calculator. Graded on a pass/no pass basis. Course does not transfer.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Recognize and apply the concept of a function in the larger context of algebra.
- CLO\#2: Simplify and solve problems involving radical, quadratic, exponential, and logarithmic expressions and equations. (ILO: Quantitative literacy \& reasoning)
- CLO\#3: Apply radical, quadratic, exponential, and logarithmic models to solve real world problems.
- CLO\#4: Use appropriate technology to graph radical, quadratic, exponential, and logarithmic functions and perform regression, judging the reasonableness of the results.


## MTH 96 - Applied Algebra II

## 4 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement, and MTH 60 or MTH 63 or designated placement.

Course Description: Introduces the study and application of linear, quadratic, power, exponential, and logarithmic expressions and functions. Working with real data, the mathematics of curve fitting will be developed making extensive use of the graphing calculator. This course concludes the developmental mathematics sequence. Course does not transfer.

Course Level: Postsecondary Remedial Math

## Course Learning Outcomes:

- CLO\#1: Differentiate between empirical, graphical, and functional representations of algebraic relationships.
- CLO\#2: Create linear, quadratic, power, exponential, and logarithmic models of real world situations using the regression feature of graphing calculators and excel. (ILO: Quantitative literacy \& reasoning)
- CLO\#3: Recognize the basic shape of linear, quadratic, power, exponential, and logarithmic relationships.
- CLO\#4: Use basic algebra skills to solve linear, quadratic, power, exponential, and logarithmic equations.


## MTH 105R - Corequisite Support for MTH105Z

1 Credit(s)
Corequisite(s): RD 90 or WR 91
Course Description: This support course focuses on the foundational skills and concepts needed to be
persistent and successful in MTH $105 Z$ introduction to contemporary math. In an interactive setting, students will receive appropriate support in quantitative and algebraic reasoning, reading comprehension, logic, geometry, probability, problem solving, technology, and study skills.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate relevant skills to effectively engage with the concepts and skills needed in MTH105Z. (ILO: Quantitative Literacy \& Reasoning )
- CLO\#2: Utilize study habits and learning strategies that promote success in MTH105Z.
- CLO\#3: Analyze, communicate, and interpret results in context.


## MTH $105 Z$ - Math in Society

## 4 Credit(s)

Prerequisite(s): MTH 95 or MTH 96 and RD 90 or WR 91 or designated placement.

Course Description: An exploration of present-day applications of mathematics focused on developing numeracy. Major topics include quantitative reasoning and problem-solving strategies, probability and statistics, and financial mathematics; these topics are to be weighted approximately equally. This course emphasizes mathematical literacy and communication, relevant everyday applications, and the appropriate use of current technology. Course is graded A through F. Formerly offered as MTH 105 / MTH105.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Employ mathematical reasoning skills when reading complex problems requiring quantitative or symbolic analysis and demonstrate versatility in the consideration and selection of solution strategies. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#2: Demonstrate proficiency in the use of mathematical symbols, techniques, and computation that contribute to the exploration of applications of mathematics.
- CLO\#3: Use appropriate mathematical structures and processes to make decisions and solve problems in the contexts of logical reasoning, probability, data, statistics, and financial mathematics.
- CLO\#4: Use appropriate representations and language to effectively communicate and interpret quantitative results and mathematical processes orally and in writing
- CLO\#5: Demonstrate mathematical habits of mind by determining the reasonableness and implications of mathematical methods, solutions, and approximations in context.


## MTH 111R - Corequisite Support for MTH111Z

## 1 Credit(s)

Prerequisite(s): MTH 95 or designated placement.

## Corequisite(s): MTH 111Z

Course Description: An optional course taken concurrently with MTH 111Z. It is for those students who want more help with the material of MTH 111Z. MTH111R covers a review of MTH 95 material, using the graphing calculator, and topics and concepts of particular difficulty presented in the MTH 111Z class.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Solve basic algebra problems involving polynomial, rational, exponential, logarithmic, conic sections and non-linear systems
- CLO\#2: Move comfortably between empirical, graphical, and functional representations of algebraic relationships.
- CLO\#3: Recognize the basic shape of polynomial, logarithmic, exponential, and conic relations and the interrelatedness of their transformations. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#4: Use appropriate technology to enhance conceptual understanding of regression, graphing non-linear systems, matrix algebra and finding zeros of polynomial functions.
- CLO\#5: Demonstrate skill with real world phenomena best modeled by polynomial, rational, exponential, logarithmic, conic sections and non-linear systems of equations.


## MTH $111 Z$ - Precalculus I: Functions

## 4 Credit(s)

Prerequisite(s): MTH 95 and RD 90 or WR 91, or designated placement
Course Description: A course primarily designed for students preparing for trigonometry or calculus. This course focuses on functions and their properties, including polynomial, rational, exponential, logarithmic, piecewise-defined, systems of equations, conic sections and inverse functions. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology. Course is graded A through F. Formerly offered as MTH 111 / MTH111Z.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explore the concept of a function numerically, symbolically, verbally, and graphically and identify properties of functions both with and without technology.
- CLO\#2: Analyze polynomial, rational, exponential, and logarithmic functions, as well as piecewisedefined functions, in both algebraic and graphical contexts, and solve equations involving these function types.
- CLO\#3: Demonstrate algebraic and graphical competence in the use and application of functions including notation, evaluation, domain/range, algebraic operations \& composition, inverses, transformations, symmetry, rate of change, extrema, intercepts, asymptotes, and other behavior. (ILO: Quantitative literacy \& reasoning)
- CLO\#4: Use variables and functions to represent unknown quantities, create models, find solutions, and communicate an interpretation of the results.
- CLO\#5: Determine the reasonableness and implications of mathematical methods, solutions, and approximations in context.


## MTH 112R - Corequisite Support for MTH112Z

## 1 Credit(s)

Prerequisite(s): MTH 95 or designated placement.

Corequisite(s): MTH 112 Z

Course Description: This is an optional course taken concurrently with MTH 112Z. It is for those students who want more help with the material of MTH 112Z. MTH112R covers topics and concepts of particular difficulty presented in the MTH $112 Z$ class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Solve trigonometry problems in the context of right triangles and circles. (ILO: Quantitative literacy \& reasoning)
- CLO\#2: Demonstrate mathematical fluency with real world phenomena in surveying, engineering, navigation, and projectile motion, best modeled by trigonometric functions.
- CLO\#3: Solve analytic geometry problems involving trigonometry.
- CLO\#4: Solve and create trigonometric identities and equations.


## MTH $112 Z$ - Precalculus II: Trigonometry

## 4 Credit(s)

Prerequisite(s): MTH 95 or designated placement.
Course Description: A course primarily designed for students preparing for calculus and related disciplines. This course explores trigonometric functions and their applications as well as the language and measurement of angles, triangles, circles, and vectors. These topics will be explored symbolically, numerically, and graphically in real-life applications and interpreted in context. This course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of present-day technology. Course is graded A through F. Formerly offered as MTH 112 I MTH112.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Translate among various systems of measure for angles including radians, degrees, and revolutions. (ILO: Quantitative literacy \& reasoning)
- CLO\#2: Represent, manipulate, and evaluate trigonometric expressions in terms of sides of a right triangle and in terms of the coordinates of a unit circle.
- CLO\#3: Graph, transform, and analyze trigonometric functions using amplitude, shifts, symmetry, and periodicity.
- CLO\#4: Manipulate trigonometric expressions and prove trigonometric identities.
- CLO\#5: Solve trigonometric equations using inverses, periodicity, and identities.
- CLO\#6: Define, represent, and operate with vectors both geometrically and algebraically.
- CLO\#7: Apply the law of sines and the law of cosines to determine lengths and angles.
- CLO\#8: Use variables, trigonometric functions, and vectors to represent quantities, create models, find solutions, and communicate an interpretation of the results.
- CLO\#9: Determine the reasonableness and implications of mathematical methods, solutions, and approximations in context.


## MTH 199 - Special Studies: Mathematics

## Var. (1-2) Credit(s)

Prerequisite(s): MTH 111 Z and MTH $112 Z$ or permission of Instructor.
Course Description: Designed as a mathematical course of study to investigate beyond traditional curriculum offerings. Topics to be determined based on student interest and ability.

## Course Learning Outcomes:

- CLO\#1: Use problem-solving steps and problem-solving strategies to define, understand, analyze, and solve problems. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#2: Research historical sources, assimilate ideas and codify into organized and informative written presentations.
- CLO\#3: Communicate mathematical discoveries and arguments in engaging and accurate language.
- CLO\#4: Research real world applications and write computer programs to extend their use.


## MTH 211 - Fundamentals of Elementary Math I

## 4 Credit(s)

Prerequisite(s): MTH 95 or MTH 96 or designated placement.
Course Description: The first of a three-term sequence designed to prepare pre-service elementary and middle school teachers for entrance into the Oregon teacher's certification program. The course will study the topics of problem solving, sets, whole number concepts and operations, elementary number theory, integers, and elementary logic.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and use problem-solving steps and problem solving strategies to understand, analyze and solve problems.
- CLO\#2: Identify and use the attributes of numbers to describe the nature of the whole numbers, integers, and numeration systems.
- CLO\#3: Use definitions and properties to describe the operations of whole numbers and integers.
- CLO\#4: Justify operational algorithms for whole numbers using properties and theorems. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#5: Calculate whole number and integer results accurately using mental math, paper and pencil, and computational technology.
- CLO\#6: Communicate and respond to mathematical conjectures by seeking verification using mathematical definitions, properties and theorems. Respond to, including respectfully disagreeing with, the mathematical conjectures of others.
- CLO\#7: Develop, evaluate, and present elementary mathematical arguments (proofs) using properties and theorems developed in this course.


## MTH 212 - Fundamentals of Elementary Math II

4 Credit(s)
Prerequisite(s): MTH 211 or designated placement.
Course Description: The second term of a three-term sequence designed to prepare pre-service elementary and middle school teachers for entrance into the Oregon teacher certification program. The
course will study the topics from basic math, algebra, counting theory, probability, and statistics.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and use problem solving steps and problem solving strategies to understand, analyze and solve problems.
- CLO\#2: Identify and use the attributes of measurements to describe the nature of the rational numbers
- CLO\#3: Define and give examples of primes, composites, factors and multiples; and use these effectively to simplify rational number calculations and results. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#4: Use definitions and properties to describe operations, and operational algorithms, with rational numbers.
- CLO\#5: Calculate rational number results accurately whether using mental math, paper and pencil, or computational technology.
- CLO\#6: Define probability and use this definition with specific properties and models for probability to explain and calculate $P(E), P(A$ and $B), P(A$ or $B), P(A \mid B)$ and odds in elementary problem situations.
- CLO\#7: Use fundamental counting techniques, including permutations and combinations, to determine the size of a set of outcomes.
- CLO\#8: Create, explain and use graphical displays of statistical information.
- CLO\#9: Explain, calculate and use relevant statistical measures of central tendency, variability and relative standing.
- CLO\#10: Communicate and respond to mathematical conjectures by seeking verification using mathematical definitions, properties and theorems. Analyze and respond to the mathematical conjectures of others. Respectfully disagree with a conjecture by providing counterexamples.
- CLO\#11: Develop, evaluate, and present elementary mathematical arguments (proofs) using properties and theorems developed in this course.


## MTH 213 - Fundamentals of Elementary Math III

## 4 Credit(s)

Prerequisite(s): MTH 95 or MTH 96 or designated placement.

Course Description: The third term of a three-term sequence designed to prepare pre-service elementary and middle school teachers for entrance into the Oregon teacher certification program. The course will study the topics of geometric shapes, measurement, triangle congruence and similarity, coordinate geometry, and transformational geometry.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use problem solving steps and problem solving strategies to understand, analyze and solve problems.
- CLO\#2: Define and use the attributes of dimensionality, shape, angle, line and intersection to view our geometrical world and to solve problems.
- CLO\#3: Define and use concepts of congruence and similarity to create geometric constructions, analyze these, and to solve problems.
- CLO\#4: Define and explain the Cartesian coordinate system. Use the Cartesian coordinate system to create, analyze and solve problems.
- CLO\#5: Define linear, area, surface area, and volume. Explain and use measurement formulas to solve problems. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#6: Define and explain the metric system. Use metric measures to solve problems.
- CLO\#7: Define translations, rotations, reflections, glide reflections and size transformations. Use these to analyze shapes and solve problems.
- CLO\#8: Define and use symmetries to analyze and solve problems.
- CLO\#9: Analyze and create tilings and tessellations of the plane and polyhedron nets using paper and pencil and appropriate software.
- CLO\#10: Communicate and respond to mathematical conjectures by seeking verification using mathematical definitions, properties, and theorems. Respectfully provide counter example(s) for mathematical conjectures that are not correct.
- CLO\#11: Develop, evaluate, and present elementary mathematical arguments (proofs) using properties and theorems developed in this course.


## MTH 244 - Inferential Statistics

## 4 Credit(s)

Prerequisite(s): STAT $243 Z$ and BA 285 or CIS 125SS

Course Description: Builds on the knowledge of descriptive statistics learned in MTH243 to develop abilities in inferential statistics. Emphasis is on the understanding and application of interval estimating, hypothesis testing, correlation and regression, inferences using Chi-square, and one-way and two-way analysis of variance (ANOVA). Designed to provide students with the analytical skills they will need in upper division business courses including accounting, finance, operations management and applied research. Course also offered as BA 282.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the impact of sampling and the difference between observation and experiment.
- CLO\#2: Perform significance testing and interval estimation. Be able to describe the strengths and weaknesses of these two methods.
- CLO\#3: Test a hypothesis against the null hypothesis.
- CLO\#4: Test hypotheses comparing two populations for both categorical and quantitative response variables. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#5: Demonstrate when and how to use the Chi square test for categorical bivariate analysis.
- CLO\#6: Prepare statistical analysis using linear regression techniques for quantitative bivariate data.
- CLO\#7: Prepare statistical analysis using the Multiple Linear Regression technique.
- CLO\#8: Prepare statistical analysis using one way and two-way Analysis of Variance (ANOVA) techniques.
- CLO\#9: Demonstrate with simple nonparametric statistical analysis and know when each type of analysis is appropriate.


## MTH 251 - Calculus I (Differential Calculus)

## 5 Credit(s)

Prerequisite(s): MTH 111 Z and MTH 112 Z or designated placement.
Course Description: First course in the calculus sequence for science, mathematics, and engineering students. Topics include limits, differentiation, extrema, related rates, optimization problems, and other basic applications of differentiation.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate how to find an equation from a function that determines slope using the definition of a derivative.
- CLO\#2: Find a derivative for a function using the power, product, quotient, chain, and implicit differentiation rules.
- CLO\#3: Apply the concept of rate of change in application problems. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#4: Apply derivatives to create and understand graphs.
- CLO\#5: Demonstrate an understanding of the concept of a limit.


## MTH 252 - Calculus II (Integral Calculus)

## 5 Credit(s)

Prerequisite(s): MTH 251
Course Description: The second course in the traditional calculus sequence for science, mathematics, and engineering students. Topics include integration, integration techniques, applications of integration, and improper integrals.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate how to find an equation from a function that determines the area under a curve using the definition of an integral.
- CLO\#2: Find an area under a curve using power rule, substitution, and integration by parts. (ILO: Quantitative literacy \& reasoning)
- CLO\#3: Apply integration concepts to find volume and surface area of rotated solids.
- CLO\#4: Demonstrate an understanding of a Riemann Sum.


## MTH 253 - Calculus III (Infinite Series)

## 5 Credit(s)

Prerequisite(s): MTH 252

Course Description: The third course in the calculus sequence for science, mathematics, and engineering students. Includes infinite series, conic sections, plane curves, parametric equations, polar coordinates, vectors, and vector-valued functions.

Course Level: Lower Division Collegiate
Course Learning Outcomes:

- CLO\#1: Demonstrate the use of an infinite polynomial series to model exponential, trigonometric, and logarithmic functions. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#2: Demonstrate the ability to use divergence, integral, comparison, alternating series, ratio, and root tests to determine convergence of an infinite sequence.
- CLO\#3: Model functions with parametric and polar equations and find areas and rates of change. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#4: Model forces and motion in 3D with vectors, dot products, and cross products.
- CLO\#5: Demonstrate a familiarity with modeling motion in 3D with vector-valued functions.


## MTH 254 - Calculus IV (Vector Calculus)

## 5 Credit(s)

Prerequisite(s): MTH 252 or permission of Instructor.

## Recommended Prerequisite(s): MTH 253

Course Description: The fourth course in the calculus sequence for science, mathematics, and engineering majors. Includes vector-valued functions, functions of several variables, partial differentiation, multiple integration, and vector analysis.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Graph 3D and level curves by hand and using technology (i.e. GeoGebra) (ILO: Quantitative Literacy \& Reasoning)
- CLO\#2: Find derivatives, directional derivatives, tangent planes, and maximums and minimums for 3D curves.
- CLO\#3: Set up and solve double and triple integrals to find areas and volumes of 3D solids.
- CLO\#4: Model with vector fields, determining divergence and curl.
- CLO\#5: Find and interpret line and surface integrals for 3D functions.


## MTH 256 - Differential Equations

## 5 Credit(s)

Prerequisite(s): MTH 252 or permission of Instructor.
Recommended Prerequisite(s): MTH 253

Course Description: First course in ordinary differential equations for science, mathematics, and engineering students. Includes first order differential equations, linear second order differential equations, and higher order linear differential equations with applications. Additional topics include Laplace transforms, series solutions of linear differential equations, and systems of differential equations with applications. A graphing calculator is required (the $\mathrm{TI}-83, \mathrm{TI}-84$ or $\mathrm{TI}-92$ graphing calculator are recommended).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate how to model differential equations with direction fields.
- CLO\#2: Solve separable, linear, first, and second order differentiable equations. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#3: Model various natural phenomena with differential equations


## MTH 261 - Linear Algebra

## 5 Credit(s)

Prerequisite(s): MTH 251 and MTH 252
Course Description: First course in linear algebra for science, mathematics, and engineering students. Includes both the theoretical and practical realms of systems of linear equations, matrices, determinants, vector spaces, inner product spaces, eigenvalues and eigenvectors.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate various matrix operations including determinants. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#2: Demonstrate skill with vector spaces, subspaces and their applications.
- CLO\#3: Demonstrate skill with inner product spaces and their applications.
- CLO\#4: Demonstrate skill with Eigen vectors and values and their applications.


## MTH 280 - Cooperative Work Experience / Mathematics

## Var. (1-3) Credit(s)

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the Instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, students should complete this course within the last two terms of a certificate or degree program.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process. (ILO: Communication)
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives).
- CLO\#5: Follow instructions and meet deadlines.
- CLO\#6: Demonstrate a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job.
- CLO\#7: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job.
- CLO\#8: Make contacts which will help in obtaining employment.


## STAT 243R - Corequisite Support for STAT243Z

## 1 Credit(s)

## Corequisite(s): RD 90 or WR 91

Course Description: This support course focuses on the foundational skills and concepts needed to be persistent and successful in STAT $243 Z$ probability and statistics. In an interactive setting, students will receive appropriate support in quantitative and algebraic reasoning, reading comprehension, statistics notation, problem solving, technology, and study skills. Course grade based on participation and attendance and designed to match main course grade. Formerly offered as MTH 243R / MTH243R.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate relevant skills to effectively engage with the concepts and skills needed in STAT243Z. (ILO: Quantitative Literacy \& Reasoning)
- CLO\#2: Utilize study habits and learning strategies that promote success in STAT243Z.
- CLO\#3: Analyze, communicate, and interpret results in context.


## STAT $243 Z$ - Elementary Statistics I

## 4 Credit(s)

Prerequisite(s): MTH 95 or MTH 96 and RD 90 or WR 91 or designated placement.

Corequisite(s): STAT 243R for non-STEM students.
Course Description: A first course in statistics focusing on the interpretation and communication of statistical concepts. Introduces exploratory data analysis, descriptive statistics, sampling methods and distributions, point and interval estimates, hypothesis tests for means and proportions, and elements of probability and correlation. Technology will be used when appropriate. Course is graded $A$ through F. Formerly offered as MTH 243 / MTH243.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Students will be able to critically read, interpret, report, and communicate the results of a statistical study along with evaluating assumptions, potential for bias, scope, and limitations of statistical inference.
- CLO\#2: Students will be able to produce and interpret summaries of numerical and categorical data as well as appropriate graphical and/or tabular representations.
- CLO\#3: Students will use the distribution of sample statistics to quantify uncertainty and apply the basic concepts of probability into statistical arguments. (ILO: Quantitative literacy \& reasoning)
- CLO\#4: Students will be able to identify, conduct, and interpret appropriate parametric hypothesis tests.
- CLO\#5: Students will be able to assess relationships in quantitative bivariate data.


## MUS 101 - Music Fundamentals

## 3 Credit(s)

Course Description: Focuses on reading and writing basic music notation. Examines the fundamentals of tonal music including the key signatures, scales, circle of fifth, modes, rhythm, intervals, triads, and seventh chords. Emphasizes terminology and basic musical concepts.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate fluency in reading and writing notations in both treble clef and bass clef. (ILO: Critical Thinking)
- CLO\#2: Identify types of scales both on paper and by listening.
- CLO\#3: Demonstrate an understanding of rhythm in basic meters.


## MUS 105 - Music Appreciation

## 3 Credit(s)

Course Description: Introduces the history and repertory of Western classical music. Through guided listening, students will develop both an aural and an intellectual understanding of music while emphasizing the political, cultural, and scientific values that have shaped the history of Western music.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to identify the style and genre of a given music. (ILO: Critical Thinking)
- CLO\#2: Demonstrate an ability to discuss the political and cultural values that shaped the music of a given genre.
- CLO\#3: Identify basic musical elements including melody, accompaniment, dynamics, texture, and rhythm.


## MUS 108 - Music in World Cultures

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Introduces music from various cultures with an international and cross-cultural perspective. Explores both commonalities and differences in how music is defined, valued, and utilized in many cultures around the world. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify various musical styles and the cultures from which they come, recognizing and evaluating commonalities in the genre of music. (ILO: Critical Thinking)
- CLO\#2: Explain musical terms and their applications.
- CLO\#3: Describe the variety of musical styles and performances.
- CLO\#4: Compare and contrast the musical characteristics of different cultures with those of their own culture to develop a greater appreciation of the diversity of musical styles, forms, and performance practices.


## MUS 111 - Music Theory I

## 3 Credit(s)

Prerequisite(s): MUS 101 or equivalent knowledge. (MUS111, MUS 112, MUS 113 must be taken in sequence, unless Instructor permission is granted.)

Corequisite(s): WR 115 and MUS 114
Course Description: Examines the fundamentals of music theory including pitch and pitch class, simple meter and compound meter, scales including major and minor scales and diatonic modes, intervals, chords, and voice leading.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify simple meter and compound meter.
- CLO\#2: Describe all major and minor keys and their relationship. (ILO: Critical Thinking)
- CLO\#3: Compose all major, minor, and seventh chords.
- CLO\#4: Explain the principles of voice-leading.


## MUS 112 - Music Theory II

## 3 Credit(s)

Prerequisite(s): MUS 111 (MUS 111, MUS112, MUS 113 courses must be taken in sequence, unless Instructor permission is granted.)

## Corequisite(s): MUS 115

Course Description: MUS112 continues the examination of tonal music including harmonic analysis in a key/tonal context, harmonic progressions, realizing a figured bass, part-writing procedures, and introduction of cadences. MUS 111, MUS112, and MUS 113 courses must be taken in sequence.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an understanding of the principles of counterpoint.
- CLO\#2: Describe and construct various types of cadences. (ILO: Critical Thinking)
- CLO\#3: Explain part-writing procedures.


## MUS 113 - Music Theory III

## 3 Credit(s)

Prerequisite(s): MUS 112 (MUS 111, MUS 112, and MUS113 must be taken in sequence, unless Instructor permission is granted.)

Course Description: MUS113 continues the examinations of music theory including Chromatic Harmony; Motives, Phrases and Periods; Harmonic Functions; Harmonic Progressions and Circle of Fifths; Secondary Chords and Tonicization; Mode Mixture; and Modulation. Emphasis is on concepts of contextual analysis.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify motives, phrases, and periods. (ILO: Critical Thinking)
- CLO\#2: Explain harmonic functions in various contexts.
- CLO\#3: Demonstrate an understanding of secondary chords and tonicization.


## MUS 114 - Aural Skills I

## 1 Credit(s)

Prerequisite(s): MUS 101 or equivalent knowledge. (MUS114, MUS 115, MUS 116 must be taken in sequence, unless Instructor permission is granted.) This Aural Skills sequence should be taken concurrently with the Music Theory sequence of MUS 111, MUS 112, MUS 113.

Corequisite(s): WR 115 and MUS 111
Course Description: This first of a three-term sequence of courses provides instruction and practice in beginning sight-reading, sight-singing, and ear-training. It includes melodic and rhythmic dictation as well as intervallic recognition. It covers the fundamental concepts of rhythm, meter, major and minor tonalities, diatonic and modal scales, triads and seventh chords, and cadences. This course is designed to be taken with MUS 111 concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to recognize various pitches and intervals.
- CLO\#2: Demonstrate an ability to dictate simple melodies and rhythm. (ILO: Critical Thinking)
- CLO\#3: Exhibit an ability to sight-read simple melodies.
- CLO\#4: Demonstrate an understanding of the fundamental concepts of major and minor tonalities.


## MUS 115 - Aural Skills II

## 1 Credit(s)

Prerequisite(s): MUS 114 (MUS 114, MUS115, MUS 116 must be taken in sequence, unless Instructor permission is granted.) This Aural Skills sequence should be taken concurrently with the Music Theory sequence of MUS 111, MUS 112, MUS 113.

## Corequisite(s): MUS 112

Course Description: This second of a three-term sequence provides instruction and practice in intermediate sight-reading, sight-singing, and ear-training. It includes melodic and rhythmic dictation as well as intervallic recognition. It covers more variety of rhythm, simple and compound meter, major and minor tonalities, diatonic and modal scales, triads and seventh chords, and cadences. This course is designed to
be taken with MUS 112 concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to identify various pitches and intervals.
- CLO\#2: Demonstrate an ability to dictate melodies in various keys and rhythms. (ILO: Critical Thinking)
- CLO\#3: Demonstrate an ability to sight-sing music in various keys and rhythms.
- CLO\#4: Demonstrate an ability to recognize types of chords.


## MUS 116 - Aural Skills III

## 1 Credit(s)

Prerequisite(s): MUS 115 (MUS 114, MUS 115, MUS116 must be taken in sequence, unless Instructor permission is granted.) This Aural Skills sequence should be taken concurrently with the Music Theory sequence of MUS 111, MUS 112, MUS 113.

## Corequisite(s): MUS 113

Course Description: This third of a three-term sequence provides instruction and practice in more advanced sight-reading, sight-singing, and ear-training. It includes more complex melodic and rhythmic dictation as well as wider intervallic recognition. It covers more variety of rhythm, simple and compound meter, major and minor tonalities, diatonic scales and modal scales, triads and seventh chords, and cadences. Non-chord tones and secondary dominant chords will be explored. This course is designed to be taken with MUS 113 concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to dictate complex melodies based on various intervallic structures and keys. (ILO: Critical Thinking)
- CLO\#2: Demonstrate an ability to dictate complex rhythm based on various meters
- CLO\#3: Demonstrate an ability to sight-sing and sight-read with accuracy.
- CLO\#4: Demonstrate an understanding of non chord tones and secondary dominant chords.


## MUS 118 - Commercial Music Ensemble

## 1 Credit(s)

Prerequisite(s): Ability to read music or play by ear. Some instruments are provided but many will need to be supplied by the student. Please check with the Instructor on equipment that is available or can be checked out.

Course Description: Commercial Music Ensemble is a performance and recording based ensemble that rehearses and performs repertoire from popular music styles. The ensemble includes vocalists, guitarists, bassists, keyboard/pianists, drummers/percussionists, strings, horns, and more. Membership in the ensemble is open to all students and those in the community. Students will have the opportunity to learn the language of popular music style, chart arranging and stylistic interpretation. Performances will occur at RCC and in the community. Course can be repeated for up to 12 credits.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to play with others in harmony. (ILO: Communication)
- CLO\#2: Demonstrate an understanding of stylistic idioms and practical application.
- CLO\#3: Exhibit an understanding of rehearsal and performance techniques and etiquette in an ensemble setting.


## MUS 119 - Jazz Combo

## 1 Credit(s)

Prerequisite(s): Ability to read music. Basic understanding of musical terms and markings. Basic skills in playing one's instrument.

Course Description: Jazz Combo is a performance-based ensemble that rehearses and performs repertoire from jazz and popular music styles in the jazz idiom. The ensemble includes saxophones, trumpets, trombones, pianists, bassists, guitarists, drummers/percussionists, strings, vocalists and more. Students will explore the language of jazz in small sized combos, improvisation, chart arranging and stylistic interpretation. Membership in the ensemble is open to all students and those in the community. Performances will occur at RCC and in the community. Course can be repeated up to 12 credits.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an understanding stylistic idioms and practical application. (ILO: Critical Thinking)
- CLO\#2: Demonstrate an ability to perform with others in harmony.
- CLO\#3: Exhibit rehearsal and performance techniques and etiquette in an ensemble setting.


## MUS 131 - Class Piano I

## 2 Credit(s)

Course Description: Provides group instruction for beginning and intermediate piano. Focuses on the development of basic piano skills, note-reading, rhythm, scales, chords, and the introduction to related musical concepts. Contents and expected learning proficiencies of this course may vary from term to term. Not for music majors. No previous piano experience required. Course may be repeated for 6 credits total.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop and display basic piano skills.
- CLO\#2: Demonstrate ability to read and play piano music of difficulty appropriate for skill level.
- CLO\#3: Demonstrate facility with simple scale patterns and chords using proper fingering and technique. (ILO: Critical Thinking)


## MUS 132 - Class Piano II

## 2 Credit(s)

Prerequisite(s): MUS 131 or equivalent piano experience.
Course Description: Provides group instruction for beginning and intermediate piano. Focuses on the development of basic piano skills, note-reading, rhythm, scales, chords, and the introduction to related musical concepts. Contents and expected learning proficiencies of this course may vary from term to term. Not for music majors. Course may be repeated for 6 credits total.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop and display basic piano skills.
- CLO\#2: Demonstrate ability to read and play piano music of difficulty appropriate for skill level. (ILO: Communication)
- CLO\#3: Develop ability to accompany simple songs by choosing appropriate chords and chord patterns.
- CLO\#4: Demonstrate facility with simple scale patterns and chords using proper fingering and technique.


## MUS 133-Class Piano III

## 2 Credit(s)

Prerequisite(s): MUS 132 or equivalent piano experience.
Course Description: Provides group instruction for beginning and intermediate piano. Focuses on the development of basic piano skills, note-reading, rhythm, scales, chords, and the introduction to related musical concepts. Contents and expected learning proficiencies of this course may vary from term to term. Not for music majors. Course may be repeated for 6 credits total.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop and display basic piano skills.
- CLO\#2: Demonstrate ability to read and play piano music of difficulty appropriate for skill level. (ILO: Communication)
- CLO\#3: Develop ability to accompany simple songs by choosing appropriate chords and chord patterns.
- CLO\#4: Demonstrate facility with simple scale patterns and chords using proper fingering and technique.


## MUS 135 - Beginning Hand Drums

## 2 Credit(s)

Course Description: Provides students hands-on experience with a variety of hand percussion instruments from around the world. Emphasis is on basic techniques and rhythms to facilitate musical performance in a group setting. May be repeated up to four credits.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate music skills which will enable the student to attain greater fluency on his or her instrument.
- CLO\#2: Explain musical symbols and terminology.
- CLO\#3: Participate as a member of a team by performing as part of a large ensemble.
- CLO\#4: Explain and demonstrate musical structure in a variety of percussion styles. (ILO: Critical Thinking)


## MUS 136 - Introduction to Ukulele

## 2 Credit(s)

Course Description: Introduction to Ukulele covers the basic principles of playing and performing on the ukulele. Students will learn the basic anatomy, how to tune, and the beginning techniques of the instrument. Also covered are reading both music notation and tab as well as fingering methods, right hand-picking styles and techniques specific to the ukulele. Students will learn how to accompany other musicians in various musical settings. May be repeated for up to six credits.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Exhibit an understanding of a basic technique of playing the instrument.
- CLO\#2: Demonstrate an ability to read and play the instrument based on musical notation and tablature. (ILO: Critical Thinking)
- CLO\#3: Demonstrate an ability to accompany other musicians.


## MUS 137 - Group Guitar: Beginning

## 2 Credit(s)

Course Description: Covers the basic construction of the guitar, principles of tuning, maintenance, and treatment of the instrument. Also covered are key signatures, scales, primary chords and their structures, as well as fingering methods, right hand picking styles and techniques specific to the guitar. Students will learn how to accompany solo and group singing, and learn skills needed to translate music and methods for solving problems common to guitar players. May be repeated up to six credits.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Display knowledge of the fret board.
- CLO\#2: Accompany simple songs by choosing appropriate chords and chord patterns. (ILO: Critical Thinking)
- CLO\#3: Display basic music reading skills.


## MUS 138 - Group Guitar: Intermediate

## 2 Credit(s)

Prerequisite(s): MUS 137 or equivalent experience.

Course Description: Enables students to create more complicated common style arrangements to folk, blues, and popular song styles by adding melody notes and bass runs to open chords. Students will also
learn accompanying styles to a much broader range of song types, the use of more sophisticated chords and voicings, and the use of barre chords affording the guitarist the ability to play in any key. May be repeated up to six credits.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Display the ability to accompany a broad range of song styles.
- CLO\#2: Create more complicated guitar arrangements by adding bass runs and open chords. (ILO: Critical Thinking)
- CLO\#3: Display intermediate music reading skills.


## MUS 142 - Music Technology I

## 3 Credit(s)

Course Description: Music Technology I is an introduction to audio and music production. Students will use and develop an understanding of what is a DAW, how to use and manipulate audio files, the use of plugins, outboard gear such as interface and surface controllers, and production and delivery of music digitally.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to use the basic features of a Digital Audio Station (DAW). (ILO: Critical Thinking)
- CLO\#2: Exhibit an understanding of the individual function and application of plug-ins.
- CLO\#3: Demonstrate an ability to deliver project files in various audio formats.
- CLO\#4: Demonstrate an ability to use and manipulate loops and audio files in music creation.


## MUS 143 - Music Technology II: MIDI and Virtual Instruments

## 3 Credit(s)

Prerequisite(s): MUS 142 or permission of Instructor.
Course Description: Music Technology II: MIDI and Virtual Instruments is a continuation of MUS 142. This course explores and expands on Daws, plug-ins and audio files editing while starting to explore MIDI and Virtual Instruments. Students will have the opportunity to program, enter and record MIDI, learn to control and operate virtual instruments/plug-ins and integrate it alongside audio files in the DAW.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to program, manipulate, and record MIDI. (ILO: Critical Thinking)
- CLO\#2: Demonstrate an ability to use and integrate Virtual Instruments into a session.
- CLO\#3: Demonstrate an ability to integrate virtual instruments and MIDI files to create music.


## MUS 144 - Music Technology III: Audio Recording and Mic Techniques

Prerequisite(s): MUS 143 or permission of IInstructor.
Course Description: Music Technology III: Audio Recording and Mic Techniques is a continuation of MUS 143. This course explores and expands on recording our own audio, common practices to capture audio at the source, and audio production and editing after the recording. Students will have the opportunity to record in both live and studio settings, learn to place mics and capture audio, organize a session, cable/audio/session management and postproduction inside a DAW.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to use various Mic techniques to capture audio. (ILO: Critical Thinking)
- CLO\#2: Demonstrate an ability to compose a series of takes in a session to create a performance.
- CLO\#3: Demonstrate an ability to manage audio sources, I/O in the DAW and Audio Interface.


## MUS 150 - Rogue Chorus

## 1 Credit(s)

Course Description: Rogue Chorus is open to singers of all levels at RCC and from the community. It provides an opportunity for students to explore choral repertoire of diverse musical styles and genres. No audition required. Repeatable up to 12 credits.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Sing choral parts in pitch.
- CLO\#2: Sing choral parts in correct rhythm.
- CLO\#3: Execute dynamic and expressive markings as written in the music score and as directed by choir director. (ILO: Communication)


## MUS 151 - Riverside Chorus

## 1 Credit(s)

Course Description: Riverside Chorus open to singers of all levels and provides an opportunity for students to explore choral repertoire of diverse musical styles and genres. No audition required. Repeatable for up to 12 total credits.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Sing choral parts in pitch.
- CLO\#2: Sing choral parts in correct rhythm.
- CLO\#3: Execute dynamic and expressive markings as written in the music score and as directed by choir director. (ILO: Communication)


## MUS 152 - Concert Band

## 1 Credit(s)

Prerequisite(s): Prerequisites include the ability to read music, approximately two years playing experience, ownership of a brass or woodwind instrument, and a desire to have fun playing music with others. Some instruments may be available for rent or loan from RCC Music Department. Check with the Instructor.

Course Description: Open to students and community members of all ages. The ensemble plays a variety of both standard and non-standard concert band literature. Concert(s) at the end of the term. Repeatable for up to 12 total credits.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Exhibit music skills which will enable the student to attain greater fluency on his or her instrument. (ILO: Communication)
- CLO\#2: Participate as a member of a team by developing the communicative and interpretive skills necessary for performing as part of an ensemble.


## MUS 153-Orchestra

## 1 Credit(s)

Prerequisite(s): Ability to read music. Basic understanding of musical terms. Basic skills in playing one's instrument. Ownership of one's instrument. RCC Music Department may have opportunities for students to rent or loan an instrument. Consult with the Instructor.

Course Description: The Rogue Orchestra explores a variety of music from different musical periods. It is open to all the students at Rogue Community College as well as the community members who play string, wind, brass, and percussion instruments. Perform in the concert at the end of each term. Repeatable up to 12 credits.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to play with others in harmony. (ILO: Communication)
- CLO\#2: Demonstrate an ability to follow the direction of a conductor.


## MUS 158-Chamber Music Ensemble

## 1 Credit(s)

Course Description: Provides an opportunity for instrumentalists to explore, practice, and perform chamber music repertoire. Includes conducted and coached rehearsals for public performance. Covers repertoire for chamber group (duo-octet), small ensembles, and chamber orchestra. Requires the ability to read music. Must play a musical instrument. Singers considered. This course is repeatable for up to (12) credits.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop music reading skills.
- CLO\#2: Develop a steady sense of tempo to play together with others. (ILO: Communication)
- CLO\#3: Play music with correct rhythm in time.
- CLO\#4: Play music with correct dynamics according to the score.


## MUS 199 - Special Studies: Music

Var. (1-3) Credit(s)<br>Prerequisite(s): Varies by course.

Course Description: Serves a variety of needs and interests, and is used to develop a music course focused around various themes, in keeping with the department mission to increase students' literacy, awareness of cultures and different cultural values, critical thinking, and self-awareness. The course is offered in a number of formats: workshop, seminar, or independent study and may be repeated for up to 6 credits.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Varies based on course focus.


## MUS 199L - Special Studies: Music (Lab)

## Var. (1-3) Credit(s)

Course Description: Serves a variety of needs and interests, and is used to develop a music course focused around various themes, in keeping with the department mission to increase students' literacy, awareness of cultures and different cultural values, critical thinking, and self-awareness. The course is offered in a number of formats: workshop, seminar, or independent study, and may be repeated for up to 6 credits.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Varies based on course focus.


## MUS 201 - Exploring Music: Introduction to Music History

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: This course explores the history of Western European music from the Middle Ages to the 20th century. It is an overview of musical genres, styles, forms, and practices that were embraced in each period. Examines the way historical events, cultural trends, or technical inventions affected the musical trend in each era. Emphasis is on cultivating critical listening and comprehension skills through musical examples, learning from lectures, documentaries, recordings, and reading of the textbook. No musical background is required. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

Course Learning Outcomes:

- CLO\#1: Explain basic vocabulary of musical terms such as timbre, harmony, melody, homophony, etc.
- CLO\#2: Display critical listening and comprehension skills in music.
- CLO\#3: Describe the general characteristics of European music of the various historical periods. (ILO: Critical Thinking)
- CLO\#4: Explain the major forms and genres of Western European music.


## MUS 205 - History of Jazz

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: This course surveys Jazz styles from its origins to the present as revealed through the study of the most innovative and influential artists of this uniquely American musical form. Emphasis is placed on building critical listening and comprehension skills through listening to musical examples, in-class discussion, quizzes, class assignments, research, and reading of the text. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the important elements of jazz music upon listening to a live or recorded performance.
- CLO\#2: Describe the main style periods of jazz and their characteristics. (ILO: Critical Thinking)
- CLO\#3: Identify the most important innovators and artists of jazz music and explain their contributions to the history and development of jazz as a genre.
- CLO\#4: Describe the roles of the various cultures and their style of music that have contributed to the formation of jazz as the uniquely American musical genre (African, Latin, and European).


## MUS 206 - Introduction to Rock Music

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: This course offers a survey of history of rock music as the unique and prominent musical genre of the United States from its origins to the present. Explores the most innovative and influential artists of rock music as well as their performing and compositional style. Emphasis is placed on building critical listening and comprehension skills through listening to musical examples, in-class discussion of the music, quizzes, assignments, research, and reading of the text. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the important musical elements of rock music upon listening to a live or recorded performance.
- CLO\#2: Describe the musical characteristics of rock and roll and its sub-genres in each of the main stylistic periods. (ILO: Critical Thinking)
- CLO\#3: Identify the most important innovators and artists of rock and roll and describe their contributions to the development of Rock as a prominent musical genre in the U.S.
- CLO\#4: Describe the various cultures and their musical styles that have contributed to the formation of Rock music as a uniquely American musical genre.


## MUS 207 - Songwriting

## 3 Credit(s)

Prerequisite(s): MUS 111 or MUS 101 or permission of Instructor.

Course Description: Songwriting is an introduction to the techniques and styles of popular music songwriting. This course provides students the opportunity to freely explore lyric writing, crafting melodies and hooks, effective use of harmony, and common song structures to successfully create their songs. Students will create their own works through basic lead sheets and workshop them with the class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to write a lead sheet. (ILO: Critical Thinking)
- CLO\#2: Demonstrate an ability to craft a coherent lyric using the tools and skills that students learn in this course.
- CLO\#3: Demonstrate an ability to set a melody and lyric to a series of appropriate harmony.


## MUS 208 - Film Music

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: This course explores the capacity of music to enhance drama and affect our emotions in the medium of film. Examines different ways in which music has been used in film since the birth of cinema to the present. No prior knowledge of music is necessary.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the power of music in enhancing the story, defining the emotion of a character, conveying an idea, and evoking a time or place in a given scene.
- CLO\#2: Describe the elements and parameters of music that contribute to creating music ideal for a given scene in a film. (ILO: Critical Thinking)
- CLO\#3: Identify the major composers and their works and styles in film.


## MUS 211 - Music Theory IV

## 3 Credit(s)

Prerequisite(s): MUS 111 and MUS 112 and MUS 113.
(MUS211, MUS 212, MUS 213 courses must be taken in sequence, unless Instructor permission is granted.)

Course Description: Continues MUS 111, MUS 112 and MUS 113. Offers students a clear and thorough introduction to the resources and practice of Western music with a focus on formal and harmonic analysis. Examines a variety of compositional forms of Baroque \& Classical eras and explores the ways that their renderings live in the music of our time. Topics include the study of binary, ternary, rounded binary, sonataallegro (or first movement form), rondo, and fugue.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to recognize binary, rounded binary, ternary, sonata-allegro, rondo form and fugue by looking at the music and also by listening to the music. (ILO: Critical Thinking)
- CLO\#2: Demonstrate an understanding of the formal structure of sonata-allegro.
- CLO\#3: Demonstrate an ability to recognize modulations on paper and by listening.


## MUS 212 - Music Theory V

## 3 Credit(s)

Prerequisite(s): MUS 211
(MUS 211, MUS212, MUS 213 courses must be taken in sequence, unless Instructor permission is granted.)
Corequisite(s): MUS 225
Course Description: Offers students a clear and thorough introduction to the resources and practice of Western music with a focus on the music of the Classical and Romantic periods and the ways that their renderings apply to music of our time. Forms to examine include rondo and variation. Includes study of extended tertial harmony (9th, 11th, 13th chords), altered dominants, chromatic mediants, and enharmonic modulation.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an ability to identify Rondo and Variations on paper and by listening.
- CLO\#2: Demonstrate an ability to identify and describe altered chords. (ILO: Critical Thinking)
- CLO\#3: Demonstrate an understanding of enharmonic modulations.


## MUS 213 - Music Theory VI

## 3 Credit(s)

Prerequisite(s): MUS 212
(MUS 211, MUS 212, MUS213 courses must be taken in sequence, unless Instructor permission is granted.)
Corequisite(s): MUS 226
Course Description: Expands upon the elements of the practice of Western music harmony and introduces concepts, styles, and techniques of post-tonal theory of the 20th century music.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and identify the music and harmony of the twentieth century.
- CLO\#2: Describe the concepts, styles, and techniques of post-tonal theory of the 20th century music. (ILO: Critical Thinking)
- CLO\#3: Identify and describe the non-diatonic scales used by the composers of post-tonal era.


## MUS 224 - Aural Skills IV

## 1 Credit(s)

Prerequisite(s): MUS 116
(MUS224, MUS 225, and MUS 226 must be taken in sequence, unless Instructor permission is granted.)
Corequisite(s): MUS 211
(This Aural Skills sequence should be taken concurrently with the Music Theory sequence of MUS 211, MUS 212, and MUS 213.)

Course Description: Aural Skills IV is a continuation of MUS 116 and serves to augment the subject matter in MUS 211 with an emphasis on musical aural/oral training. Students develop their ability to hear, identify, and sing intervallic, tertial, melodic, harmonic, and rhythmic patterns in music. Through in-class study and drill, combined with out-of-class computer-assisted learning and self-guided practice, students will develop skills in sight singing and aural transcription with a focus on dominant and non-dominant seventh chords in all positions, leading tone seventh chords in root position, and perceiving tonicization and modulation in chord progressions and melodies. This course is designed to be taken with MUS 211 concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Aurally identify and sing examples of simple and compound intervals, major and minor scales, triadic chord qualities, dominant/non-dominant/leading-tone 7th-chord qualities, secondary dominant/leading-tone 7th-chords, modulations to near keys, and simple/compound time signatures. (ILO: Critical Thinking)
- CLO\#2: Transcribe melodic, harmonic, and rhythmic material from dictated music examples.
- CLO\#3: Sight-sing/transcribe tonal melodies and chord progressions (both modulating and nonmodulating), and rhythmic exercises.
- CLO\#4: Recognize musical patterns and detect errors in music examples


## MUS 225 - Aural Skills V

## 1 Credit(s)

Prerequisite(s): MUS 224
(MUS 224, MUS225, and MUS 226 must be taken in sequence, unless Instructor permission is granted.)

## Corequisite(s): MUS 212

(This Aural Skills sequence should be taken concurrently with the Music Theory sequence of MUS 211, MUS 212, and MUS 213.)

Course Description: Aural Skills V is a continuation of MUS 224 and serves to augment the subject matter in MUS 212 with an emphasis on musical aural/oral training. Students develop their ability to hear, identify, and sing intervallic, tertial, melodic, harmonic, and rhythmic patterns in music. Through in-class study and drill, combined with out-of-class computer-assisted learning and self-guided practice, students will develop skills in sight singing and aural transcription with a focus on harmonies through secondary dominant and leading tone. This course is designed to be taken with MUS 212 concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Aurally identify and sing examples of simple and compound intervals, major and minor scales, triadic chord qualities, dominant/non-dominant/leading-tone 7 th-chord qualities, secondary dominant/leading-tone 7th-chords, modulations to near keys, and simple/compound time signatures. (ILO: Critical Thinking)
- CLO\#2: Transcribe melodic, harmonic, and rhythmic material from dictated music examples.
- CLO\#3: Sight-sing/transcribe tonal melodies and chord progressions (both modulating and nonmodulating), and rhythmic exercises.
- CLO\#4: Recognize musical patterns and detect errors in music examples


## MUS 226 - Aural Skills VI

## 1 Credit(s)

Prerequisite(s): MUS 225
(MUS 224, MUS 225, and MUS226 must be taken in sequence, unless Instructor permission is granted.).

Corequisite(s): MUS 213
(This Aural Skills sequence should be taken concurrently with the Music Theory sequence of MUS 211, MUS 212, and MUS 213.)

Course Description: Aural Skills VI is a continuation of MUS 225 and serves to augment the subject matter in MUS 213 with an emphasis on musical aural/oral training. Students develop their ability to hear, identify, and sing intervallic, tertial, melodic, harmonic, and rhythmic patterns in music. Through in-class study and drill, combined with out-of-class computer-assisted learning and self-guided practice, students will develop skills in sight singing and aural transcription with a focus on harmonies through secondary dominant and leading tone. This course is designed to be taken with MUS 213 concurrently.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Exhibit an understanding of chromatic harmonies including secondary dominants and modulations. Aurally identify and sing examples of simple and compound intervals, major and
minor scales, triadic chord qualities, dominant/non-dominant/leading-tone 7th-chord qualities, secondary dominant/leading-tone 7th-chords, modulations to near keys, and simple/compound time signatures. (ILO: Critical Thinking)
- CLO\#2: Transcribe melodic, harmonic, and rhythmic material from dictated music examples.
- CLO\#3: Sight-sing/transcribe tonal melodies and chord progressions (both modulating and nonmodulating), and rhythmic exercises.
- CLO\#4: Recognize musical patterns and detect errors in music examples.


## MUS 261 - History of Western Music I: Ancient to Baroque

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement, and MUS 101 or knowledge of music fundamentals and the ability to read music.

Course Description: This course studies the history of Western music with a focus on the development of music from the antiquity, the Middle Ages, Renaissance, and Baroque Period. It will examine musical genres, forms, styles, and practices that were embraced in each period. It will also explore the way that historical events, cultural trend, and/or technical inventions affected the musical trend of each era. The emphasis is on cultivating critical listening and comprehension skills through musical examples, learning from lectures, documentaries, recordings, and reading of the textbook.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain musical terms, including tempo markings and various musical textures.
- CLO\#2: Describe the major genres, styles, forms, characteristics of music and performance practices embraced during each of the periods. (ILO: Critical Thinking)
- CLO\#3: Display critical listening and comprehension skills in music.
- CLO\#4: Identify the major composers, their works, styles, and musical innovations from each period.
- CLO\#5: Describe the development of music and the changing musical trends affected by historical events, cultural trends, and/or technical inventions throughout the periods covered in this class.


## MUS 262 - History of Western Music II: Classical and Romantic

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement score, and MUS 101 or knowledge of music fundamentals and the ability to read music.

Course Description: This course studies the history of Western music with a focus on the development of music from Classical period to Romantic period. It will examine musical genres, forms, and styles that were embraced in each period. Explores the way that historical events, cultural trend, and/or technical inventions affected the musical trend of each era. Emphasis is on cultivating critical listening and comprehension skills through musical examples, learning from lectures, documentaries, recordings, and reading of the textbook.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the major genres, styles, forms, and characteristics of music embraced during each of the periods. (ILO: Critical Thinking)
- CLO\#2: Display critical listening and comprehension skills in music.
- CLO\#3: Identify the major composers, their works, styles, and musical innovations from each period.
- CLO\#4: Describe the development of music and the changing musical trends affected by historical events, cultural trends, and/or technical inventions throughout the periods covered in this class.
- CLO\#5: Explain the musical terms found in tempo and expressive markings in Italian, formal structures, and styles of performance or genres.


## MUS 263 - History of Western Music III: 20th Century to Modern Day

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement, and MUS 101 or knowledge of music fundamentals and the ability to read music.

Course Description: This course studies the history of Western music with a focus on the development of music from Late Nineteenth Century, Twentieth-Century Modernism, and Postmodernism (Mid-Twentieth Century and Beyond). Examines innovative compositional techniques, musical genres, forms, and styles that were embraced during each period. Explores the way that historical events, cultural trends, and/or technical inventions affected the musical trend or climate in each era. Emphasis is on cultivating critical listening and comprehension skills through musical examples, learning from lectures, documentaries, recordings, and reading of the textbook.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain musical terms found in compositional procedures, forms, harmony, rhythm, and styles of performance, compositions, or genres.
- CLO\#2: Describe the major genres, styles, forms, new compositional techniques, and characteristics of music embraced during each of the periods. (ILO: Critical Thinking)
- CLO\#3: Display critical listening and comprehension skills in music.
- CLO\#4: Describe the development of music and the changing musical trends affected by historical events, cultural trends, exposure to non-western music, and/or technical inventions throughout the periods covered in this class.


## MUS 264 - History of Rock I: The Roots of Rock

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: This course provides students with an opportunity to explore the musical, social and cultural aspects of rock music from its pre-rock influences and its development through c.1963. Emphasis is placed on building listening and comprehension skills through listening to rock music, in-class discussion of the music, class assignments, research, and reading of the text.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the important elements of a rock performance.
- CLO\#2: Critique recorded and "live" rock and roll performances.
- CLO\#3: Explain the characteristics of the main style periods of rock and roll and their sub-genres. (ILO: Critical Thinking)
- CLO\#4: Identify the most important innovators and artists of rock and roll and what their contributions were.
- CLO\#5: Identify the roles of the various cultures that have contributed to this musical formAmerican jazz and blues, African, Latin, and European.


## MUS 265 - History of Rock II: Rock's Golden Age

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: This course provides students with an opportunity to explore the musical, social and cultural aspects of rock music from its pre-rock influences and its development from 1964-1975. Emphasis is placed on building listening and comprehension skills through listening to rock music, in-class discussion of the music, class assignments, research, and reading of the text.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe the important elements of a rock performance.
- CLO\#2: Critique recorded and "live" rock and roll performances.
- CLO\#3: Explain the characteristics of the main style periods of rock and roll and their sub-genres. (ILO: Critical Thinking)
- CLO\#4: Identify the most important innovators and artists of rock and roll and what their contributions were.
- CLO\#5: Identify the roles of the various cultures that have contributed to this musical formAmerican jazz and blues, African, Latin, and European.


## MUS 266 - History of Rock III: Heavy Metal to Hip-Hop

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: This course explores the musical, social and cultural aspects of rock music from c. 1975 through the present day. Emphasis is placed on building listening and comprehension skills through listening to rock music, in-class discussion of the music, class assignments, research, and reading of the text.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe important elements of a rock performance.
- CLO\#2: Critique recorded and "live" rock and roll performances
- CLO\#3: Explain the characteristics of the main style periods of rock and roll and their sub-genres. (ILO: Critical Thinking)
- CLO\#4: Identify the most important innovators and artists of rock and roll and what their contributions were.
- CLO\#5: Identify the roles of the various cultures that have contributed to this musical formAmerican jazz and blues, African, Latin, and European.


## NFM 225 - Nutrition

## 4 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement. Previous coursework in biology is helpful.
Course Description: Covers chemistry of nutrients, digestion, absorption, and utilization in the body. Studies optimal diets, diet fallacies, diet disorders, and how nutrition affects health and disease.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe and apply knowledge of the general properties of the major nutrients and their effect on basic health.
- CLO\#2: Apply knowledge to personal eating habits, wise consumer food selections and planning a healthy diet.
- CLO\#3: Describe and explain the general body processes of digestion, absorption, metabolism and excretion.
- CLO\#4: Explain how foods act as sources of energy and the general principles of sensible weight management.
- CLO\#5: Apply scientific reasoning in evaluation of current fads and fallacies, advertisements, practices in enrichment and fortification, labeling and supplementation. (ILO: Critical Thinking)
- CLO\#6: Describe and apply knowledge of nutrition's role in the prevention and treatment of disease.


## NRS 110 - Foundations of Nursing-Health Promotion

## 4 Credit(s)

Prerequisite(s): Completion of all prerequisite / preparatory courses (minimum of 45 credits) and formal acceptance into the RCC AAS nursing program.

Course Description: This course introduces the learner to framework of the OCNE curriculum. The emphasis on health promotion across the life span includes learning about self-health as well as client health practices. To support self and client health practices, students learn to access research evidence about healthy lifestyle patterns and risk factors for disease/illness, apply growth and development theory, interview clients in a culturally sensitive manner, work as members of a multidisciplinary team giving and receiving feedback about performance, and use reflective thinking about their practice as nursing students. Populations studied in the course include children, adults, older adults and the family experiencing a normal pregnancy. This course 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.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a culturally and age-appropriate health assessment, and interpret health data, such as screening for biological and psychosocial health risks, evidence of safe and healthy habits,
developmental tasks and vulnerabilities, family functioning. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Develop a plan of care that is family-centered, and developmentally and culturally appropriate, using evidence such as clinical guidelines and integrative literature reviews, to help facilitate a patient's health behavior change.
- CLO\#3: Use effective communication to establish a therapeutic patient-centered relationship and advocate for a health behavior change based on assessment of health risks.
- CLO\#4: Design and evaluate a health behavior change for self and for a selected patient using relevant evidence and family/cultural data.
- CLO\#5: Demonstrate beginning use of selected nursing frameworks, including the legal/ethical base for practice, and their application to the practice of nursing.
- CLO\#6: Recognize and report the importance and relevance of reflection on clinical experiences and on competencies and its influence on personal and professional behavior.
- CLO\#7: Demonstrate use of effective learning strategies in a performance-based curriculum.
- CLO\#8: Demonstrate use of the importance of fulfilling commitments to the team in timely completion of assignments.
- CLO\#9: Demonstrate safe and competent practice of the fundamentals of nursing care, and adherence to patient dignity, safety of patient, self and others, asepsis, and infection prevention with each patient encounter.


## NRS 110C - Foundations of Nursing-Health Promotion Lab And Clinical

## 5 Credit(s)

Prerequisite(s): Completion of all prerequisite / preparatory courses (minimum of 45 credits) and formal acceptance into the RCC AAS nursing program.

Course Description: Clinical associated with NRS 110
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a culturally and age-appropriate health assessment, and interpret health data, such as screening for biological and psychosocial health risks, evidence of safe and healthy habits, developmental tasks and vulnerabilities, family functioning. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Develop a plan of care that is family-centered, and developmentally and culturally appropriate, using evidence such as clinical guidelines and integrative literature reviews, to help facilitate a patient's health behavior change.
- CLO\#3: Use effective communication to establish a therapeutic patient-centered relationship and advocate for a health behavior change based on assessment of health risks.
- CLO\#4: Design and evaluate a health behavior change for self and for a selected patient using relevant evidence and family/cultural data.
- CLO\#5: Demonstrate beginning use of selected nursing frameworks, including the legal/ethical base for practice, and their application to the practice of nursing.
- CLO\#6: Recognize and report the importance and relevance of reflection on clinical experiences and on competencies and its influence on personal and professional behavior.
- CLO\#7: Demonstrate use of effective learning strategies in a performance-based curriculum.
- CLO\#8: Demonstrate use of the importance of fulfilling commitments to the team in timely completion of assignments.
- CLO\#9: Demonstrate safe and competent practice of the fundamentals of nursing care, and adherence to patient dignity, safety of patient, self and others, asepsis, and infection prevention with each patient encounter.


## NRS 111 - Foundations of Nursing in Chronic Illness I

## 2 Credit(s)

Prerequisite(s): NRS 110, NRS 110C

Corequisite(s): NRS 230, NRS 232

Course Description: 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 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 considered 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a health assessment that is patient-centered and family-centered and both developmentally and culturally appropriate, interpret, and use the resulting health data, focusing on:
- mental and functional status, ADLs and IADLs
- coping/adaptive strategies used by patient/family
- lived experience of chronic illness, including recognition of stigma and its impact on vulnerability and maintaining health,
- impact of condition on family functioning, and
- specific lab value interpretation and medication concerns such as polypharmacy.
- CLO\#2: Provide safe and effective, developmentally and culturally appropriate care to patients with chronic illness including:
- safely and effectively assisting clients with ADLs \& IADLs,
- identifying and providing for comfort needs (physical and emotional),
- teaching patients/families about interventions for managing symptoms such as chronic pain, fatigue,
- teaching patients/families about self-assessment and self-management in highly prevalent chronic conditions such as (but not limited to) congestive heart failure, dementia, type 2 diabetes, depression, and obesity. (ILO: Information Literacy)
- CLO\#3: Develop and implement a patient-centered and family-oriented plan of care for a patient with a chronic illness that incorporates evidence-based intervention strategies, assessment data, child and family developmental considerations, and demonstrates a deep understanding of the patient's perspective and illness experience, within the framework of exacerbation, trajectory, and plateau.
- CLO\#4: Apply ANA Code of Ethics and nursing values in the care of persons with a chronic illness or disability.
- CLO\#5: Identify roles and functions of members of the health care team in order to provide care for the chronically ill.


## NRS 111C - Foundations of Nursing in Chronic IIIness I Lab/Clinical

## 4 Credit(s)

Prerequisite(s): NRS 110, NRS 110C

Corequisite(s): NRS 230, NRS 232
Course Description: Clinical associated with NRS 111
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a health assessment that is patient-centered and family-centered and both developmentally and culturally appropriate, interpret, and use the resulting health data, focusing on:
- mental and functional status, ADLs and IADLs
- coping/adaptive strategies used by patient/family
- lived experience of chronic illness, including recognition of stigma and its impact on vulnerability and maintaining health,
- impact of condition on family functioning, and
- specific lab value interpretation and medication concerns such as polypharmacy.
- CLO\#2: Provide safe and effective, developmentally and culturally appropriate care to patients with chronic illness including:
- safely and effectively assisting clients with ADLs \& IADLs,
- identifying and providing for comfort needs (physical and emotional),
- teaching patients/families about interventions for managing symptoms such as chronic pain, fatigue,
- teaching patients/families about self-assessment and self-management in highly prevalent chronic conditions such as (but not limited to) congestive heart failure, dementia, type 2 diabetes, depression, and obesity.(ILO:Information Literacy)
- CLO\#3: Develop and implement a patient-centered and family-oriented plan of care for a patient with a chronic illness that incorporates evidence-based intervention strategies, assessment data, child and family developmental considerations, and demonstrates a deep understanding of the patient's perspective and illness experience, within the framework of exacerbation, trajectory, and plateau.
- CLO\#4: Apply ANA Code of Ethics and nursing values in the care of persons with a chronic illness or disability.
- CLO\#5: Identify roles and functions of members of the health care team in order to provide care for the chronically ill.


## NRS 112 - Foundations of Nursing in Acute Care I

## 2 Credit(s)

Prerequisite(s): NRS 110, NRS 110C and NRS 111, NRS 111C
Corequisite(s): NRS 231, NRS 233
Course Description: This course introduces the learner to assessment and common interventions (including relevant technical procedures) for care of patients across the life span who require acute care, including normal childbirth. Disease/illness trajectories and their translation into clinical practice guidelines and/or standard procedures are considered in relation to their impact on providing culturally sensitive,
patient-centered care. Includes classroom and clinical learning experiences.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a culturally and age-appropriate health assessment and interpret health data focusing on physiologic, developmental and behavioral parameters of the disease trajectory, normal childbirth, and acute exacerbations of chronic conditions and their resolution, and the patient response to acute conditions/processes.
- CLO\#2: Develop plans of care that are family/patient-centered, developmentally and culturally appropriate, using evidence including clinical practice guidelines and integrative literature reviews to implement care plans safely for patients with common acute conditions/processes - manage common symptoms such as acute pain and acute anxiety
- follow evidence-based protocols for procedures and performing skills safely
- use expected illness trajectory to implement patient-centered plans of care,
- monitor progress toward recovery, occurrence of complications and patient's response to interventions. (ILO: Critical Thinking)
- CLO\#3: Identify potential legal and ethical issues related to patient decision-making and informed consent in acute care settings.
- CLO\#4: Apply ANA Code of Ethics and Nursing Values to care of patients.
- CLO\#5: Use therapeutic communication skills in the development of relationships with patients, families, and the care team. (ILO: Communication)
- CLO\#6: Identify roles of the nurse within the healthcare team and roles of all members of the healthcare team, patients, and families.
- CLO\#7: Discuss need for delegation of patient care with experienced nurses.
- CLO\#8: Demonstrate professional behaviors in all interactions with members of the healthcare team including peers, faculty, and staff.


## NRS 112C - Foundations of Nursing in Acute Care I Lab/Clinical

## 4 Credit(s)

Prerequisite(s): NRS 110, NRS 110C and NRS 111, NRS 111C
Corequisite(s): NRS 231, NRS 233
Course Description: Clinical associated with NRS 112
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a culturally and age-appropriate health assessment and interpret health data focusing on physiologic, developmental and behavioral parameters of the disease trajectory, normal childbirth, and acute exacerbations of chronic conditions and their resolution, and the patient response to acute conditions/processes.
- CLO\#2: Develop plans of care that are family/patient-centered, developmentally and culturally appropriate, using evidence including clinical practice guidelines and integrative literature reviews to implement care plans safely for patients with common acute conditions/processes - manage common symptoms such as acute pain and acute anxiety
- follow evidence-based protocols for procedures and performing skills safely
- use expected illness trajectory to implement patient-centered plans of care,
- monitor progress toward recovery, occurrence of complications and patient's response to interventions. (ILO: Critical Thinking)
- CLO\#3: Identify potential legal and ethical issues related to patient decision-making and informed consent in acute care settings.
- CLO\#4: Apply ANA Code of Ethics and Nursing Values to care of patients.
- CLO\#5: Use therapeutic communication skills in the development of relationships with patients, families, and the care team. (ILO: Communication)
- CLO\#6: Identify roles of the nurse within the healthcare team and roles of all members of the healthcare team, patients, and families.
- CLO\#7: Discuss need for delegation of patient care with experienced nurses.
- CLO\#8: Demonstrate professional behaviors in all interactions with members of the healthcare team including peers, faculty, and staff.


## NRS 115 - LPN Transition to OCNE

## 4 Credit(s)

Prerequisite(s): NRS 230 and NRS 232 and full acceptance to the RCC Nursing Program. This course is only for LPNs accepted into the advanced placement process.

Course Description: Introduces the learner to the framework of the RCC and Oregon Consortium for Nursing Education (OCNE) curriculum including the OCNE competencies and benchmarks and the clinical judgment model. The student is introduced to the role and practice of the registered nurse. 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, concept-based learning activities, and patient care activities will be used to provide students opportunities to demonstrate critical thinking in the provision of simulated and actual patient care. The course will be delivered through a variety of methods, e.g. face to face classroom and seminar, skills lab, high fidelity simulation, and hospital clinical experiences. Participation in weekly NRS115 seminar sessions and all scheduled NRS 115C clinical experiences (including required preparation for clinical care) will typically require a five day per week availability. Clinical is graded on a P/NP basis.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss and compare own practice using the 10 OCNE Competencies and benchmark rubric.
- CLO\#2: Construct plans of care that are family-centered, developmentally and culturally appropriate, using evidence including clinical guidelines and integrative literature reviews to implement care plans safely for patients with common chronic and acute conditions/processes.
- CLO\#3: Demonstrate the use of therapeutic communication skills in the simulated care of patients and families. (ILO: Communication)
- CLO\#4: Compose a health behavior change for self, use effective communication to establish a therapeutic relationship and advocate for a health behavior change in a client. (ILO: Information Literacy)
- CLO\#5: Demonstrate a beginning integration of selected nursing frameworks, including the legal and ethical basis for practice, and their application to the practice of nursing.
- CLO\#6: Explain the importance and relevance of reflection and its influence on personal and professional behavior and demonstrate consistent utilization of reflective practice including active participation in simulation and debriefing.
- CLO\#7: Identify potential legal and ethical issues and reflect on application of the ANA Code of Ethics in previous patient care experiences.
- CLO\#8: Identify levels of evidence appropriate to various kinds of decision making in nursing practice.
- CLO\#9: Demonstrate safe and competent practice (at beginning level) of the following skills: medication administration, IV maintenance for both primary and secondary bags, urinary catheterization, sterile technique, dosage calculations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#10: Describe selected concepts of health promotion, chronic care, acute care and their application in the care of patients and groups of patients.
- CLO\#11: Identify similarities and differences between the role of the LPN and the role of the RN, recognizing differences in scope of practice as delineated in the Oregon Nurse Practice Act.


## NRS 115C - LPN Transition to OCNE Clinical

## 2 Credit(s)

Prerequisite(s): NRS 230 and NRS 232 and full acceptance to the RCC Nursing Program. This course is only for LPNs accepted into the advanced placement process.

Course Description: Clinical associated with NRS 115.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Discuss and compare own practice using the 10 OCNE Competencies and benchmark rubric.
- CLO\#2: Construct plans of care that are family-centered, developmentally and culturally appropriate, using evidence including clinical guidelines and integrative literature reviews to implement care plans safely for patients with common chronic and acute conditions/processes.
- CLO\#3: Demonstrate the use of therapeutic communication skills in the simulated care of patients and families. (ILO: Communication)
- CLO\#4: Compose a health behavior change for self, use effective communication to establish a therapeutic relationship and advocate for a health behavior change in a client. (ILO: Information Literacy)
- CLO\#5: Demonstrate a beginning integration of selected nursing frameworks, including the legal and ethical basis for practice, and their application to the practice of nursing.
- CLO\#6: Explain the importance and relevance of reflection and its influence on personal and professional behavior and demonstrate consistent utilization of reflective practice including active participation in simulation and debriefing.
- CLO\#7: Identify potential legal and ethical issues and reflect on application of the ANA Code of Ethics in previous patient care experiences.
- CLO\#8: Identify levels of evidence appropriate to various kinds of decision making in nursing practice.
- CLO\#9: Demonstrate safe and competent practice (at beginning level) of the following skills: medication administration, IV maintenance for both primary and secondary bags, urinary catheterization, sterile technique, dosage calculations. (ILO: Quantitative Literacy and Reasoning)
- CLO\#10: Describe selected concepts of health promotion, chronic care, acute care and their application in the care of patients and groups of patients.
- CLO\#11: Identify similarities and differences between the role of the LPN and the role of the RN, recognizing differences in scope of practice as delineated in the Oregon Nurse Practice Act.


## NRS 199 - Special Studies: Nursing

## Var. (1-3) Credit(s)

Prerequisite(s): Completion of the first term of the Nursing program is required.

Course Description: Develops students' abilities to recognize and treat the symptoms of illness and injury in classroom labs and simulated patient care scenes. Includes skills in patient assessment, basic airway management, overall assessment and patient management, medication administration, and the use of other equipment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate key principles of Nursing care.
- CLO\#2: Apply concepts learned in the classroom to the assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#3: Demonstrate effective teamwork in managing simulated scenarios.
- CLO\#4: Variable, depending on content. (ILO: Variable, depending on content.)


## NRS 221 - Nursing in Chronic IIIness II and End-of-Life

## 5 Credit(s)

Prerequisite(s): NRS 110, NRS 111, NRS 112, NRS 230, NRS 231, NRS 232, NRS 233

Course Description: This course builds on Foundations of Nursing in Chronic Illness I. Chronic IIIness 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 inter-professional 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a health assessment that is in-depth, evidence-based, family centered, and both developmentally and culturally appropriate. Interpret health data, focusing on:
- functional issues associated with complexities of co-morbid conditions in relation to ADLs and IADLs.
- manifestations of psychiatric diagnoses and their impact on patient self-care.
- psychosocial issues and the impact of the illness on individual development and family function.
- the patient's personal, social and cultural interpretation of the meaning of the illness and the impact on the patient's family.
- capacity for and engagement in self-care.
- opportunities for health behavior change.
- CLO\#2: Applies evidence-based nursing practices in support of patient and family in self health care management across the lifespan to:
- establish meaningful relationships with patients/families.
- support patient and family in development of capacity for self-health care management.
- address caregiver needs for preparedness and predictability with regards to the management of symptoms /manifestations for specific disorders.
- assess family strengths and resources, caregiver role strain, and capacity to provide care.
- CLO\#3: Incorporate measures to enhance quality of life in the plan of care by:
- facilitating patient in developing their personal definition of quality of life.
- addressing patient needs for preparedness and predictability.
- CLO\#4: Identify and use community resources to provide support for the patient and family caregiving by:
- supporting the patient in negotiating the healthcare settings.
- assessing appropriateness of resources in meeting the patient/family needs, (e.g. accessibility, financial feasibility, acceptability)
- developing inter-professional collaboration for the provision of care.
- CLO\#5: Communicate with agencies involved in patient care to assure continuity of care across settings (e.g. schools, day care, adult foster care, etc.) by:
- negotiating with others to modify care; and
- advocating for patients. (ILO: Communication)
- CLO\#6: Utilize nursing and inter-professional based knowledge of death and dying trajectories to support patients/families across the lifespan who are experiencing transitions at the end of life by: - describing the epidemiology of dying: where, when, how people die, dying trajectories across the lifespan.
- using developmentally and culturally appropriate communication with patients and families at end of life.
- using appropriate assessment techniques for individuals and families experiencing life threatening illness.
- CLO\#7: Analyze impact of health care delivery system issues, policy and financing on individual and family health care needs for chronic illness and end of life care by:
- comparing basic funding mechanisms.
- identifying decision-making issues for chronic care based on funding resources.
- assessing appropriateness of resources in meeting the patient/family needs, (e.g., accessibility, financial feasibility, acceptability).
- CLO\#8: Demonstrate honesty and integrity.
- CLO\#9: Demonstrate correct application/continued competence in previously learned principles/nursing care skills/therapeutic measures including dosage calculations.


## NRS 221C - Nursing in Chronic IIIness II and End- of-Life Clinical

## 4 Credit(s)

Prerequisite(s): NRS 110, NRS 111, NRS 112, NRS 230, NRS 231, NRS 232, NRS 233
Course Description: Clinical associated with NRS 221
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct a health assessment that is in-depth, evidence-based, family centered, and both developmentally and culturally appropriate. Interpret health data, focusing on:
- functional issues associated with complexities of co-morbid conditions in relation to ADLs and IADLs.
- manifestations of psychiatric diagnoses and their impact on patient self-care.
- psychosocial issues and the impact of the illness on individual development and family function.
- the patient's personal, social and cultural interpretation of the meaning of the illness and the impact on the patient's family.
- capacity for and engagement in self-care.
- opportunities for health behavior change.
- CLO\#2: Applies evidence-based nursing practices in support of patient and family in self health care management across the lifespan to:
- establish meaningful relationships with patients/families.
- support patient and family in development of capacity for self-health care management.
- address caregiver needs for preparedness and predictability with regards to the management of symptoms /manifestations for specific disorders.
- assess family strengths and resources, caregiver role strain, and capacity to provide care.
- CLO\#3: Incorporate measures to enhance quality of life in the plan of care by:
- facilitating patient in developing their personal definition of quality of life.
- addressing patient needs for preparedness and predictability.
- CLO\#4: Identify and use community resources to provide support for the patient and family caregiving by:
- supporting the patient in negotiating the healthcare settings.
- assessing appropriateness of resources in meeting the patient/family needs, (e.g. accessibility, financial feasibility, acceptability)
- developing inter-professional collaboration for the provision of care.
- CLO\#5: Communicate with agencies involved in patient care to assure continuity of care across settings (e.g. schools, day care, adult foster care, etc.) by:
- negotiating with others to modify care; and
- advocating for patients. (ILO: Communication)
- CLO\#6: Utilize nursing and inter-professional based knowledge of death and dying trajectories to support patients/families across the lifespan who are experiencing transitions at the end of life by: - describing the epidemiology of dying: where, when, how people die, dying trajectories across the lifespan.
- using developmentally and culturally appropriate communication with patients and families at end of life.
- using appropriate assessment techniques for individuals and families experiencing life threatening illness.
- CLO\#7: Analyze impact of health care delivery system issues, policy and financing on individual and family health care needs for chronic illness and end of life care by:
- comparing basic funding mechanisms.
- identifying decision-making issues for chronic care based on funding resources.
- assessing appropriateness of resources in meeting the patient/family needs, (e.g., accessibility, financial feasibility, acceptability).
- CLO\#8: Demonstrate honesty and integrity.
- CLO\#9: Demonstrate correct application/continued competence in previously learned principles/nursing care skills/therapeutic measures including dosage calculations.


## NRS 222 - Nursing in Acute Care II and End-of-Life

## 5 Credit(s)

Prerequisite(s): NRS 221, NRS 221C
Course Description: 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, 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct evidence-based assessment, using age, developmental and culturally appropriate communication skills, specifically by:
- Monitoring a variety of data and accurately interpreting obvious deviations from expected patterns in increasingly complex acute conditions (e.g. co-morbidities, complications, high-risk pregnancies, acute psychosis, life threatening situations, diverse health beliefs);
- Recognizing potential problems and rapidly changing physiologic and behavioral situations;
- Recognizing pathophysiological changes and symptoms experienced by the patient which are associated with the dying process;
- Regularly monitoring patients' level of comfort and ability to manage symptoms and symptom distress;
- Assessing family's response to patient's illness and,
- Recognizing impact of individual development, as well as family development and dynamics on physiologic and behavioral status.
- CLO\#2: Develop and use evidence-based, individualized, developmentally appropriate interventions that are dynamic and based on changing needs of patient and family.
- CLO\#3: Collaborate with health care team members to provide comfort and symptom management.
- CLO\#4: Develop discharge plans in collaboration with patient, family and health care team members.
- CLO\#5: Reflect on experiences in caring for patients with acute conditions.
- CLO\#6: Demonstrate correct application/continued competence in previously learned principles/nursing care skills/therapeutic measures including dosage calculations and medication administration. (ILO: Quantitative Literacy and Reasoning)


## NRS 222C - Nursing in Acute Care II and End-of-Life Clinical

## 4 Credit(s)

Prerequisite(s): NRS 221, NRS 221C

Course Description: Clinical associated with NRS 222

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Conduct evidence-based assessment, using age, developmental and culturally appropriate communication skills, specifically by:
- Monitoring a variety of data and accurately interpreting obvious deviations from expected patterns in increasingly complex acute conditions (e.g. co-morbidities, complications, high-risk pregnancies, acute psychosis, life threatening situations, diverse health beliefs);
- Recognizing potential problems and rapidly changing physiologic and behavioral situations;
- Recognizing pathophysiological changes and symptoms experienced by the patient which are associated with the dying process;
- Regularly monitoring patients' level of comfort and ability to manage symptoms and symptom distress;
- Assessing family's response to patient's illness and,
- Recognizing impact of individual development, as well as family development and dynamics on physiologic and behavioral status.
- CLO\#2: Develop and use evidence-based, individualized, developmentally appropriate interventions that are dynamic and based on changing needs of patient and family.
- CLO\#3: Collaborate with health care team members to provide comfort and symptom management.
- CLO\#4: Develop discharge plans in collaboration with patient, family and health care team members.
- CLO\#5: Reflect on experiences in caring for patients with acute conditions.
- CLO\#6: Demonstrate correct application/continued competence in previously learned principles/nursing care skills/therapeutic measures including dosage calculations and medication administration. (ILO: Quantitative Literacy and Reasoning)


## NRS 224 - Integrative Practicum

## 2 Credit(s)

Prerequisite(s): NRS 222, NRS 222C
Course Description: This course is designed to formalize the clinical judgments, knowledge and skills necessary in safe, registered nurse practice. The faculty/preceptor/student triad model provides a context that allows the student to experience the nursing role in a selected setting, balancing the demands of professional nursing and intentional 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Make sound clinical judgments based on increasingly complex knowledge base, best practice evidence and experience in care of selected populations.
- CLO\#2: Set priorities in the provision of care with attention to patient needs and preferences, available resources and ethical aspects of patient care.
- CLO\#3: Practice self-reflection and self-analysis to identify areas for improvement.
- CLO\#4: Advocate for and provide individualized care for patients and families.
- CLO\#5: Evaluate and improve one's own leadership skills through collaboration with the health care team.
- CLO\#6: Delegate or assign responsibilities appropriately taking into consideration the other's scope of practice or training.
- CLO\#7: Integrate concepts of resource utilization, quality improvement and systems to enhance care delivery across the continuum of care. (ILO: Quantitative Literacy and Reasoning)
- CLO\#8: Articulate a personal view of nursing practice that exemplifies quality and safety in care.
- CLO\#9: Demonstrate competent performance when evaluated against national standards and criteria.


## NRS 224C - Integrative Practicum Clinical

## 7 Credit(s)

Prerequisite(s): NRS 222, NRS 222C

Course Description: Clinical associated with NRS 224

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Make sound clinical judgments based on increasingly complex knowledge base, best practice evidence and experience in care of selected populations.
- CLO\#2: Set priorities in the provision of care with attention to patient needs and preferences, available resources and ethical aspects of patient care.
- CLO\#3: Practice self-reflection and self-analysis to identify areas for improvement.
- CLO\#4: Advocate for and provide individualized care for patients and families.
- CLO\#5: Evaluate and improve own leadership skills through collaboration with the health care team.
- CLO\#6: Delegate or assign responsibilities appropriately taking into consideration the other's scope of practice or training.
- CLO\#7: Integrate concepts of resource utilization, quality improvement and systems to enhance care delivery across the continuum of care. (ILO: Quantitative Literacy and Reasoning)
- CLO\#8: Articulate a personal view of nursing practice that exemplifies quality and safety in care.
- CLO\#9: Demonstrate competent performance when evaluated against national standards and criteria.


## NRS 230 - Clinical Pharmacology I

## 3 Credit(s)

Prerequisite(s): BI 234 and NRS 110

Course Description: 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, psychotropic drugs, neurological drugs, principles of cancer chemotherapy, and drugs for endocrine, cardiovascular and respiratory diseases. 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Use current, reliable sources of information to access pertinent information about drugs and natural products, focusing on - identification of appropriate reliable sources of information in specific nursing situations
- rapid and accurate retrieval of pertinent information from a current drug guide, and
- accurate retrieval of information from a comprehensive drug information source.
- CLO\#2: Monitor and evaluate the effectiveness of drug therapy, focusing on
- selection and interpretation of basic focused nursing assessments to detect therapeutic effects,
- side effects and adverse reactions, and drug-drug, drug-food, and drug-natural product interactions for specific classes of drugs
- surveillance for vulnerability to negative effects of specific classes of drugs based on age, developmental physiology, concurrent pathophysiology, psychopathology or other factors.
- CLO\#3: Teach patients, family members, and others from diverse populations across the lifespan regarding safe and effective use of drugs and natural products, focusing on:
- self-management of specific classes of over-the-counter and prescription drugs that are used episodically.
- self-management of specific classes of drugs that are taken for chronic conditions.
- how the action of specific classes of drugs relates to developmental, maturational, aging, neurochemical, and pathophysiological processes, or normal physiology.
- which side/adverse effects of specific classes of drugs and natural products to self-manage and which ones to report to health professionals.
- how to avoid or recognize drug-drug, drug-food, and drug-natural product interactions with specific classes of drugs. (ILO: Communication)
- CLO\#4: Identify appropriate nursing interventions to increase therapeutic benefits and reduce potential negative effects of drug therapy, focusing on
- identification of basic non-pharmacological interventions that potentially enhance the effectiveness of specific classes of drugs
- assessment of barriers to adherence to drug therapy with specific classes of drugs. (ILO: Critical thinking)
- CLO\#5: Communicate appropriately with other health professionals regarding drug therapy, focusing on
- using appropriate technical language related to pharmacology.
- explaining drug mechanisms of action and their relationship to normal physiology.
- reporting pertinent information about an individual's response to specific classes of drugs or natural products. (ILO: Communication)


## NRS 231 - Clinical Pharmacology II

## 3 Credit(s)

Prerequisite(s): NRS 230
Course Description: This sequel to NRS 230 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 including immune related drugs, herbals, gastrointestinal drugs, antivirals, antidysrhythmics and others.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Use current, reliable sources of information to access pertinent information about drugs and natural products, focusing on
- identification of appropriate reliable sources of information in specific nursing situations
- rapid and accurate retrieval of pertinent information from a current drug guide, and - accurate retrieval of information from a comprehensive drug information source.
- CLO\#2: Monitor and evaluate the effectiveness of drug therapy, focusing on
- selection and interpretation of basic focused nursing assessments to detect therapeutic effects
- side effects and adverse reactions, and drug-drug, drug-food, and drug-natural product interactions for specific classes of drugs
- surveillance for vulnerability to negative effects of specific classes of drugs based on age, developmental physiology, concurrent pathophysiology, psychopathology or other factors. (ILO: Critical Thinking)
- CLO\#3: Teach patients, family members, and others from diverse populations across the lifespan regarding safe and effective use of drugs and natural products, focusing on:
- self-management of specific classes of over-the-counter and prescription drugs that are used episodically
- self-management of specific classes of drugs that are taken for chronic conditions
- how the action of specific classes of drugs relates to developmental, maturational, aging, neurochemical, and pathophysiological processes, or normal physiology, - which side/adverse effects of specific classes of drugs and natural products to self-manage and which ones to report to health professionals, and - how to avoid or recognize drug-drug, drug-food, and drug-natural product interactions with specific classes of drugs
- CLO\#4: Identify appropriate nursing interventions to increase therapeutic benefits and reduce potential negative effects of drug therapy, focusing on
- identification of basic non-pharmacological interventions that potentially enhance the effectiveness of specific classes of drugs
- assessment of barriers to adherence to drug therapy with specific classes of drugs. (ILO: Critical Thinking )
- CLO\#5: Communicate appropriately with other health professionals regarding drug therapy, focusing on
- using appropriate technical language related to pharmacology
- explaining drug mechanisms of action and their relationship to normal physiology and
- reporting pertinent information about an individual's response to specific classes of drugs or natural products.


## NRS 232 - Pathophysiological Processes I

## 3 Credit(s)

Prerequisite(s): Acceptance into the Nursing program.

Corequisite(s): NRS 110 or advanced placement as an LPN.

Course Description: 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Access current, reliable information about selected pathophysiological processes, including cellular adaptation, injury, and death; inflammation and tissue healing; fluid and electrolyte imbalances; and physiologic response to stressors. (ILO: Information Literacy)
- CLO\#2: Select and interpret basic focused nursing assessments based on knowledge of clinical manifestations of and developmental considerations in selected pathophysiological processes in patients across the life span.
- CLO\#3: Teach persons from diverse populations across the lifespan regarding selected pathophysiological processes, focusing on
- explaining how the risk factors relate to specific pathophysiological processes
- describing selected pathophysiological processes in appropriate terms
- explaining how the signs and symptoms relate to specific pathophysiological processes
- explaining which signs and symptoms to report to a health professional
- explaining how developmental factors relate to pathophysiology
- CLO\#4: Communicate effectively with other health professionals regarding selected pathophysiological processes, focusing on
- using appropriate technical language
- clarifying technical details of pathophysiological processes
- reporting pertinent information about a patient's status


## NRS 233 - Pathophysiological Processes II

## 3 Credit(s)

Corequisite(s): NRS 232
Course Description: 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.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Access and interpret current, reliable information about selected pathophysiological processes.
- CLO\#2: Select and interpret basic focused nursing assessments based on knowledge of clinical manifestations, developmental considerations and potential complications of selected pathophysiological processes in patients across the life span. (ILO: Critical Thinking)
- CLO\#3: Teach persons from diverse populations regarding selected pathophysiological processes, focusing on explaining how risk factors relate to specific pathophysiological processes describing selected pathophysiological processes in appropriate terms explaining how the signs and symptoms relate to specific pathophysiological processes explaining which signs and symptoms to report to a health professional, and explaining how developmental factors relate to pathophysiology, symptom experience, symptom reporting, and symptom management.
- CLO\#4: Communicate effectively with other health professionals regarding selected pathophysiological processes, focusing on using appropriate technical language clarifying technical
details of pathophysiological processes, and prioritizing and reporting pertinent information regarding a patient's status.


## OAL 150-Outdoor Living Skills

## 2 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement, and ability to walk with a backpack in the wilderness containing own, personal gear.

Course Description: Introduces students to the art of preparing to camp in front country or back country, presenting skills that are applicable to any environment and activity. Students will develop and apply skills in a range of environmental settings and will be prepared for future classes and experiences in the outdoors. The primary goal of this course is to learn the skills necessary to plan equipment and food for group trips as well as practice the skills of making informed choices in wilderness environments. The class requires two field experiences and an overnight, field-based component in order to demonstrate proficiency in planning for future, extended mountain backpacking, rock climbing, snow-survival camping, hiking, and water-based adventures.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop skills to carefully plan all necessary aspects of a well-planned outdoor adventure, allocating time and materials for all equipment and food.
- CLO\#2: Develop skills to account for emergency needs and sudden changes in the outdoor environmental circumstances.
- CLO\#3: Demonstrate ability to set up tents, start camp stoves, find or create shelter, bear-proof food, hike with a group, camp with craft and low impact levels on the environment. (ILO: Communication)
- CLO\#4: Participate in two field experiences and an overnight outdoor adventure experience to demonstrate proficiency in the various camp-craft requirements for responsible leadership in the outdoor environment.
- CLO\#5: Participate in two field experiences and one overnight wilderness hiking experience to demonstrate ability to operate as a respectful, responsible, and engaged group member and as a group leader.


## OAL 223 - Wilderness Navigation

## 2 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Uses a classroom setting to preview and cover the types of land forms that will be seen in the wilderness to prepare students for understanding real life navigation complexes. Introduces students to wilderness navigation including how to orient, navigate, and route-find in a wilderness setting using maps, compass, altimeter and GPS. Course requires students to demonstrate competency in a field setting. Successful completion is not possible without mandatory off-site locations components.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate an understanding of the concepts and skills necessary for map reading, compass use, and application of information to prepare for a wilderness adventure.
- CLO\#2: Students will demonstrate an understanding of maps, their development, interpretation, and the wealth of information and data they provide by creating various maps throughout the course.
- CLO\#3: Students will demonstrate mastery of GPS and altimeter technologies associated with navigation by successfully using the technology in the course.
- CLO\#4: Students will incorporate and synthesize new navigation information, skills of map reading, compass, altimeter and GPS, and apply them in three field-based, real world settings. (ILO: Critical Thinking)


## OAL 250 - Foundations of Outdoor Adventure and Leadership

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Introduces the student to the history, philosophy, and styles in outdoor adventure leadership in contemporary society, with application to current trends and prospects for the future. The course will allow students to develop knowledge and a personal style of effective leadership and communication.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Trace the history and philosophy of outdoor adventure leadership within the context of the purpose and intent of experiential education.
- CLO\#2: Develop knowledge of factors affecting the motivation behind adventure participants.
- CLO\#3: Analyze varying outdoor leadership skills and styles, and describe the appropriate leadership command approach for guides, Instructors, and team members in a range of settings.
- CLO\#4: Explore effective group conflict management and group facilitation with feedback and assessment methods. (ILO: Critical Thinking)
- CLO\#5: Evaluate expeditionary behavior, necessary critical decisions, and risk management within an adventure setting.
- CLO\#6: Experience an on-campus, outdoor component of experiential education by actively participating as a team member and leader in a facilitated outdoor challenge.
- CLO\#7: Explore employment opportunities, certificates, and local leaders in the field of OAL.


## PE 184 - Adaptive Physical Education

## 1 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: This course focuses on knowledge, comprehension, and application of human movement principles related to individuals with disabilities. Prepares students with a foundation of special needs applications through a combination of research and practical classroom experience within the professional arena of persons with disabilities. Because student participation is both a vital part of the learning process and an important way to enrich the course experience, student to student interaction is required. Students are encouraged to raise issues, provide information from their own experience, and ask questions.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and define basic terminology associated with various disabilities needed to write and speak as an informed and competent professional. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#2: Identify and describe disabilities as defined in Public Law
- CLO\#3: Demonstrate a comprehension of the central principles and benefits of adaptive physical education for students.
- CLO\#4: Identify various disabling conditions and their significance in the broader context of health and fitness.
- CLO\#5: Design and write 3 lesson plans that include adaptations and modifications intended to individualize instruction to include children with disabilities in general in a "least restrictive environment" in a physical education class. (ILO: Communication)
- CLO\#6: Apply learned principles and strategies from the lectures and readings to a field work setting: Plan assessment, diagnostic, and prescriptive techniques in meeting the individual needs of 3 persons with disabilities


## PE 185AML - Aerobics, Multi-Level

## 1 Credit(s)

Course Description: Consists of a high-energy, cardiovascular workout for men and women of all ages, sizes, and physical conditions using dance aerobics, step aerobics, kickboxing, and Latin craze as a foundation in the class. Geared to meet each student's ability, needs and goals while strengthening the entire body to a music workout. Activities include muscular strength and endurance, cardiovascular endurance, body composition, and flexibility while keeping one foot on the floor at all times during aerobic segments. Benefits of exercise, proper execution of exercises, the prevention and care of exercise-related injuries, and major muscle groups and body terms are included.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper exercise form in more than one dance/fitness style. (ILO: Critical Thinking)
- CLO\#2: Demonstrate improvement in the targeted areas of body composition.
- CLO\#3: Identify the major muscle groups and explain safe use, injury prevention and recovery.
- CLO\#4: Create and demonstrate routine or specific exercise or present information on a fitness related topic.


## PE 185APT - Aquatics for Personal Trainers

## 1 Credit(s)

Prerequisite(s): PE 185PCW
Course Description: Provides students with a solid foundation for working as personal trainers in the medium of water. The course provides a comprehensive approach to the fundamentals of physical fitness,
weight loss, and functional movements that promote flexibility, movement, and a life of health and wellness in a pool setting. The course is designed to support students who would like to pursue a personal trainer certification.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in the pool and demonstrate the skills of aquatic personal training.
- CLO\#2: Set specific, measurable, attainable, realistic, and timely goals for individuals. (ILO: Critical Thinking)
- CLO\#3: Conduct an initial assessment of current physical status, and develop programs for health and fitness goals distinguishing between the two.
- CLO\#4: Develop a rapport that allows clients to trust and follow the help and directions of the personal trainer. Steps to follow or something specific that is done to build a rapport? Clients trust is different with each person.


## PE 185BMT - Mountain Biking

1 Credit(s)
Prerequisite(s): Physical abilities and strength to mountain bike.
Course Description: Mountain Biking is an "all-comers" course that allows for a range of abilities, form novice to advanced. Students will attend one orientation and will then meet at designated trail heads in the Rogue Valley each week and participate in the mountain biking courses. Mountain Biking course topics include: comfort and competitive rides, fitness, safety, hydration, nutrition, basic bicycle maintenance, and opportunities to get involved in the sport through community rides, racing, and volunteering.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate improvement in increased cardio-respiratory endurance, increased muscle strength and endurance, and improvement of mountain biking skills by completing progressively more difficult rides and challenges.
- CLO\#2: Participate in all aspects of the course everyday including warmups, rides, maintenance and safety procedures to develop a lifelong love of fitness through biking.
- CLO\#3: Demonstrate basic bicycle maintenance and safety procedures that contribute to the group goal of successful rides with the team's bicycles. (ILO: Critical Thinking)
- CLO\#4: Students will demonstrate integrity, and self-management in caring for personal gear and others' experiences by being respectful and sociable with other trail users they may encounter.


## PE 185BOW - Bowling

## 1 Credit(s)

Prerequisite(s): Sufficient physical ability to move on the lanes, lift a bowling ball, and throw it down the
lane.

Course Description: Teaches basic bowling skills as well as provides a foundation to more advanced skills and techniques for those who are ready and able. Through use of instructional videos, personalized coaching on and off the lanes, and feedback from fellow classmates and the Instructor, students will achieve personal fitness goals while having fun and interacting with others. Upon completion of this course students will show an improvement in bowling techniques, develop an understanding of rules, verbiage and etiquette of the sport, and be able to watch and participate in the sport with greater ability and knowledge.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate as member of bowling team and demonstrate skills and exercises designed to support the sport. (ILO: Critical Thinking)
- CLO\#2: Demonstrate proper form, technique and positioning in fundamental skills resulting in improved accuracy in bowling skills.
- CLO\#3: List basic game rules, scoring and terms of bowling.
- CLO\#4: Successfully apply all elements in the class while attempting to perfect competencies according to individual highest ability level possible.


## PE 185BPA - Backpacking Adventure

## 1 Credit(s)

Prerequisite(s): Ability to walk in the wilderness with a backpack containing personal gear for a minimum of 5-8 miles per day.

Course Description: Teaches the skills to travel and camp with quality and style, while exploring and respecting the wilderness. The skills necessary to plan equipment and food for group trips as well as the skills to make informed choices in a wilderness environment will be covered. There will be a required planning/backpacking principles orientation in order to prepare for a mountain backpacking trip to an Oregon wilderness area. Students will be expected to share the cost of food and gas and will be responsible for their own backpacking gear including rental if necessary.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in wilderness hiking, operate as team member and practice effective communication skills. (ILO: Communication)
- CLO\#2: Develop skills to carefully plan, allocating materials for equipment and food.
- CLO\#3: Demonstrate ability to set up camp, navigate with map and compass, and hike with a group
- CLO\#4: Display integrity in leadership through individual and team challenges.


## PE 185CAC - Core and Cardio

## 1 Credit(s)

Course Description: Offers a variety of methods to achieve a stronger core and greater cardiac performance: weighted workout, kick boxing, circuit training, dance aerobics, step aerobics, and interval training are used to strengthen and increase metabolism, heart circulation, and lung capacity. Stretching, Pilates mat work, use of balls, weights and exercise bands to tone, strengthen, and develop the core, will also be employed. Short lectures will cover the benefits of exercise, proper breathing and execution of exercises, the prevention and care of exercise-related injuries, diet, physiology, major muscles groups and body terms, and information on related health issues.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply fundamentals in proper exercise in different fitness styles.
- CLO\#2: Demonstrate improvement in the targeted areas of body composition.
- CLO\#3: Identify the major muscle groups, and explain proper use, injury prevention and recovery.
- CLO\#4: Create and demonstrate a routine or specific exercise or present on a fitness related topic. (ILO: Communication)


## PE 185CFT - Circuit Fitness Training

## 1 Credit(s)

Course Description: Provides students the opportunity to develop individual cardiovascular fitness, flexibility, and muscular strength and endurance through a range of group exercise activities. Each class will begin with a warm-up including toning and dynamic stretching of all major muscle groups followed by 40 to 55 minutes of circuit activities: weight machines, free weights, steps, medicine ball, slides, jogging/walking, resistance bands, stability ball and jump ropes are among the activities and equipment included. These circuit activities will rotate on a regular schedule. Every class will end with a cool-down period focusing on static stretching and relaxation. Short lecture sections will cover the benefits of exercise, proper breathing and execution of exercises, prevention and care of exercise-related injuries, diet, physiology, major muscles groups and body terms, and information on related health issues.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate and apply safe and easy exercises for the heart and entire body. (ILO: Critical Thinking)
- CLO\#2: Demonstrate improvement in body composition.
- CLO\#3: List and describe function major muscle groups.
- CLO\#4: Create and present a routine or specific exercise for toning an individual muscle group or information on a fitness-related topic.


## PE 185CID - Cycling Indoor

## 1 Credit(s)

Prerequisite(s): Ability to pedal a stationary bicycle.

Course Description: Improves fitness, health, and overall wellness through structured group cycling. The course is designed to improve cardiovascular endurance while enhancing cycling skills and mechanics. Instructor-led workouts are performed on stationary cycles using a variety of cycling-specific body positions and drills to the sounds of music. Focuses on maintaining or improving fitness through participation in a regular schedule of bicycle riding. Options for intensity are provided. Promotes improved cardiorespiratory conditioning, muscle strength and endurance, flexibility, and body composition.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe and effective indoor cycling (ILO: Critical Thinking)
- CLO\#2: Demonstrate improvement in the targeted areas of body composition.
- CLO\#3: Develop a fitness, health, and wellness program plan.


## PE 185CRD - Road Cycling

## 1 Credit(s)

Prerequisite(s): Physical abilities and strength to road cycle.

Course Description: Road Cycling offers credit for cycling throughout the week and is designed so that beginner to expert can participate to improve his/her skills and enjoyment. Topics covered: riding techniques, comfort, fitness, safety, and basic bicycle maintenance. Rides can be in various locations throughout the Rogue \& Applegate Valley, such as to and from school. The class will meet virtually in week 1 for an orientation and cover course expectations and requirements as well as basic safety and bicycle maintenance. Students will provide evidence of completion of assigned rides to Instructor through shared STRAVA (or other) app use and submit a journal for each ride through Blackboard.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate improvement in increased cardio-respiratory endurance, increased muscle strength and endurance, and improvement of road cycling skills by completing progressively more difficult rides and challenges.
- CLO\#2: Participate in all aspects of the course everyday including warmups, rides, maintenance and safety procedures to develop a lifelong love of fitness through biking. (ILO: Critical Thinking)
- CLO\#3: Demonstrate basic bicycle maintenance, personal gear and safety procedures that contribute to the group goal of successful rides.
- CLO\#4: Students will be assessed and held accountable by the Instructor for self-management and logging required rides through electronic means.


## PE 185DBR - Dance: Ballroom and Social

## 1 Credit(s)

Course Description: Introduces ballroom dancing including basic steps in some of the most popular European, Latin, and American ballroom dance rhythms. The emphasis is on learning the techniques of the basic moves in the different dance rhythms. Students are expected to execute moves based on the general dance patterned steps and are also expected to lead and follow extemporaneous sequences. Approximately 75 percent of the dance time the Instructor cues the steps that students should be performing, and the class executes these moves together. 25 percent of the class time focuses on how to lead and how to follow for the various moves that have been taught. The goal is to have students leave with a fundamental working knowledge of the most popular and familiar ball room dances: Foxtrot, Rumba/Cha-Cha, Waltz, Tango, and Swing (Jitterbug/Jive).
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in the class practicing the mastery of the basic steps of ballroom dances every day.
- CLO\#2: Demonstrate, monitor, modify and correct the dance move as familiarity is acquired with the terminology used in describing dance steps. (ILO: Critical Thinking)
- CLO\#3: Develop a sense of musicality, mood and rhythm to establish a working connection with a partner and perform at least four elements in dance.
- CLO\#4: Demonstrate a step that has been taught in the class twice during the term.


## PE 185DSL - Dance: Salsa and Latin

## 1 Credit(s)

Prerequisite(s): Ability to stand and move in close contact with another person.
Course Description: Salsa and Latin dance is an introductory social dance course that covers basic steps, patterns, and technique for several popular Latin rhythms. An emphasis on lead and follow technique will allow students to execute improvised dance to music. By the end of the term, students will have a fundamental working knowledge of the dances presented in class, with some ability both to lead and follow as demonstrated in a final exam. The dances covered include: Salsa, Cumbia, Bachata, and Merengue. Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in the class, and develop the mastery of the basic steps of dances covered.
- CLO\#2: Practice how to monitor, modify, and correct the dance moves and develop appropriate terminology. (ILO: Critical Thinking)
- CLO\#3: Develop musicality, mood and rhythm using improvisational dance skills to perform at least four elements in each dance.
- CLO\#4: Demonstrate a step that has been taught in the class twice during the term.


## PE 185HOA - Hiking Oregon Adventure

## 1 Credit(s)

Prerequisite(s): Physical abilities and strength to sustain 3 days of hiking in the recreation areas of Oregon. Students must be able to minimally perform the requisite physical activities and participate on a regular, daily basis for the entire length of the class period to pass the class successfully.

Course Description: Teaches necessary skills involved in hiking. These skills include pre-trip planning, orienteering, traveling as a group, wilderness ethics, and safety. Course topics will also include plant, animal, and animal track identification. We will focus on learning about and exploring the diverse flora and fauna while enjoying the beauty that the Oregon National recreation area has to offer in wilderness areas and coastal environments. We will be camping in state or local campgrounds and hiking each day from that base camp. You are expected to learn and share in all aspects of hiking together including plant and animal identification, map and compass lessons and Geocaching GPS activities. We will cover basic preventative first aid, particularly hydration and foot care. We will approach challenges as a group and involvement is critical to a safe and successful backcountry excursion.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Plan and gather proper equipment and perform basic outdoor skills associated with hiking and camping.
- CLO\#2: Develop personal wilderness ethic that will influence interaction with a unique geological and biological diversity found in the area. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Collaborate as a team to achieve a common goal. Discuss importance of teamwork in aspect to safety, navigation and plant and animal track identification.
- CLO\#4: Complete required hikes and camping


## PE 185KAK - Karate/Kenpo Self Defense (Beginning through Advanced)

## 1 Credit(s)

Course Description: Covers the fundamentals of the traditional form of karate, Daimon-Ryu Kenpo karate. Emphasis is on self-development and awareness, with the acquisition of self-defense skills as a practical byproduct. The course covers postures, fundamental techniques, self-defense applications, and basic combinations of the material. Upon successful completion of the Yellow Belt exam, an official rank certificate will be recorded and issued to the candidate.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate and demonstrate concepts in Kenpo Karate.
- CLO\#2: Demonstrate improvement in fundamental combinations of forms and specialized techniques. (ILO: Critical Thinking)
- CLO\#3: Demonstrate beginning to advanced basic defense level techniques.
- CLO\#4: Apply skills to move toward acquiring the next level of belt advancement.


## PE 185KAR - Karate, Traditional

## 1 Credit(s)

Prerequisite(s): Students must be able to minimally perform the requisite physical activities defined by the course.

Course Description: Teaches the fundamentals of Okinawan/Japanese karate (Ukinju-Ryu Karate-Do) that has an emphasis on balance, coordination, physical fitness, and personal wellbeing as a primary goal, with the acquisition of self-defense skills and a sport competition component as practical byproducts. Covers postures, fundamental techniques, interactive drills, and self-defense applications. In addition, international sport competition rules and regulations and the basic combative skills will be introduced that can lead to organized sport competition comparative, in style, to that of the Traditional Karate-Do to be featured in the 2021 Tokyo Olympic Games.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate and demonstrate concepts in Karate-Do.
- CLO\#2: Demonstrate basic defensive karate strategies and techniques.
- CLO\#3: Demonstrate improvement in applied, fundamental combinations of forms and measurable levels of skill toward acquiring the next level of belt advancement.
- CLO\#4: Explain karate concepts in a written format. (ILO: Communication)


## PE 185KSA - Kayaking the Sea Coast Adventure

## 1 Credit(s)

Prerequisite(s): Breathe independently (i.e., not require medical devices to sustain breathing); independently maintain sealed airway passages while underwater; independently hold head upright without neck/head support; manage personal care independently; manage personal mobility independently; follow instructions and effectively communicate independently; independently turn from face-down to face-up and remain floating face up while wearing a properly fitted life jacket; get in/out of a paddlecraft independently as well as get out from under a capsized paddlecraft.

Course Description: Offers beginners and seasoned kayakers a unique educational, outdoor adventure. Students will learn to maneuver sea kayaks in different environments in the ocean based on the ACA's Essentials of Kayaking curriculum, Levels 1-3. The course is designed to heighten a student's enjoyment of padding in the ocean and to appreciate the beauty, both as a spectator and as a participant, of the kayaking adventure. Students will learn the fundamental kayaking skills that provide lifelong recreational learning and fitness enjoyment. Includes the basic elements of ocean navigation, safety considerations, and paddling and stability techniques.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate personal preparation for kayaking trip.
- CLO\#2: Exhibit correct techniques for using spray skirt.
- CLO\#3: Develop skills to enter exit kayak.
- CLO\#4: Demonstrate effective use and control of the paddle.
- CLO\#5: Identify marine hazards and hydrology of the ocean environment and address other safety issues.
- CLO\#6: Maneuver in calm water satisfactorily.
- CLO\#7: Demonstrate kayak safety and rescue procedures. (ILO: Communication)


## PE 185KWW - Kayaking Whitewater

## 1 Credit(s)

Prerequisite(s): Ability to breathe independently (i.e., not require medical devices to sustain breathing); independently maintain sealed airway passages while underwater; independently hold head upright without neck/head support; manage personal care independently; manage personal mobility independently; follow instructions and effectively communicate independently; independently turn from face-down to face-up and remain floating face up while wearing a properly fitted life jacket.

Course Description: Offers beginners and seasoned river runners a unique educational, outdoor adventure. Students will learn to kayak various parts of the Rogue River based on the ACA's Essentials of Kayaking curriculum levels 1-3. The course is designed to heighten a student's enjoyment of the river and its beauty, both as a spectator of the river and as a participant in the kayaking adventure in still waters up to Class I-II rapids. Students will learn the fundamental kayaking skills that provide lifelong recreational learning and fitness enjoyment. Includes the basic elements of river reading, safety considerations, and paddling techniques, and learning the skills required to efficiently maneuver a kayak on rivers with Class I-II rapids.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate personal preparation for kayaking trip: appropriate clothing, sufficient swimming ability, and proper adjustments for individual kayak control and planning course.
- CLO\#2: Exhibit correct techniques for using spray skirt.
- CLO\#3: Students will perfect entering and exiting kayak.
- CLO\#4: Demonstrate effective use and control of the paddle.
- CLO\#5: Maneuver in calm water satisfactorily.
- CLO\#6: "Run the river" with confidence. (ILO: Critical Thinking)
- CLO\#7: Identify hazards and hydrology of the river environment.
- CLO\#8: Recognize boating safety and rescue procedures. (ILO: Communication)


## PE 185LSW - Lap Swimming

## 1 Credit(s)

Prerequisite(s): Sufficient physical ability to swim and/or move in a pool environment.
Course Description: Fosters the development of cardiovascular health and increased strength and flexibility through aquatic and strength exercises at the community YMCA pool and fitness center. The
course emphasizes overall fitness and encourages students to swim and train at their own paces. Students set individual goals for swimming and strength training, and strive to reach those goals over the course of the term. Students meet with the instructor before the class begins to discuss class procedures and goals. Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in swimming and use safe exercise guidelines.
- CLO\#2: Demonstrate improvement in the targeted areas of body composition. (ILO: Communication)
- CLO\#3: Improve efficiency of swim strokes and distance of swimming. Safely modify and personalize a swim program to fit individual abilities and fitness levels, which encourages lifelong exercise and increases overall wellness.
- CLO\#4: Create and follow safe exercise routines for the entire body designed to improve the fitness level, stretch isolated muscles and gain greater muscle coordination.


## PE 185MTA - Mountaineering Adventure

## 1 Credit(s)

Prerequisite(s): Physical abilities and strength to climb mountains.

Course Description: Covers the basic skills needed to explore and respect the wilderness while perfecting the ability to climb mountains safely. The skills necessary to plan equipment and make informed choices in a wilderness environment will be covered and include: equipment, knots, safety, training, stretching, skills and techniques, route finding, belaying, snow and ice anchors, rappelling, rope handling, self-arrest, crevasse rescue, and team work. The course will include 2 off-campus backcountry trips to learn \& practice skills in preparation for a mountaineering trip. All three day trips are required for successful completion of the course. Students will be expected to share the cost of food and gas, and will be responsible for their own winter boots and clothing. Mountaineering equipment including: helmets, harnesses, ice axes, crampons, ropes, belay devices, prussiks, snow and ice anchors, and avalanche equipment will be provided.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop mountain climbing skills and physical tasks to master proficient climbing and safety practices with clear communication.
- CLO\#2: Apply knowledge to master equipment checks, knots, stretching, skills \& techniques, belaying, snow \& ice anchors, rappelling, rope handling, self-arrest, crevasse rescue and teamwork.
- CLO\#3: Describe and demonstrate proper care, inspection and maintenance of mountaineering equipment. (ILO: Communication)
- CLO\#4: Demonstrate leadership in the teamwork challenges, navigation, and maintaining unity with varying levels of classmates' abilities.
- CLO\#5: Show evidence of mastery of basic mountaineering skills and climbing ethics in a backcountry or wilderness setting.


## PE 185PBL - Pickleball

## 1 Credit(s)

Prerequisite(s): Students need to be able to run, move and swing a paddle to fully participate in all activities.

Course Description: Provides instruction in all areas of indoor pickleball: essential components of skill sets, game tactics, offensive and defensive strategies, and fundamentals of team play. Students will learn the fundamental rules and skills that will provide them lifelong recreational learning and fitness enjoyment.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate as a pickleball team member and follow skills and exercises designed to support the sport. (ILO: Critical Thinking)
- CLO\#2: Demonstrate individual improvement in proper form and accuracy in pickleballskills.
- CLO\#3: Demonstrate fundamental mastery of playing pickleball in a game setting with defensive and offensive strategies.
- CLO\#4: Display the basic game rules and terms. (ILO: Communication)


## PE 185PCW - Physical Conditioning - Weight Training

## 1 Credit(s)

Prerequisite(s): Ability to lift weights and use cardio equipment.

Course Description: Encompasses body composition evaluation, fitness assessments, a variety of the newest fitness industry weight training programs/activities - such as EMOMs and supersets - that involve muscle endurance and strength, aerobic activities for improved cardiovascular endurance and circulation, and stretching for flexibility. Students meet with the instructor and create an individual workout based on components of best practices in the fitness industry. Incorporates fitness and weight lifting activities to accommodate each student's ability and need by designing a workout to address individual performance levels and student goals.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participation and class interaction to improve fitness components.
- CLO\#2: Demonstrate improvement in personal performance levels. (ILO: Critical Thinking)
- CLO\#3: Display self-management skills by organizing and maintaining information of personal records and set SMART Goals.
- CLO\#4: Demonstrate lifting proficiency by self-monitoring lifting forms that improve general health and fitness status according to performance and safety levels.
- CLO\#5: Demonstrate mastery in concepts and forms of Tabata, EMOM, TRX, circuit, cluster, flexibility, mobility/functional, super-set, and tri-set training methods.
- CLO\#6: Demonstrate a functional ability to discuss common fitness terms. (ILO: Communication)


## PE 185PIL - Pilates

## 1 Credit(s)

Course Description: Designed to enhance flexibility, core strength, coordination, improved breathing and lung capacity, muscle control and balance through a system of controlled movements, Pilates is an "all comers" exercise course. Pilates is an effective method for reducing stress, increasing abdominal tone, improving posture and flexibility by combining smoothly controlled movements with concentration and breathing. Students of all ability levels are welcome.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate Pilates exercise method and how to execute the basic Pilates forms properly by participating daily as a class member and following safe and easy exercise routines for flexibility and entire body.
- CLO\#2: Show improved flexibility, balance, muscle control, coordination, core strength, breathing and lung capacity, self-management and relaxation.
- CLO\#3: List the names of the various muscle groups and explain how to monitor, modify and correct the exercises in order to meet the needs of one's individual body type and muscle structure. (ILO: Communication)
- CLO\#4: Demonstrate physical proficiency with the basic routines in the class and remain in-sync with others in an in-sync fashion with the other members of the course.


## PE 185RCA - Rock Climbing Adventure

## 1 Credit(s)

Prerequisite(s): Physical abilities and strength to climb rock surfaces.

## Recommended Prerequisite(s): PE 185RCB

Course Description: Provides extended learning opportunities for students to challenge themselves while focusing on safety and teamwork. Focus is on both top rope and sport climbing on a wide variety of rock types and route difficulty levels. Introduction to traditional clean lead climbing methods will also be covered. Students will have extended opportunities to practice anchor evaluation, safety equipment usage, topographical reading, route finding, climbing skills, and teamwork. This will be a three-day, two-night climbing expedition. Class requires an orientation session where skills will be demonstrated, practiced and audited. Class focus would be on continued skill development in the outdoor rock-climbing environment. Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in rock climbing skills and physical tasks to master proficient climbing and safety practices and clear communication with one's partner as the Instructor demonstrates (ILO: Communication)
- CLO\#2: Review, build upon, and demonstrate proficiency in using the family of knots and apply them appropriately.
- CLO\#3: Apply the dynamics of anchor systems and demonstrate how to build them.
- CLO\#4: Demonstrate proficiency in leading and belaying sport climbs using established safe techniques of clipping, proper rope management, appropriate communication, and best practices with a partner.
- CLO\#5: Demonstrate leadership and climbing ethics for indoor and outdoor venues.
- CLO\#6: Plan for equipment and use it wisely: students will demonstrate personal qualities of proper care and maintenance for personal climbing gear.
- CLO\#7: Display evidence of master rock climbing skills and climbing ethics for indoor and outdoor venues.


## PE 185RCB - Rock Climbing Beginning

## 1 Credit(s)

Prerequisite(s): Physical abilities and strength to climb rock surfaces.

Course Description: Covers the basic skills needed to explore and respect the wilderness while perfecting the ability to climb rock faces safely. The skills necessary to plan equipment and make informed choices in a wilderness environment will be covered and include: equipment, knots, safety, training, stretching, skills and techniques, belaying, top rope anchors, rappelling and teamwork. The course will include several venues and a field trip for successful completion of the course. Students will be expected to share the cost of food and gas, and will be responsible for their own rock-climbing gear including rentals if necessary.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in rock climbing and develop proficient climbing skills and safety practices.
- CLO\#2: Perform correct equipment checks, knots, stretching, skills \& techniques, belaying, top rope anchors, rappelling and teamwork.
- CLO\#3: Explain proper care and maintenance of climbing gear.
- CLO\#4: Demonstrate leadership while directing group through challenges.
- CLO\#5: Display mastery of basic rock-climbing skills and practices. (ILO: Communication)


## PE 185RRV - Rafting the River

## 1 Credit(s)

Prerequisite(s): Ability to breathe independently (i.e., not require medical devices to sustain breathing); independently maintain sealed airway passages while underwater; independently hold head upright without neck/head support; manage personal care independently; manage personal mobility independently; follow instructions and effectively communicate independently; and independently turn from face-down to face-up and remain floating face up while wearing a properly fitted life jacket.

Course Description: Offers beginners and seasoned river runners a unique educational, outdoor adventure. Students will learn to raft various parts of the Rogue River based on the ACA's Essentials of Rafting curriculum Levels 1-3. The course is designed to heighten a student's enjoyment of the river and its beauty, both as a spectator and as a participant of the rafting adventure in still waters up to mild rapids. Includes the skills required to efficiently row and paddle a raft on rivers by mastering skills such as using good judgement and organization, river reading, safety considerations, and paddling and rowing techniques such as forward/pushing, back/pulling, opposing, single and dual oar use, facing down and upstream on the river, turn craft to left, right, straight, reverse, spin-pivot turn, turn broad arcing while underway, river
strategies, rowing in current, scouting, portaging/lining, and river signals. Students will enjoy boating skills that provide lifelong recreational learning and fitness enjoyment.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate personal preparation for whitewater rafting trip.
- CLO\#2: Exhibit correct rowing technique and ability.
- CLO\#3: Maneuver in calm water satisfactorily.
- CLO\#4: Demonstrate "Run the river" principles.
- CLO\#5: Identify hazards and hydrology of the river environment.
- CLO\#6: Recognize boating safety and rescue procedures. (ILO: Communication)


## PE 185SAC - Soccer and Conditioning

## 1 Credit(s)

Prerequisite(s): Ability to lift weights, use cardio equipment, and participate in small sided soccer games.

Course Description: Encompasses body composition evaluation and fitness assessments, a variety of the fitness industry's weight training programs/activities that involve muscle endurance and strength, aerobic activities for improved cardiovascular endurance and circulation, and stretching for flexibility specifically for soccer players. Students are paired together and will be put through intense circuit training each day. Each grouping of exercises has a set number of repetitions to be completed in a certain amount of time as displayed on the instructor's clock. Each session is a full body workout that includes major muscle groups of the upper body, lower body, and core. Each class ends in a short soccer match.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Daily participation and full effort in class to maintain and to improve fitness components.
- CLO\#2: Self-assess physical performance and demonstrate continuous improvement. Make an initial assessment of one's current physical status to obtain personal performance levels and demonstrate improvements by the end of the term.
- CLO\#3: Display self-management skills by organizing and maintaining information and set SMART goals.
- CLO\#4: Monitor and correct lifting form according to performance and safety levels: spot for other lifters, isolate muscle groups effectively, use activity formulas, and demonstrate lifting techniques. (ILO: Communication)


## PE 185SAS - Step and Stuff

## 1 Credit(s)

Course Description: Develops individual cardiovascular fitness, muscular strength and endurance, flexibility and stability through group exercise activities utilizing the step platforms and various other exercise
equipment. Learn about basic step moves, starting out easy and working up to more advanced moves, as well as mat work, stability balls, free weights, step/platforms and exercise bands to strengthen muscle, increase endurance, stretch bodies, and abdominal/core work. Each class begins with a warm-up, including toning and dynamic stretching of all major muscle groups, followed by 40-55 minutes of fitness activities. Every class ends with a cool-down period focusing on static stretching, breathing, body alignment, and relaxation. At the end of class, the Instructor will discuss handouts and information such as the benefits of breathing and exercise, the prevention and care of exercise-related injuries, muscles, diet, physiology, and information related to health.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Practice safe exercises for the heart and entire body.
- CLO\#2: Demonstrate improvement in body composition.
- CLO\#3: Identify the major muscle groups and proper use, injury prevention and recovery.
- CLO\#4: Present a routine or specific exercise or present information on a fitness-related topic (ILO: Communication)


## PE 185SCU - Scuba Diving

## 1 Credit(s)

Course Description: Designed to foster the development of proper and safe techniques in obtaining an Open Water Diver certificate issued by Scuba Schools International (SSI.) The course offers students classroom instruction, pool practice, and a minimum of 4 open water dives of 20 minutes each, in rivers, lakes or ocean. This certificate allows certificate holders to dive to a maximum depth of 60' in open water with another certified diver. The 2-part water skills are: Confined Water sessions at the YMCA and open water, 2-day weekend at a local river or lake. Additional fees are required.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Complete all course participation requirements, quizzes and a written scuba exam at $80 \%$ on safety practices of diving.
- CLO\#2: Demonstrate proficiency in the designated skills in BCD tank, weight belt and buddy check. (ILO: Critical Thinking)
- CLO\#3: In shallow pool: Demonstrate clearing mask and snorkel, clear and recover regulator and inflation and deflation of BCD in shallow pool.
- CLO\#4: In deep pool demonstrate skills of shallow water procedures and complete procedures and skills for deep water dive.
- CLO\#5: Demonstrate procedures and skills required from or to land/shore.
- CLO\#6: Demonstrate swimming skills, problem solving skills, rescue swimming and proper care of equipment.
- CLO\#7: Successfully complete four dives.


## PE 185SDW - Self Defense for Women

## 1 Credit(s)

Course Description: Offers instruction in the basic self-defense awareness and practical physical techniques geared to specifically serve the needs and concerns of the female community. The physical core of the training is the Daimon-Ryu Kenpo Karate system, a traditional form of karate which has an emphasis on self-development and awareness as a primary goal, with the acquisition of self-defense skills as a practical by product. The course will cover situational awareness, critical distance, movement and postures, physical weapons awakening, self-defense applications, stress inoculation and assault scenario practice. Men and women alike are welcome in this practical, demonstration-based course. Topics of the course will cover proper conditioning exercise, body control, proper terminology, historical foundations, postures, fundamental techniques, self-defense applications, basic combinations of the material. Students are provided with demonstrations of the basic moves and are allowed to practice the moves with feedback. The course consists of lectures, class exercises and practice in the basics of punches, blocks, strikes, and joint manipulations. Regular attendance is necessary and supplemental handouts are provided periodically in class. Upon completion, students should be able to successfully perform a series of defensive moves. Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate concepts of self-defense.
- CLO\#2: Display basic defensive strategies.
- CLO\#3: Demonstrate improvement in self-management and corrected performance showing fundamental combination of forms
- CLO\#4: Demonstration of applied skills in attack and defense scenario. (ILO: Critical Thinking)


## PE 185SID - Soccer, Indoor

## 1 Credit(s)

Prerequisite(s): Students need to be able to run and kick a ball to fully participate in all activities.

Course Description: Provides instruction in all areas of indoor soccer: essential components of skill sets, game tactics, offensive and defensive strategies, and fundamentals of team play. Students in soccer will learn the fundamental rules and skills that will provide them lifelong recreational learning and fitness enjoyment. Through this course, students will foster qualities of sportsmanship, team play, collaboration, cardio-respiratory fitness and commitment.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate as a soccer team member and follow skills and exercises designed to support the sport.
- CLO\#2: Demonstrate improvement in pre- to post fitness and skill levels.
- CLO\#3: Display teamwork and fair play.
- CLO\#4: Demonstrate a combination of FIFA soccer rules and skills. (ILO: Critical Thinking)


## PE 185SSS - Snow Skiing - Snowboarding

## 1 Credit(s)

Prerequisite(s): Ability to stand on skis or snowboard and maintain balance while developing techniques on the mountain.

Course Description: Designed to teach the complete range of alpine skiing or snowboarding skills, from basic to advanced techniques, in small group settings of students based on ability levels. It is designed to help students achieve personal fitness goals, while having fun and interacting with others. Upon completion of this course students will show improvement in downhill techniques, develop an understanding of rules and etiquette of the sport and be able to view the sport with greater appreciation of the techniques and skills required. RCC HPER Department will communicate with instructors from Southern Oregon University, and the Mt. Ashland ski/snowboard instructors to offer a seamless experience of combining students from two educational institutions.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participation and class interaction.
- CLO\#2: Demonstrate proper form, technique and positioning for fundamental skills and basic theory of skiing/snowboarding, including edges, and positioning.
- CLO\#3: Attempt to perfect skiing/boarding maneuvers according to individual ability level within the group setting.
- CLO\#4: Snowboarders and Alpine skiers will achieve and demonstrate a personal level of comfort in speed and finesse in either snowboarding or skiing techniques. (ILO: Critical Thinking)


## PE 185SUA - Surfing Adventure

## 1 Credit(s)

Prerequisite(s): Ability to float, swim, tread water and carry a surfboard into the ocean to at least waistdeep water.

Course Description: Provides training and practical application in the skills associated with longboard surfing. Surfing combines physical exercise, balance, and constant observation of one's environment. Students will enjoy the waves, wind, beach, and interacting with other surfers. Includes safety considerations in the ocean environment, communication, equipment usage and care, reading waves, wind, and tides, paddling, standing, balancing, turning, the "art of wiping out", and surfing etiquette. Class includes a threeday, two-night surfing expedition. Students will be responsible for their own food, camping equipment, clothing, and transportation to and from the site, as well as travel to and from camping location. Participation in all aspects of the orientation and trip are necessary to successfully complete the course. Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate improved ability in elements of surfing.
- CLO\#2: Participate as part of the surfing team and practice effective communication.
- CLO\#3: Demonstrate principles of "camp craft". (ILO: Critical Thinking)


## PE 185TAI - Tai Chi

## 1 Credit(s)

Prerequisite(s): Ability to engage in specific movement patterns.

Course Description: For beginners as well as more advanced students of Tai Chi, students will learn techniques for relaxation and stress reduction using the Yang style of Tai Chi and various breathing exercises. The relationship of Tai Chi to martial arts and the applications of the various postures will be explained. Learning to do the forms is one objective of this course, but the emphasis is on understanding the concepts of Tai Chi as related to stress reduction and relaxation.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and demonstrate concepts of the Yang style of Tai Chi.
- CLO\#2: Demonstrate improvement in self-management and corrected performance.
- CLO\#3: Interpret and explain the relationship of breathing exercises to Tai Chi.
- CLO\#4: Demonstrate comprehension and applied skills of Tai Chi terminology and comprehension as instructor calls forms. (ILO: Critical Thinking)


## PE 185TRX - TRX and Functional Fitness

## 1 Credit(s)

Course Description: Provides students the opportunity to develop individual cardiovascular fitness, flexibility, and muscular strength and endurance through a range of individual and group exercise activities. Each class will begin with a warm-up including toning and dynamic stretching of all major muscle groups, followed by 40 to 55 minutes of activities that support functional movement and strength gains: the TRX band system, weights, steps, medicine ball, resistance bands, stability balls are among the activities and equipment included. Every class will end with a cool-down period focusing on static stretching and relaxation. Mini-lecture sections will cover benefits of exercise, functional strength for optimal wellness, proper breathing and execution of exercises, prevention and care of exercise-related injuries, diet, major muscles groups and body anatomy, and information on related health issues.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper \& safe exercise in more than one fitness style.
- CLO\#2: Demonstrate progress toward a healthy lifestyle. (ILO: Critical Thinking)
- CLO\#3: Identify the major muscle groups, effective and safe use, injury prevention and recovery.
- CLO\#4: Develop and present a routine or specific exercise, or present information on a fitnessrelated topic.


## PE 185VBL - Volleyball Co-Ed

## 1 Credit(s)

Prerequisite(s): Sufficient physical ability to move on the court and pass/hit a volleyball.

Course Description: Learn the fundamental rules and skills that will provide lifelong recreational learning and fitness enjoyment of volleyball. This course is designed to allow students to master basic volleyball proficiency, acquire advanced skills, gain knowledge of game tactics, offensive and defensive strategies, develop communication with teammates, and practice fair play in a lifetime sport. Through this course, students will foster qualities of sportsmanship, team play, collaboration.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate as a volleyball team member and follow skills and exercises designed to support the sport.
- CLO\#2: Demonstrate individual improvement in proper form and accuracy in volleyball skills. (ILO: Critical Thinking)
- CLO\#3: Display the basic game rules and term.
- CLO\#4: Demonstrate fundamental mastery of playing volleyball in a game setting with defensive and offensive strategies.


## PE 185WSA - Winter Survival and Snow Camping Adventure

## 1 Credit(s)

Prerequisite(s): Ability to walk in the snowy wilderness for short distances with a backpack containing personal gear.

Course Description: Provides training and practical application of learning to deal with the extremes of winter and camping in the snow. The winter environment poses many inherent challenges to travelers and outdoor adventure participants. Every year, individuals and families enter the wilderness and find themselves unprepared for peril due to accident, poor planning, or lack of education. The class requires a three-hour mandatory orientation session on campus to cover winter clothing and equipment, survival essentials, avalanche awareness, snow travel options, snow shelter building, hypothermia, and frostbite prevention and treatment. A one-day snow trip is scheduled before the actual adventure, to learn and practice winter skills in daylight hours. The course culminates in a two-day, overnight snow camping trip. The general schedule is: hike to camping destination, construct snow shelter, set up evening camp preparations, dinner and sleep arrangements. Day two: breakfast, snow activities, lunch, travel back to snow-park, debrief. An additional fee is required.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participate in winter wilderness hiking and operate as engaged team member.
- CLO\#2: Develop skills to plan and allocate material, equipment and food through snow travel.
- CLO\#3: Demonstrate ability to set up tents, start camp stoves, camp with craft and low impact, navigate with map and compass, hike with a group. (ILO: Critical Thinking)
- CLO\#4: Apply leadership skills through completion of challenges.


## PE 185WWT - Women and Weights: Weight Control and Strength Improvement

## 1 Credit(s)

Course Description: Focuses on empowering women and men with the basics of weight training and various modes of fitness, with a special focus on the physiology of the woman's body. The benefits of safe, effective, and progressive strength training will be emphasized. Topics in the course will include enhanced strength, muscle tone, increased metabolism, enhanced energy levels and reduction of depression symptoms. Each week a new mode of fitness will be introduced or incorporated into a progressively expanding circuit of exercises. These circuit activities will rotate on a regular schedule. Every class will end with a cool-down, stretching, and relaxation. Short lecture sections will cover the benefits of exercise, proper breathing and execution of exercises, prevention and care of exercise-related injuries, diet, physiology, major muscles groups and body terms, and information on related health issues.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe and easy exercises for the heart and entire body.
- CLO\#2: Demonstrate improvement in body composition. (ILO: Critical Thinking)
- CLO\#3: Identify major muscle groups, and explain proper and safe use.
- CLO\#4: Develop and present routine or specific exercise for toning an individual muscle group, or present fitness-related topic.


## PE 185YOB - Yoga Balance and Core

## 1 Credit(s)

Prerequisite(s): Ability to follow slow poses and movements.
Course Description: Yoga, balance and core is inspired by Yoga and Pilates with added core and strength conditioning. This class is designed to include exercises that increase strength, stamina, stability, balance, flexibility, and focus on the core muscles. Poses are held for several breaths to focus on increasing strength, while a rhythmic, flowing style generates heat in the body. This blend of focus and flow incorporate dynamic balance and functional training that challenge strength and balance, and emphasize the athleticism of yoga and Pilates. Classes end in a traditional way with deep relaxation and meditation. Modifications available for all fitness levels, no prior yoga or Pilates experience is required.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate safe and easy exercise routines for flexibility and entire body.
- CLO\#2: Demonstrate improvement in the targeted areas of greater flexibility and increased muscle strength and endurance. (ILO: Critical Thinking)
- CLO\#3: Demonstrate various yoga poses (asanas), alignment principles, breathing techniques (pranayamas) and states of mindfulness to connect the emotional well-being with physical wellness.
- CLO\#4: Display leadership skills.


## PE 185YOF - Yoga Flow

## 1 Credit(s)

Prerequisite(s): Ability to follow the instructor's movements in Yoga/Tai Chi/Pilates style actions.

Course Description: Yoga Flow is inspired by Yoga, Tai Chi and Qi Gong with added core and strength conditioning. This class is designed to include exercises that increase strength, stamina, stability, balance, flexibility, and focus on the core muscles. Poses are held for several breaths to focus on increasing strength, while a rhythmic, flowing style generates heat in the body. This blend of focus and flow incorporate dynamic balance and functional training that challenge strength and balance, and emphasize the athleticism of yoga. Classes end in a traditional way with deep relaxation and meditation. Modifications available for all fitness levels, no prior yoga, Tai Chi or Qi Gong experience is required.
Course is repeatable.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Participation and demonstration of safe and easy exercise yoga flow poses.
- CLO\#2: Show improvement in the targeted areas of body composition.
- CLO\#3: Demonstrate proficiency in various yoga flow poses, Tia Chi forms, alignment principles, and breathing techniques.
- CLO\#4: Demonstrate leadership by leading the class through a short presentation of yoga flow principles. (ILO: Critical Thinking)


## PE 185YOG - Yoga

## 1 Credit(s)

Course Description: Offers an effective method for reducing stress and creating a relaxation response within the body and mind. Through a series of controlled exercises, stretching, and breathing techniques, this course will give students firsthand experience with the concepts and applications of being responsible for improving health. Yoga enhances flexibility, strength, coordination, lung capacity and balance through a system of gentle movements: various yoga poses (asanas), alignment principles, and breathing techniques (pranayamas). Students of all ability levels and all faith systems are welcome.
Course is repeatable.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate proper and safe exercising.
- CLO\#2: Demonstrate improvement in the targeted areas of greater comfort, effectiveness, and ease of yoga poses. (ILO: Critical Thinking)
- CLO\#3: Demonstrate proficiency of various yoga poses and principles.
- CLO\#4: Demonstrate leadership by facilitating small group yoga lesson.


## PE 185ZLG - Zip Line Guide Technical Skills

## 1 Credit(s)

Prerequisite(s): Physical fitness in order to perform required duties of zip line guide.
Course Description: Provides training and practical application in the skills associated with zip line challenge course facilitation. Students will learn the technical skills and safety procedures for safe zip line facilitation expectations. Combines physical demands, balance, and constant observation of one's environment. Includes all safety considerations and procedures, communication, equipment usage and care, and etiquette. Course is given over two weekends. Participation in all aspects of the orientation and trip are necessary to successfully complete the course.
Course is repeatable.
Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the technical skills of tying knots, performing safety checks, physically "gearing up" guests, performing equipment inspections, equipment use, and checking brake system operation.
- CLO\#2: Demonstrate the skills to lead team on proper procedures and safety guidelines. (ILO: Communication)
- CLO\#3: Demonstrate procedures of sending and receiving guests down the zip line and zipping first as the leading zip line guide.
- CLO\#4: Demonstrate compliance with and competency with industry standards.
- CLO\#5: Operate as a respectful and engaged group member.


## PE 185ZUM - Zumba ®

## 1 Credit(s)

Course Description: Zumba $\circledR^{\circledR}$ is a Latin-inspired, dance-fitness class that incorporates Latin and international music with dance movements, creating a dynamic, exciting, and effective fitness workout. This class combines fast and slow rhythms that tone and sculpt the body in an aerobic/fitness fashion to achieve a unique blended balance of cardio and muscle toning movements through easy-to-follow steps. Movements target areas such as the legs, arms, core, abdominal, and the most important muscle in the body, the heart. Students are encouraged to work at their own paces. Activities include: muscular endurance, cardiovascular endurance, body composition, flexibility, and learning the basic muscle groups.
Course is repeatable.

Course Level: Lower Division Collegiate

Course Learning Outcomes:

- CLO\#1: Demonstrate basic Zumba ® forms properly and Zumba ® dance fitness style.
- CLO\#2: Demonstrate improvement in fundamental combinations of Zumba ® style dancing in impromptu and choreographed dances.
- CLO\#3: Memorize basic anatomy and physiology of large muscle groups used during Zumba ${ }^{\circledR}$ dance and simple health concepts.
- CLO\#4: Demonstrate leadership by leading the class through 30+ second routine or present information on a fitness-related topic of student's choice. (ILO: Communication)


## PE 199 - Special Studies: Physical Education

## Var. (1-3) Credit(s)

Course Description: Offers selected topics of study in physical education through workshop and field study format.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate improvement in the targeted areas of body composition: (a) flexibility, (b) cardio-respiratory endurance, (c) lung capacity, (d) fat percentage and/or measurements, (e) muscle strength and endurance.
- CLO\#2: Demonstrate proper exercise form for identified skills and activities. (ILO: Critical Thinking)


## PE 280 - Cooperative Work Experience/Physical Education

## Var. (1-3) Credit(s)

Prerequisite(s): Permission of CWE Instructor or Department Chair.
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives). (ILO: Critical Thinking)


## PE 291-Red Cross Lifeguard Training

Course Description: Provides training for potential lifeguards in lifesaving skills in the event of an emergency. Includes a three-year Red Cross lifeguard training certification and a two-year CPR/AED professional rescuer certification with successful completion of the course. Through videos, group discussion, and both hands on and pool practice, students will learn surveillance skills, patron rescue, first aid and CPR/AED.
Prerequisites:Minimum 16 years of age and ability to pass swimming tests (freestyle, side stroke, and breast stroke).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Complete Red Cross swim tests with sufficient times and indicators to allow life guard certification.
- CLO\#2: Recognize problem situations and apply professional and appropriate lifesaving techniques to ensure personal safety and safety of any other persons involved.
- CLO\#3: Demonstrate ability to triage and complete risk evaluation while working effectively with others recognizing personal responsibility in the overall successful efforts of the team.
- CLO\#4: Successfully complete Red Cross Professional Rescuer CPR course skills and exam. (ILO: Critical Thinking)


## PH 201-General Physics I

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement, and MTH $112 Z$ or designated placement.
Corequisite(s): PH 201L, PH 201R
Course Description: This is the first term of a three-term algebra-based physics course. Conservation laws and Newtonian mechanics are covered. This includes but is not limited to force and motion, forms of energy (including kinetic potential and various types of internal energy such as rotational, thermal and latent), conservation of momentum, conservation of angular momentum, conservation of energy, Newton's laws, kinematics, free-body diagrams, net force equations, torque and orbital mechanics. Students must enroll in lecture, laboratory and recitation sections. All three sections are required and to be taken concurrently.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Explain and apply conservation laws in physics (momentum, angular momentum, energy).
- CLO\#3: Explain and apply Newton's laws (inertia, force, mass, acceleration, action, reaction).
- CLO\#4: Select the equations appropriate to the constraints of a given physics problem.


## PH 201L - General Physics I Lab

## 1 Credit(s)

Prerequisite(s): WR 115 or designated placement, and MTH $112 Z$ or designated placement.

## Corequisite(s): PH 201, PH 201R

Course Description: This is the first term of a three-term algebra-based physics course. Conservation laws and Newtonian mechanics are covered. This includes but is not limited to force and motion, forms of energy (including kinetic potential and various types of internal energy such as rotational, thermal and latent), conservation of momentum, conservation of angular momentum, conservation of energy, Newton's laws, kinematics, free-body diagrams, net force equations, torque and orbital mechanics. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply conservation laws in physics (momentum, angular momentum, energy).
- CLO\#2: Apply Newton's laws (inertia, force, mass, acceleration, action, reaction).
- CLO\#3: Interpret laboratory data to draw conclusions about general physics experiments. (ILO: Critical Thinking)


## PH 201R - General Physics I Recitation

## 1 Credit(s)

Prerequisite(s): WR 115 or designated placement, and MTH 112 Z or designated placement.
Corequisite(s): PH 201, PH 201L
Course Description: This is the first term of a three-term algebra-based physics course. Conservation laws and Newtonian mechanics are covered. This includes but is not limited to force and motion, forms of energy (including kinetic potential and various types of internal energy such as rotational, thermal and latent), conservation of momentum, conservation of angular momentum, conservation of energy, Newton's laws, kinematics, free-body diagrams, net force equations, torque and orbital mechanics. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Select and apply the equations appropriate to the constraints of a given physics problem.


## PH 202-General Physics II

## 3 Credit(s)

Prerequisite(s): PH 201, PH 201L, PH 201R or PH 211, PH 211L, PH 211R

Corequisite(s): PH 202L and PH 202R

Course Description: This is the second term of a three-term algebra-based physics course. Special relativity and electromagnetism are covered. This includes but is not limited to spacetime diagrams, time dilation, length contraction, conservation of four-momentum, electrostatics, fields, current, voltage, circuits,
magnetism, induction, Maxwell's equations and electromagnetic waves. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided
- CLO\#3: Apply the principles of special relativity and electromagnetism.


## PH 202L - General Physics II Lab

## 1 Credit(s)

Prerequisite(s): PH 201, PH 201L, PH 201R or PH 211, PH 211L, PH 211R

Corequisite(s): PH 202, PH 202R

Course Description: This is the second term of a three-term algebra-based physics course. Special relativity and electromagnetism are covered. This includes but is not limited to spacetime diagrams, time dilation, length contraction, conservation of four-momentum, electrostatics, fields, current, voltage, circuits, magnetism, induction, Maxwell's equations and electromagnetic waves. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems when it appears that not enough information is provided.
- CLO\#3: Apply the basic principles geometric optics.
- CLO\#4: Apply basic principles of electrostatics (charge, field, potential).
- CLO\#5: Apply basic principles of electric current (circuits, Ohm's law).
- CLO\#6: Apply basic principles of electromagnetism (currents, magnets, electromagnetic fields).
- CLO\#7: Interpret laboratory data to draw conclusions about general physics experiments.


## PH 202R - General Physics II Recitation

## 1 Credit(s)

Prerequisite(s): PH 201, PH 201L, PH 201R or PH 211, PH 211L, PH 211R

Corequisite(s): PH 202, PH 202L

Course Description: This is the second term of a three-term algebra-based physics course. Special relativity and electromagnetism are covered. This includes but is not limited to spacetime diagrams, time dilation, length contraction, conservation of four-momentum, electrostatics, fields, current, voltage, circuits, magnetism, induction, Maxwell's equations and electromagnetic waves. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Use sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply the principles of special relativity and electromagnetism.


## PH 203 - General Physics III

## 3 Credit(s)

Prerequisite(s): PH 202, PH 202L, PH 202R or PH 212, PH 212L, PH 212R

Corequisite(s): PH 203L, PH 203R

Course Description: his is the third term of a three-term algebra-based physics course. Waves, quantum mechanics, thermodynamics and statistical mechanics are covered. This includes but is not limited to wave interference, diffraction, photoelectric effect, wave-particle duality, Schrodinger wave equation, spectra, heat capacity, kinetic molecular theory, multiplicity, entropy, ideal gas law, cyclic processes, laws of thermodynamics and heat engines. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Explain and apply Maxwell's equations in the context of magnetic flux, electromagnetic induction, and electromagnetic radiation.
- CLO\#4: Explain and apply basic principles of wave physics (interference, diffraction, resonance, wave-particle duality).
- CLO\#5: Explain and apply basic principles of quantum mechanics (probability, spin, wave function, spectroscopy, Schrodinger equation, nuclear physics).
- CLO\#6: Explain and apply basic principles of thermodynamics (multiplicity, entropy, Boltzmann factors, gases, distributions, cyclic processes, engines).


## PH 203L - General Physics III Lab

## 1 Credit(s)

Prerequisite(s): PH 202, PH 202L, PH 202R or PH 212, PH 212L, PH 212R

Corequisite(s): PH 203, PH 203R

Course Description: This is the third term of a three-term algebra-based physics course. Waves, quantum mechanics, thermodynamics and statistical mechanics are covered. This includes but is not limited to wave interference, diffraction, photoelectric effect, wave-particle duality, Schrodinger wave equation, spectra, heat
capacity, kinetic molecular theory, multiplicity, entropy, ideal gas law, cyclic processes, laws of thermodynamics and heat engines. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply Maxwell's equations in the context of magnetic flux, electromagnetic induction, and electromagnetic radiation.
- CLO\#4: Apply basic principles of wave physics (interference, diffraction, resonance, wave-particle duality).
- CLO\#5: Apply basic principles of quantum mechanics (probability, spin, wavefunction, spectroscopy, Schrodinger equation, nuclear physics).
- CLO\#6: Apply basic principles of thermodynamics (multiplicity, entropy, Boltzmann factors, gases, distributions, cyclic processes, engines).
- CLO\#7: Interpret laboratory data to draw conclusions about general physics experiments.


## PH 203R - General Physics III Recitation

## 1 Credit(s)

Prerequisite(s): PH 202, PH 202L, PH 202R or PH 212, PH 212L, PH 212R

Corequisite(s): PH 203, PH 203L

Course Description: This is the third term of a three-term algebra-based physics course. Waves, quantum mechanics, thermodynamics and statistical mechanics are covered. This includes but is not limited to wave interference, diffraction, photoelectric effect, wave-particle duality, Schrodinger wave equation, spectra, heat capacity, kinetic molecular theory, multiplicity, entropy, ideal gas law, cyclic processes, laws of thermodynamics and heat engines. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Explain and apply Maxwell's equations in the context of magnetic flux, electromagnetic induction, and electromagnetic radiation.
- CLO\#4: Explain and apply basic principles of wave physics (interference, diffraction, resonance, wave-particle duality).
- CLO\#5: Explain and apply basic principles of quantum mechanics (probability, spin, wavefunction, spectroscopy, Schrodinger equation, nuclear physics).
- CLO\#6: Explain and apply basic principles of thermodynamics (multiplicity, entropy, Boltzmann factors, gases, distributions, cyclic processes, engines).
- CLO\#7: Describe and explain the basic physics of climate change (equilibrium, atmospheric blanket, models, ocean effect).
- CLO\#8: Interpret laboratory data to draw conclusions about general physics experiments.


## PH 211 - General Physics (Calculus Based) I

## 3 Credit(s)

Prerequisite(s): WR 115 or designated placement, and MTH 112 Z or designated placement.

Corequisite(s): MTH 251, PH 211L, PH 211R
Course Description: This is the first term of a three-term calculus-based physics course. Conservation laws and Newtonian mechanics are covered. This includes but is not limited to forces and motion, forms of energy (including kinetic potential and various types of internal energy such as rotational, thermal and latent), conservation of momentum, conservation of angular momentum, conservation of energy, Newton's laws, kinematics, free-body diagrams, net force equations, torque and orbital mechanics. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Explain and apply conservation laws in physics (momentum, angular momentum, energy) using calculus where appropriate.
- CLO\#4: Explain and apply Newton's laws (inertia, force, mass, acceleration, action, reaction) using calculus where appropriate.
- CLO\#5: Select the equations (using calculus where needed) appropriate to the constraints of a given physics problem.


## PH 211L - General Physics (Calculus Based) I Lab

1 Credit(s)
Prerequisite(s): WR 115 or designated placement, and MTH 112 Z or designated placement.

Corequisite(s): MTH 251, PH 211, PH 211R

Course Description: This is the first term of a three-term calculus-based physics course. Conservation laws and Newtonian mechanics are covered. This includes but is not limited to forces and motion, forms of energy (including kinetic potential and various types of internal energy such as rotational, thermal and latent), conservation of momentum, conservation of angular momentum, conservation of energy, Newton's laws, kinematics, free-body diagrams, net force equations, torque and orbital mechanics. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

Course Level: Lower Division Collegiate
Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply conservation laws in physics (momentum, angular momentum, energy) using calculus where appropriate.
- CLO\#4: Apply Newton's laws (inertia, force, mass, acceleration, action, reaction) using calculus where appropriate.
- CLO\#5: Select the proper equations, using calculus where appropriate, to the constraints of a given physics problem.


## PH 211R - General Physics (Calculus Based) I Recitation

## 1 Credit(s)

Prerequisite(s): WR 115 or designated placement, and MTH $112 Z$ or designated placement.
Corequisite(s): MTH 251, PH 211, PH 211L

Course Description: This is the first term of a three-term calculus-based physics course. Conservation laws and Newtonian mechanics are covered. This includes but is not limited to forces and motion, forms of energy (including kinetic potential and various types of internal energy such as rotational, thermal and latent), conservation of momentum, conservation of angular momentum, conservation of energy, Newton's laws, kinematics, free-body diagrams, net force equations, torque and orbital mechanics. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Explain and apply conservation laws in physics (momentum, angular momentum, energy) using calculus where appropriate.
- CLO\#4: Explain and apply Newton's laws (inertia, force, mass, acceleration, action, reaction) using calculus where appropriate.
- CLO\#5: Select the equations (using calculus where needed) appropriate to the constraints of a given physics problem.


## PH 212 - General Physics (Calculus Based) II

## 3 Credit(s)

Prerequisite(s): MTH 251, PH 211, PH 211L, PH 211R

Corequisite(s): MTH 252, PH 212L, PH 212R

Course Description: This is the second term of a three-term calculus-based physics course. Special relativity and electromagnetism are covered. This includes but is not limited to spacetime diagrams, time dilation, length contraction, conservation of four-momentum, electrostatics, fields, current, voltage, circuits, magnetism, induction, Maxwell's equations and electromagnetic waves. Students must enroll in lecture,
laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply the principles of special relativity and electromagnetism, using calculus where appropriate.


## PH 212L - General Physics (Calculus Based) II Lab

## 1 Credit(s)

Prerequisite(s): MTH 251, PH 211, PH 211L, PH 211R

Corequisite(s): MTH 252, PH 212, PH 212R

Course Description: This is the second term of a three-term calculus-based physics course. Special relativity and electromagnetism are covered. This includes but is not limited to spacetime diagrams, time dilation, length contraction, conservation of four-momentum, electrostatics, fields, current, voltage, circuits, magnetism, induction, Maxwell's equations and electromagnetic waves. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply the principles of geometric optics, using calculus where appropriate. (coordinate time, proper time, spacetime interval, spacetime diagram, coordinate transformations, cosmic speed limit, conservation of four-momentum, relativistic Doppler effect).
- CLO\#4: Apply principles of electrostatics (charge, field, potential) using calculus where appropriate.
- CLO\#5: Apply principles of electric current (circuits, Ohm's law) using calculus where appropriate.
- CLO\#6: Apply principles of electromagnetism (currents, magnets, electromagnetic fields) using calculus where appropriate.
- CLO\#7: Interpret laboratory data to draw conclusions about general physics experiments.


## PH 212R - General Physics (Calculus Based) II Recitation

## 1 Credit(s)

Prerequisite(s): MTH 251, PH 211, PH 211L, PH 211R

Corequisite(s): MTH 252, PH 211, PH 212L

Course Description: This is the second term of a three-term calculus-based physics course. Special relativity and electromagnetism are covered. This includes but is not limited to spacetime diagrams, time
dilation, length contraction, conservation of four-momentum, electrostatics, fields, current, voltage, circuits, magnetism, induction, Maxwell's equations and electromagnetic waves. Students must enroll in lecture, laboratory and recitation sections. All three sections are required

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Use sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply the principles of special relativity and electromagnetism.


## PH 213 - General Physics (Calculus Based) III

## 3 Credit(s)

Prerequisite(s): MTH 252, PH 212, PH 212L, PH 212R
Corequisite(s): PH 213L, PH 213R

Course Description: This is the third term of a three-term calculus-based physics course. Waves, quantum mechanics, thermodynamics and statistical mechanics are covered. This includes but is not limited to wave interference, diffraction, photoelectric effect, wave-particle duality, Schrodinger wave equation, spectra, heat capacity, kinetic molecular theory, multiplicity, entropy, ideal gas law, cyclic processes, laws of thermodynamics and heat engines. Students must enroll in lecture, laboratory and recitation sections. All three sections are required for this 5 -credit class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Explain and apply Maxwell's equations in the context of magnetic flux, electromagnetic induction, and electromagnetic radiation.
- CLO\#4: Explain and apply principles of wave physics (interference, diffraction, resonance, waveparticle duality), using calculus where appropriate.
- CLO\#5: Explain and apply principles of quantum mechanics (probability, spin, wave function, spectroscopy, Schrodinger equation, nuclear physics), using calculus where appropriate.
- CLO\#6: Explain and apply principles of thermodynamics (multiplicity, entropy, Boltzmann factors, gases, distributions, cyclic processes, engines) using calculus where appropriate.


## PH 213L - General Physics (Calculus Based) III Lab

## 1 Credit(s)

Prerequisite(s): MTH 252, PH 212, PH 212L, PH 212R
Corequisite(s): PH 213, PH 213R

Course Description: This is the third term of a three-term calculus-based physics course. Waves, quantum mechanics, thermodynamics and statistical mechanics are covered. This includes but is not limited to wave interference, diffraction, photoelectric effect, wave-particle duality, Schrodinger wave equation, spectra, heat capacity, kinetic molecular theory, multiplicity, entropy, ideal gas law, cyclic processes, laws of thermodynamics and heat engines. Students must enroll in lecture, laboratory and recitation sections. All three sections are required

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply Maxwell's equations in the context of magnetic flux, electromagnetic induction, and electromagnetic radiation.
- CLO\#4: Apply basic principles of wave physics (interference, diffraction, resonance, wave-particle duality).
- CLO\#5: Apply basic principles of quantum mechanics (probability, spin, wavefunction, spectroscopy, Schrodinger equation, nuclear physics).
- CLO\#6: Apply basic principles of thermodynamics (multiplicity, entropy, Boltzmann factors, gases, distributions, cyclic processes, engines).
- CLO\#7: Interpret laboratory data to draw conclusions about general physics experiments.


## PH 213R - General Physics (Calculus Based) III Recitation

## 1 Credit(s)

Prerequisite(s): MTH 252, PH 212, PH 212L, PH 212R
Corequisite(s): PH 213, PH 213L
Course Description: This is the third term of a three-term calculus-based physics course. Waves, quantum mechanics, thermodynamics and statistical mechanics are covered. This includes but is not limited to wave interference, diffraction, photoelectric effect, wave-particle duality, Schrodinger wave equation, spectra, heat capacity, kinetic molecular theory, multiplicity, entropy, ideal gas law, cyclic processes, laws of thermodynamics and heat engines. Students must enroll in lecture, laboratory and recitation sections. All three sections are required.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Use vectors, algebra, calculus, dimensional analysis, and logical reasoning to solve general physics problems resourcefully. (ILO: Quantitative Literacy and Reasoning)
- CLO\#2: Make sensible assumptions and simplifications to solve general physics problems, when it appears that not enough information is provided.
- CLO\#3: Apply Maxwell's equations in the context of magnetic flux, electromagnetic induction, and electromagnetic radiation using calculus where appropriate.
- CLO\#4: Apply basic principles of wave physics (interference, diffraction, resonance, wave-particle duality) using calculus where appropriate.
- CLO\#5: Apply principles of quantum mechanics (probability, spin, wavefunction, spectroscopy, Schrodinger equation, nuclear physics) using calculus where appropriate.
- CLO\#6: Apply principles of thermodynamics (multiplicity, entropy, Boltzmann factors, gases, distributions, cyclic processes, engines) using calculus where appropriate.


## PHL 101 - Philosophical Problems

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Introduces basic questions of philosophy and some of the persistent philosophical problems. Students will be introduced to some of the traditional solutions to those problems and be given a base to provide their own answers.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe some of the persistent philosophical problems and some traditional attempts to solve them. (ILO: Communication)
- CLO\#2: Explain the process of philosophizing, including analysis and synthesis.
- CLO\#3: Develop and articulate a personal philosophical orientation.


## PHL 102 - Ethics

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Develops the idea of humans as moral agents and provides critical consideration of various interpretations of the ideals and standards of moral conduct.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain the common terms and basic concepts related to the field of ethics. (ILO: Communication)
- CLO\#2: Explain the moral dimensions of everyday experience.
- CLO\#3: Present well-reasoned responses to ethical dilemmas.


## PHL 103 - Critical Reasoning

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.
Course Description: Introduces the study of reasoning, including the ability to recognize, analyze, criticize, and construct the main types of argument and proof.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and construct a logical argument.
- CLO\#2: Explain the relationship of logic to other fields in philosophy.
- CLO\#3: Identify and describe a variety of argument forms and fallacies.
- CLO\#4: Test deductive arguments for validity. (ILO: Critical Thinking)


## PHL 199 - Special Studies: Philosophy

## Var. (1-3) Credit(s)

Prerequisite(s): Varies by course.
Course Description: Explores major ideas and belief systems of the world and the extent to which individual values are shaped by cultures.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Varies based on course focus.


## PN 101 - Practical Nursing I

## 8 Credit(s)

Prerequisite(s): MTH 65 or higher-level math, CIS 120 (formerly offered as CS120), WR 121 Z or designated placement, and PSY 101; and $\mathrm{BI} 121, \mathrm{BI} 121 \mathrm{~L}$ and BI 122 , BI 122 L within 7 years or ( $\mathrm{BI} 231, \mathrm{BI} 231 \mathrm{~L}$ or $\mathrm{BI} 232, \mathrm{BI} 232 \mathrm{~L}$ or $\mathrm{BI} 233, \mathrm{BI}$ 233L) within 7 years;
and CPR, OSBN CNA certification, and acceptance into the Practical Nursing program (see the catalog for detailed information).

## Corequisite(s): PN 101C

Course Description: Covers the practical nurse's contributions to the nursing process and legal and ethical issues within the PN scope of practice. Practical nursing skills, pharmacology and medication administration, communication skills, growth and development across the life span, and selected medical-surgical content are covered. Clinical application occurs in the skills lab, simulation, and a long-term care setting. Skills lab/clinical course is graded on a pass/no pass basis.

Course does not transfer.
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate beginning understanding of how a nursing care plan is developed and contribute to data collection. Identify the difference between LPN and RN roles in developing and/or implementing a care plan.
- CLO\#2: Identify members of the health care team and the ethical and legal responsibilities of the LPN and RN as members of this team, and perform within the legal and ethical guidelines of the profession.
- CLO\#3: Describe and demonstrate basic focused assessmentldata collection techniques, and communicate findings which include identification of patterns and ranges of normal growth and development.
- CLO\#4: Demonstrate proficiency and safe performance of the following specified nursing skills and explain the rationale related to these skills: hand washing, bathing and bed-making, vital signs, feeding, focused assessment, data collection, charting, safe patient handling, catheter care, intake and output, oxygen administration, medical and surgical asepsis, and dressing changes.
- CLO\#5: Identify key concepts and related issues in caring for the geriatric client.
- CLO\#6: Identify the stages of the grieving process and apply interventions for persons experiencing grief.
- CLO\#7: Demonstrate the ability to accurately calculate drug dosages.
- CLO\#8: Demonstrate correct administration of oral and parenteral medications.
- CLO\#9: Recognize when information is needed and ask relevant questions, locate, evaluate, and effectively use this information. (ILO: Information literacy)
- CLO\#10: Adhere to facility and nursing program policies, e.g., attendance, working as member of a team, responding to feedback unemotionally and non-defensively, acting ethically and within scope of practice, utilization of standard precautions throughout the program.


## PN 101C - Practical Nursing I Clinical

## 4 Credit(s)

Prerequisite(s): MTH 65 or higher-level math, CIS 120 (formerly offered as CS120), WR 121 Z or designated placement, and PSY 101; and BI 121 , BI 121 L and BI 122 , BI 122 L within 7 years or (BI 231, BI 231 L or BI 232 , BI 232 L or BI 233 , BI 233L) within 7 years;
and CPR, OSBN CNA certification, and acceptance into the Practical Nursing program (see the catalog for detailed information).

## Corequisite(s): PN 101

Course Description: Covers the practical nurse's contributions to the nursing process and legal and ethical issues within the PN scope of practice. Practical nursing skills, pharmacology and medication administration, communication skills, growth and development across the life span, and selected medical-surgical content are covered. Clinical application occurs in the skills lab, simulation, and a long-term care setting. Skills lab/clinical course is graded on a pass/no pass basis.

Course does not transfer.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate beginning understanding of how a nursing care plan is developed and contribute to data collection. Identify the difference between LPN and RN roles in developing and/or implementing a care plan.
- CLO\#2: Identify members of the health care team and the ethical and legal responsibilities of the LPN and RN as members of this team, and perform within the legal and ethical guidelines of the profession.
- CLO\#3: Describe and demonstrate basic focused assessmentldata collection techniques, and communicate findings which include identification of patterns and ranges of normal growth and development.
- CLO\#4: Demonstrate proficiency and safe performance of the following specified nursing skills and explain the rationale related to these skills: hand washing, bathing and bed-making, vital signs, feeding, focused assessment, data collection, charting, safe patient handling, catheter care, intake and output, oxygen administration, medical and surgical asepsis, and dressing changes.
- CLO\#5: Identify key concepts and related issues in caring for the geriatric client.
- CLO\#6: Identify the stages of the grieving process and apply interventions for persons experiencing grief.
- CLO\#7: Demonstrate the ability to accurately calculate drug dosages.
- CLO\#8: Demonstrate correct administration of oral and parenteral medications.
- CLO\#9: Recognize when information is needed and ask relevant questions, locate, evaluate, and effectively use this information. (ILO: Information literacy)
- CLO\#10: Adhere to facility and nursing program policies, e.g., attendance, working as member of a team, responding to feedback unemotionally and non-defensively, acting ethically and within scope of practice, utilization of standard precautions throughout the program.


## PN 102 - Practical Nursing II

## 8 Credit(s)

Prerequisite(s): PN 101, PN 101C
Corequisite(s): PN 102C
Course Description: Continues application of the nursing process and practical nursing scope of practice to content in selected medical-surgical areas including perioperative, cardiovascular, endocrine, respiratory, mental health, and gastrointestinal disorders. Within the organizing framework of the concepts of the individual, society, health, and the nursing process, an integrated approach is used that considers pathophysiology, diagnostic testing, fluid and electrolyte balance, nutrition, pharmacology, psychosocial and spiritual needs, and culture across the lifespan. Nursing care provided by the student in clinical situations takes place in long-term care and in the acute-care medical/surgical and perioperative settings, with selected specialty experiences. Clinical course is graded on a pass/no pass basis.
Course does not transfer.
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify potential legal and ethical issues related to client decision-making and informed consent in acute care settings.
- CLO\#2: Use therapeutic communication skills in the development of therapeutic relationships with clients and families. (ILO: Communication)
- CLO\#3: Identify roles of health care team members involved in providing care to clients and families in acute care settings; describe and demonstrate basic focused assessmentldata collection techniques, and communicate findings which include identification of patterns and ranges of normal growth and development.
- CLO\#4: Demonstrate safe and competent clinical application of acquired knowledge, skills, and the nursing process in the direct care of clients.
- CLO\#5: Correctly perform the following skills when opportunity available: Foley catheter insertion, capillary blood sugar measurement, and saline lock conversion.
- CLO\#6: Describe the pathophysiology, medical management and nursing interventions in caring for the perioperative client.
- CLO\#7: Describe the pathophysiology, medical management, diagnostic testing, and nursing interventions in caring for available clients with selected conditions of the cardiovascular, endocrine (with an emphasis on diabetes), respiratory, and gastrointestinal systems.
- CLO\#8: Describe the role of the practical nurse in the care of the client with mental health/psychiatric disorders.
- CLO\#9: Demonstrate drug and solution calculation and administration competency. (ILO: Quantitative Literacy and Reasoning)
- CLO\#10: Adhere to facility and practical nursing program policies, e.g. attendance, working as member of a team, responding to feedback unemotionally and non-defensively, acting ethically and within scope of practice, utilization of standard precautions throughout the program.
- CLO\#11: Recognize when information is needed and ask relevant questions, locate, evaluate, and effectively use this information.


## PN 102C - Practical Nursing II Clinical

## 4 Credit(s)

Prerequisite(s): PN 101, PN 101C

Corequisite(s): PN 102
Course Description: Continues application of the nursing process and practical nursing scope of practice to content in selected medical-surgical areas including perioperative, cardiovascular, endocrine, respiratory, mental health, and gastrointestinal disorders. Within the organizing framework of the concepts of the individual, society, health, and the nursing process, an integrated approach is used that considers pathophysiology, diagnostic testing, fluid and electrolyte balance, nutrition, pharmacology, psychosocial and spiritual needs, and culture across the lifespan. Nursing care provided by the student in clinical situations takes place in long-term care and in the acute-care medical/surgical and perioperative settings, with selected specialty experiences. Clinical course is graded on a pass/no pass basis.
Course does not transfer.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify potential legal and ethical issues related to client decision-making and informed consent in acute care settings.
- CLO\#2: Use therapeutic communication skills in the development of therapeutic relationships with clients and families. (ILO: Communication)
- CLO\#3: Identify roles of health care team members involved in providing care to clients and families in acute care settings; describe and demonstrate basic focused assessment/data collection techniques, and communicate findings which include identification of patterns and ranges of normal growth and development.
- CLO\#4: Demonstrate safe and competent clinical application of acquired knowledge, skills, and the nursing process in the direct care of clients.
- CLO\#5: Correctly perform the following skills when opportunity available: Foley catheter insertion, capillary blood sugar measurement, and saline lock conversion.
- CLO\#6: Describe the pathophysiology, medical management and nursing interventions in caring for the perioperative client.
- CLO\#7: Describe the pathophysiology, medical management, diagnostic testing, and nursing interventions in caring for available clients with selected conditions of the cardiovascular, endocrine (with an emphasis on diabetes), respiratory, and gastrointestinal systems.
- CLO\#8: Describe the role of the practical nurse in the care of the client with mental health/psychiatric disorders.
- CLO\#9: Demonstrate drug and solution calculation and administration competency. (ILO: Quantitative Literacy and Reasoning)
- CLO\#10: Adhere to facility and practical nursing program policies, e.g. attendance, working as member of a team, responding to feedback unemotionally and non-defensively, acting ethically and within scope of practice, utilization of standard precautions throughout the program.
- CLO\#11: Recognize when information is needed and ask relevant questions, locate, evaluate, and effectively use this information.


## PN 103 - Practical Nursing III

## 7 Credit(s)

Prerequisite(s): PN 102, PN 102C

## Corequisite(s): PN 103C

Course Description: Continues the application of the nursing process and practical nursing scope specific to foundations of oncology, immune disorders, HIV, reproduction, maternity, pediatrics, orthopedics, neurological and renal/urinary nursing. In addition, leadership and trends in practical nursing are considered, and the NCLEX-PN application process is discussed. Within the organizing framework of the concepts of the individual, society, health and the nursing process, an integrated approach is used that considers pathophysiology, diagnostic testing, fluid and electrolyte balance, nutrition, pharmacology, psychosocial and spiritual needs and culture across the life span. Nursing care provided by the student in clinical situations (PN 103C ) takes place primarily in long-term care settings with selected specialty experiences in the maternity and/or other units of local hospitals. Clinical is graded on a pass/no pass basis.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Research and describe the pathophysiology, medical management, and nursing interventions in caring for the client with cancer, immune disorders, and selected conditions of the orthopedic, neurological, renal and reproductive systems. (ILO: Information literacy)
- CLO\#2: Use therapeutic communication skills in the development of therapeutic relationships with clients and families.
- CLO\#3: Describe the appropriate care for the woman and family during an uncomplicated pregnancy.
- CLO\#4: Describe appropriate nursing care of the mother with an uncomplicated labor, delivery, and postpartum period in a maternity department.
- CLO\#5: Describe appropriate nursing care for the full-term, uncompromised neonate.
- CLO\#6: Discuss/identify behaviors appropriate for developmental stages in infancy through toddler, and pharmacological considerations in caring for the pediatric client.
- CLO\#7: Accurately calculate drug dosages and administer medications.
- CLO\#8: Identify the practical nurse's scope of practice in collaboration with members of the health care team in data collection, contributing to the client plan of care, providing and evaluating client care.
- CLO\#9: Describe trends for practical nursing in the future, considering societal changes, roles, and technical advances.
- CLO\#10: Demonstrate increasing aptitude in recognizing, defining and functioning within the accepted roles of practical nursing, especially provider of care, member within the discipline of nursing and including the leadership role of the LPN in long-term care settings.
- CLO\#11: Demonstrate competency and safety in the provision of nursing care and in technical skills; adhere to facility and nursing program policies, e.g. attendance, working as member of a team, responding to feedback unemotionally and non-defensively, acting ethically and within scope of practice, utilization of standard precautions throughout the program.


## PN 103C - Practical Nursing III Clinical

## 3 Credit(s)

Prerequisite(s): PN 102, PN 102C
Corequisite(s): PN 103

Course Description: Continues the application of the nursing process and practical nursing scope specific to foundations of oncology, immune disorders, HIV, reproduction, maternity, pediatrics, orthopedics, neurological and renal/urinary nursing. In addition, leadership and trends in practical nursing are considered, and the NCLEX-PN application process is discussed. Within the organizing framework of the concepts of the individual, society, health and the nursing process, an integrated approach is used that considers pathophysiology, diagnostic testing, fluid and electrolyte balance, nutrition, pharmacology, psychosocial and spiritual needs and culture across the life span. Nursing care provided by the student in clinical situations (PN103C) takes place primarily in long-term care settings with selected specialty experiences in the maternity and/or other units of local hospitals. Clinical is graded on a pass/no pass basis.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Research and describe the pathophysiology, medical management, and nursing interventions in caring for the client with cancer, immune disorders, and selected conditions of the orthopedic, neurological, renal and reproductive systems. (ILO: Information literacy)
- CLO\#2: Use therapeutic communication skills in the development of therapeutic relationships with clients and families.
- CLO\#3: Describe the appropriate care for the woman and family during an uncomplicated pregnancy.
- CLO\#4: Describe appropriate nursing care of the mother with an uncomplicated labor, delivery, and postpartum period in a maternity department.
- CLO\#5: Describe appropriate nursing care for the full-term, uncompromised neonate.
- CLO\#6: Discuss/identify behaviors appropriate for developmental stages in infancy through toddler, and pharmacological considerations in caring for the pediatric client.
- CLO\#7: Accurately calculate drug dosages and administer medications.
- CLO\#8: Identify the practical nurse's scope of practice in collaboration with members of the health care team in data collection, contributing to the client plan of care, providing and evaluating client care.
- CLO\#9: Describe trends for practical nursing in the future, considering societal changes, roles, and technical advances.
- CLO\#10: Demonstrate increasing aptitude in recognizing, defining and functioning within the accepted roles of practical nursing, especially provider of care, member within the discipline of nursing and including the leadership role of the LPN in long-term care settings.
- CLO\#11: Demonstrate competency and safety in the provision of nursing care and in technical skills; adhere to facility and nursing program policies, e.g. attendance, working as member of a team, responding to feedback unemotionally and non-defensively, acting ethically and within scope of practice, utilization of standard precautions throughout the program.


## PN 104C - Practical Nursing Leadership Clinical

## 2 Credit(s)

Prerequisite(s): PN 103, PN 103C
Course Description: Facilitates the transitional process from student practical nurse to beginning graduate practical nurse. By completing an individualized, concentrated clinical experience in the long-term care or other assigned setting, students will be able to focus on leadership skills demonstrating the ability to implement nursing actions that reinforce previous practical nursing didactic content within the organizing framework of the concepts of the individual, society, health and the nursing process. Nursing care provided by the student will take place primarily in the long-term care or other assigned setting, working with a clinical teaching associate (CTA). Clinical is graded on a pass/no pass basis.
Course does not transfer.
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate nursing actions that reinforce previous practical nursing didactic content and knowledge.
- CLO\#2: Identify mental health, psychosocial, and/or physiological issues relevant to assigned clients and demonstrate appropriate nursing interventions specific to those clients.
- CLO\#3: Apply principles of organization, prioritization, and ethical decision making while acting as a provider of care and while participating in the coordination of client care.
- CLO\#4: Function as a member within the profession of nursing integrating such values as accountability, integrity, and self-motivation.
- CLO\#5: Differentiate between the roles and responsibilities of the RN, LPN, and CNA in the acute care, long term or community care settings.
- CLO\#6: Demonstrate competency and safety in the provision of nursing care and in technical skills; adhere to facility and nursing program policies, e.g. attendance, responding to feedback unemotionally and non-defensively, acting ethically within scope of practice and utilization of standard precautions.
- CLO\#7: Accepts feedback, demonstrates conflict resolution, and identifies personal strengths and ongoing improvement needs through self-evaluation.
- CLO\#8: Respects the privacy, including confidentiality of health care information, and dignity of individuals, families and groups.
- CLO\#9: Recognizes and reports situations in which assessment and intervention by RN is necessary, seeks consultation.
- CLO\#10: Uses information technology effectively and appropriately to search for new information, monitor care, report change, and document.
- CLO\#11: Applies concepts of resource utilization to practice cost-effective nursing care, including managing time of self and others.
- CLO\#12: Applies management skills to direct and supervise care provided by assistive personnel.
- CLO\#13: Questions orders which are not clear, perceived as unsafe, or outside of the LPN scope. (ILO: Critical Thinking)


## PN 199 - Special Studies: Practical Nursing

## Var. (1-3) Credit(s)

Prerequisite(s): Some level of nursing education or background is required.

Course Description: Develops students' abilities to recognize and treat the symptoms of illness and injury in classroom labs and simulated patient scenes. Includes skills in focused assessment, basic nursing interventions, patient management, medication administration, and the use of different types of equipment.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate key principles of practical nursing care.
- CLO\#2: Apply concepts learned in the classroom to the focus assessment and management of simulated patients in the lab setting. (ILO: Critical Thinking)
- CLO\#3: Demonstrate effective teamwork in managing simulated patient care scenarios.
- CLO\#4: Variable, depending on content.


## PRX 101 - Pharmacy Technician I

## 4 Credit(s)

Prerequisite(s): Acceptance into the Pharmacy Technician Certificate program.
Course Description: Introduces the basic concepts of the practice of pharmacy and the pharmacy technician's role, including the history of pharmacy, the types of pharmacy settings, the language of pharmacy and drug classifications, the types and use of technology in the pharmacy setting, and basic concepts of health insurance billing as they relate to the pharmacy technician's role.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the origin and evolution of the practice of pharmacy.
- CLO\#2: Describe the roles and responsibilities of the pharmacy technician in the range of pharmacy settings where they are employed.
- CLO\#3: Use pharmaceutical terms and the drug classification system appropriately and accurately in the pharmacy setting. (ILO: Critical Thinking)
- CLO\#4: Describe the types and uses of technology utilized in the pharmacy setting.
- CLO\#5: Apply the concepts and practices of health insurance billing appropriately in the pharmacy setting.


## PRX 102 - Pharmacy Technician II

## 4 Credit(s)

Prerequisite(s): Acceptance into the Pharmacy Technician Certificate program, and successful completion
of all prior program courses is required.

Course Description: Builds on material learned in Pharmacy Technician I. Focus is on the pharmacy technician's role in purchasing and inventory control, the behaviors expected of a professional pharmacy technician, the process of preparing, labeling, packaging, storing, and distributing medication, and the purpose, reason, and process for compounded and sterile medications.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Determine and appropriately use the specific purchasing systems and methods of purchasing and inventory control used in pharmacies.
- CLO\#2: Behave in the manner dictated by and consistent with the expectations of a professional pharmacy technician.
- CLO\#3: Demonstrate understanding of the process of preparing, labeling, packaging, storing, and distributing medication. (ILO: Information Literacy)
- CLO\#4: Explain the purpose, reason and process for compounded and sterile medications.


## PS 199 - Special Studies: Political Science

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending on subject offerings.

Course Description: Selected topics of study in political science are offered on demand through workshops, seminars, lecture, lab, and/or independent study format. This course is designed to:

- Provide students with opportunities to explore in greater depth specific topics in the field of political science which are presented in the introductory political science courses.
- Provide other RCC departments with a variety of subject offerings designed to address problems, issues and concerns which are unique to their specific discipline.
- Provide flexibility in meeting elective political science credits by allowing and encouraging students to research areas of political science not currently taught in the political science curriculum.


## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed. Typical assessments will include but are not limited to homework exercises, discussion, quizzes, examinations, course discussions, and research papers.


## PS 201 - U.S. Government: Institutions and Policy

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Provides a general investigation of the socio-political processes in the United States and includes, but is not limited to, the following: an historical overview of American democracy and political institutions, the Constitution and the road to ratification, federalism and domestic and foreign policy.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Trace the development of American democratic institutions and political culture.
- CLO\#2: Explain the U.S. Constitution: historical antecedents and contemporary perspectives.
- CLO\#3: Identify branches of government, the bureaucracy and the formation of federal policy.
- CLO\#4: Utilize critical thinking skills to explain strengths and weaknesses in the U.S. political institutions and policy. (ILO: Critical Thinking)


## PS 202 - U.S. Government: Ideologies and Political Participation

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Examines the concepts and principles of the American political system including political ideologies, civil liberties, and the role of interest groups, media and public participation in campaigns and elections.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Trace the development of American ideologies and political culture.
- CLO\#2: Explain the U.S. Constitution: historical antecedents and contemporary perspectives.
- CLO\#3: Describe the development of political parties, campaigns, and the role of the media and interest groups in the political process.
- CLO\#4: Utilize critical thinking skills to explain strengths and weaknesses in the U.S. political system. (ILO: Critical Thinking)


## PS 203 - State and Local Government

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Surveys the political process at the state and local level with an emphasis on Oregon law, constitution, and current local political issues.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain state/local political and policy making processes.
- CLO\#2: Describe legislative process/procedures at the state and local level.
- CLO\#3: Describe the levels of government (Federalism), the Oregon and U.S Constitutions, political participation, organized interest groups, and the media.
- CLO\#4: Explain the history and capacity of state and local government to solve problems and provide needed services. (ILO: Critical Thinking)


## PS 280 - Cooperative Work Experience / Political Science

Var. (1-3) Credit(s)

Prerequisite(s): Prior arrangements with CWE Instructor or Department Chair.
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a career-related experience for students working for an approved employer. As a capstone course, students should complete this course within the last two terms of their certificate or degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines. (ILO: Communication)
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives).
- CLO\#5: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job.


## PSY 101 - Psychology of Human Relations

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Focuses on the practical application of psychology in everyday situations. Topics include self-concept, emotions, needs, values, healthy relationships, interpersonal communications, and behavioral change. The course provides students an experiential opportunity to develop an understanding and awareness of themselves and others, and a variety of practical tools for the development of interpersonal skills. Emphasis is on becoming a more effective member of the human community.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply knowledge and experience critically so as to realize an informed sense of self, gender identity, values, family and community.
- CLO\#2: Identify qualities and skills necessary to establish meaningful interpersonal relationships.
- CLO\#3: Identify a variety of effective communication techniques and utilize them in working effectively and cooperatively with others.
- CLO\#4: Identify internalized biases and microaggressions, explain their impact and identify equitable alternatives. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## PSY 119 - Psychology of Personal Growth

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Provides an opportunity for students to deepen and broaden their knowledge of
theoretical psychology while gaining insights into their own behaviors and the behavior of others. Consists of small and large group exercises and individual writing assignments, augmented by lecture.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Articulate student's own "philosophy of life."
- CLO\#2: Articulate student's own reasons for career choice and "job values" associated with chosen career path.
- CLO\#3: Describe the relationship between physical and emotional wellness.
- CLO\#4: Discuss the importance of intimacy and ways in which it can be achieved in our relationships. (ILO: Critical Thinking)
- CLO\#5: Describe the stages of grief and appropriate strategies for dealing with grief.
- CLO\#6: List and discuss existential questions involved in the search for identity.


## PSY 199 - Special Studies: Psychology

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending on subject offerings.
Course Description: Selected topics of study in psychology are offered on demand through workshops, seminars, lecture, lab, and/or independent study formats. This course is designed to:

- Provide students to explore in greater depth specific topics in the field of psychology which are introduced in the general psychology and human relations courses.
- Provide other RCC departments with a variety of subject offerings designed to address problems, issues and concerns which are unique to their specific discipline.
- Provide flexibility in meeting elective psychology credits by allowing and encouraging students to research areas of psychology not currently taught in the psychology curriculum.


## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed.


## PSY 201 - General Psychology I

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Provides students with the foundational knowledge required for further study in the field of psychology. This course is designed to help students gain a historical perspective of the field of psychology, an understanding of the scientific method applied to human behavior, and knowledge of the physiology of human behavior including the brain functions, sensations and perception process. The course also explores states of consciousness, memory, learning theory, cognition, language and creativity,
motivation, emotion and stress. Provides training in the application of study skills, critical thinking and crosscultural awareness.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Discuss the historical perspective of the field of psychology as a science.
- CLO\#2: Identify the scientific method and procedures as applied to the understanding and prediction of human behavior. (ILO: Critical Thinking)
- CLO\#3: Describe the various states of consciousness experienced by humans and the conditions that cause variations in these states.
- CLO\#4: Explain human behavior using theories of learning, cognition and memory.
- CLO\#5: Describe the components of and relationships between motivation, emotion and stress as related to human behavior.


## PSY 202 - General Psychology II

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Recommended Prerequisite(s): PSY 201

Course Description: Continues the overview of the general psychology curriculum begun in PSY 201 and prepares students for continued study in more advanced psychology classes. This course is designed to help students gain an understanding of human development including personality testing, personality development and intelligence; psychopathology and current methods of treating psychopathology; social psychology; and human sexuality and gender development. Provides training in the application of study skills, critical thinking, and cross-cultural awareness.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Compare and contrast the major theories of human development.
- CLO\#2: Compare and contrast the major theories of personality. (ILO: Critical Thinking)
- CLO\#3: Discuss symptoms of psychopathology, in general, and describe various types of psychopathology.
- CLO\#4: Discuss the history and development of the field of social psychology.
- CLO\#5: Discuss human gender development and human sexual response.


## PSY 215 - Lifespan Human Development

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement, and PSY 201 or PSY 202
Course Description: Provides an overview of human development explored from a variety of perspectives. The primary objective is to examine biological, socio-cultural, and psychological factors that influence each stage of the life cycle, from conception until death. Exploration focuses on life tasks and societal expectations, physical and cognitive changes, and personality development across the lifespan. Both normative and non-normative pathways are considered. The course provides a bridge between biological science and social science and is an essential component for students entering the fields of nursing and

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Relate the major theoretical perspectives of psychology to the human developmental process.
- CLO\#2: Delineate the research methods employed by developmental psychologists. (ILO: Critical Thinking)
- CLO\#3: Describe the relative contributions of genetics and environment to the developmental process, including the reciprocal influence of social interaction and the developmental process.
- CLO\#4: Identify significant physical and cognitive processes that characterize development in each stage of the life cycle, from prenatal to death.
- CLO\#5: Recognize the normative development of and changes in personality, social interactions, and cultural demands associated with each stage of the life cycle.
- CLO\#6: Identify the non-normative events and influences that might impact development throughout the lifespan.


## PSY 219 - Introduction to Abnormal Psychology

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement, and PSY 201

Corequisite(s): PSY 202
Course Description: Introduces the psychology of abnormal behavior and its possible causes, along with an examination of the history and modern practice of mental health treatment, including legal issues such as insanity and civil commitment. Students will explore the nature of abnormality and examine social and cultural factors as well as specific disturbances in behavior, mood, thinking, and perception which have defined abnormality, past and present. Special problems of research with the clinical population and major theoretical models for assessment, diagnosis and treatment will also be studied. Specific topic areas include disorders of childhood and adolescence, anxiety, obsessive-compulsive and related disorders, disorders of trauma and stress, disorders featuring somatic symptoms, eating disorders, schizophrenia, and personality disorders.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define abnormal behavior according to a variety of major theories.
- CLO\#2: Describe common methods of assessment and diagnosis, including the classification scheme of the DSM 5.
- CLO\#3: Identify behaviors and conditions that meet the diagnostic criteria for a variety of psychiatric disorders; recognize various manifestations of these symptoms. (ILO: Information Literacy)
- CLO\#4: Identify strengths and limitations of a variety of treatment methods for psychiatric conditions, including historical treatments as well as those currently in practice.
- CLO\#5: Identify current directions in research on pathology, assessment, or treatment of psychiatric disorders.


## PSY 228 - Introduction to Positive Psychology

## 4 Credit(s)

## Prerequisite(s): BT 114 or WR $121 Z$

Course Description: Introduces students to theories and research in psychology that examine topics relevant to the nature of happiness and psychological well-being. Psychology has focused much of its efforts on the treatment of human problems. To balance this paradigm, positive psychology calls for research on what promotes human fulfillment and human potential. The most basic assumption is that human goodness and excellence are as important as disorder and human flaw. Topics covered in this course will include the nature, history and future of positive psychology, research methods, authenticity, joy, happiness, positive thinking, emotional intelligence, intuition, character strengths, core values, virtues, talents, health and social justice.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate knowledge of the science of positive psychology, its philosophy, approach, research, paradigm shift and its future.
- CLO\#2: Assess and reflect on the meaning of happiness, character traits, values and virtues and identify their strengths to increase and sustain well-being.
- CLO\#3: Demonstrate positive thinking and emotional intelligence to everyday life situations.
- CLO\#4: Demonstrate knowledge of the relationship between physical, mental, emotional, social and spiritual dimensions of humanness in promoting health and wellness.
- CLO\#5: Apply positive psychology to problem solving and social justice causes. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#6: Acquire the skill of creative inquiry and developed imagination in facing life challenges.
- CLO\#7: Recognizes how inspiration, motivation and self-empowerment occur in human development.


## PSY 231 - Human Sexuality

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Introduces the student to the many physiological, psychological, sociological, and cultural influences on sexual behavior. The course provides the foundation in both scientific and pragmatic terms to further one's understanding and acceptance of sexuality within the context and environment in which one lives. Emphasis is placed on knowledge, self-acceptance and tolerance of others' sexual expression. There will also be a study of atypical sexual behavior, deviance, aggression and victimization.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define the problems and methodology of research in human sexuality.
- CLO\#2: Describe the role of gender in the human experience and the development of gender roles. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Explain the biological basis of sexual behavior, including human sexual anatomy and physiology, conception, contraception and birth control, sexually transmitted infections and sexual dysfunction.
- CLO\#4: Identify the psychological and cultural dimensions of human sexual behavior in relation to conception, contraception, sexually transmitted infections, and sexual dysfunction.
- CLO\#5: Discuss the roles of communication about sex and sexual decision-making in intimate relationships.
- CLO\#6: Define and describe atypical behavior, including sexual harassment, coercion and victimization.


## PSY 280 - Cooperative Work Experience/Psychology

## Var. (1-3) Credit(s)

Prerequisite(s): Prior arrangements with CWE Instructor or Department Chair.
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a career-related experience for students working for an approved employer. As a capstone course, students should complete this course within the last two terms of a certificate or degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the importance of completing forms accurately and meeting deadlines.
- CLO\#2: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#3: Demonstrate good work performance (student's learning objectives).
- CLO\#4: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job. (ILO: Critical Thinking)


## RD 90 - College Reading

## 4 Credit(s)

Prerequisite(s): Designated placement as shown on current indicator chart or permission of Instructor.
Course Description: Improves reading and vocabulary skills by developing specific reading strategies and analytical skills as well as by expanding basic background knowledge that will lead to proficiency in students' college coursework. Skills to be developed include comprehension, flexibility, critical thinking, graphic illustrations, and the use of library resources. Selections, which are excerpts from current college textbooks and a variety of sources, enable the student to further develop the background knowledge and vocabulary necessary to effectively read college-level material. The course also addresses work-related literacies such as creative and critical thinking, following written and oral instructions, collaboration, and communication skills. Course is graded on a pass/no pass basis.
The course is non-transferable.
Course Level: Postsecondary Remedial

## Course Learning Outcomes:

- CLO\#1: Use reading skills and strategies to comprehend a variety of textual materials in academic, work, community, and family settings. (ILO: Communication)
- CLO\#2: Develop and increase vocabulary and analytical skills in college course work.


## RD 115 - Speedreading for College

## 3 Credit(s)

Prerequisite(s): RD 90 or WR 91 or designated placement.

Course Description: Teaches an effective speedreading process. The goal is for students to improve reading rate, vocabulary and comprehension. It also develops skills needed to become a more intelligent reader and a more accomplished college level student. These skills include efficient reading habits such as speed studying and speed researching; recognition of writing structures of fiction and various types of nonfiction; and inferential and critical reading.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Define and demonstrate knowledge of the speed-reading process.
- CLO\#2: Improve college level reading rate while improving comprehension. (ILO: Communication)


## RD 116 - College Vocabulary

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Adds significantly to students' reading, writing, and speaking vocabularies, fosters an interest in words, and offers strategies for vocabulary development throughout life. This class also provides rules and techniques to help students strengthen their spelling abilities. Students will study word elements that hold the key to understanding English words. The vocabulary presented in this class will be practical, contextual, and relevant for college students, as well as their chosen career paths. Attention is given to application of spelling and vocabulary to college, personal success, and future employment.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop strategies for continuous vocabulary development.
- CLO\#2: Analyze appropriate word choices, synonym replacements, and strategies for identifying word meanings in context. (ILO: Communication)


## RD 120 - Critical Reading and Thinking

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90) or designated placement.

Course Description: Develops a student's ability to think logically, solve problems, identify values, and understand various reasoning processes using a variety of sources. Students improve the quality of their reading and thinking by applying elements of reasoning and intellectual standards. In this skill-building course, students will critically evaluate complex issues from a variety of sources and develop lifelong critical thinking, reading and problem-solving skills.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply critical, creative thinking and reading skills to solve complex problems related to personal, social economic and legal issues. (ILO: Critical Thinking)
- CLO\#2: Identify and assess the impact/influence of underlying points of view on thinking process.
- CLO\#3: Identify and examine how culturally-based perceptions, behaviors and policies influence our thinking.
- CLO\#4: Apply logic and analytical skills to foster personal growth and better appreciate the diverse social world in which we live.


## REL 201 - World Religions

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Surveys major religions of the world, comparing histories, differences, and similarities. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree (AAOT).

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe other ways of viewing "reality" and explain the degree to which these world views are culturally derived. (ILO: Communication)
- CLO\#2: Translate ideas from one culture into existing or potential applications in our own primarily Judeo-Christian path.
- CLO\#3: Explain specific terms from each tradition, particularly those which have found their way into our culture.
- CLO\#4: Explain the most essential ideas from each tradition.


## REL 243 - Nature, Religion and Ecology

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Explores how different religious traditions and the cultures influenced by them view nature and the place of humankind within the natural environment. Native, Asian, and Western traditions are examined, as are contemporary eco-spiritual thinkers and movements. Class discussion for the students to apply the material in current social and personal contexts will be an integral part of the course.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe other ways of viewing ecological "reality" and explain the degree to which these world views are culturally derived. (ILO: Communication)
- CLO\#2: Translate ideas from one culture into existing or potential applications in our own primarily Judeo-Christian path.
- CLO\#3: Explain the relation of religions to other academic subjects such as art, science, history, and literature.
- CLO\#4: Explain the most essential ideas from each tradition.
- CLO\#5: Determine which religious concepts and practices are particularly well suited to peoples of certain climatic and geographical situations.


## SOC 199 - Special Studies: Sociology

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending on subject offerings.
Course Description: Selected topics of study in sociology are offered on demand through workshops, seminars, lecture, lab, and/or independent study format. This course is designed to:

- Provide students with opportunities to explore in greater depth specific topics in the field of sociology which are presented in the introductory sociology courses.
- Provide other RCC departments with a variety of subject offerings designed to address problems, issues and concerns which are unique to their specific discipline.
- Provide flexibility in meeting elective sociology credits by allowing and encouraging students to research areas of sociology not currently taught in the sociology curriculum.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Individual course outcomes and ILOs will be developed at the time the proposed class is designed.


## SOC 204 - Introduction to Sociology

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Examines the social contexts in which all human behaviors occur and the social forces that impact individuals. Surveys theories and sociological topics including culture, groups, socialization and deviance. Emphasis is on applying the sociological perspective, the social construction of reality and the institutionalized stratification of U.S. society by gender, race, class and sexuality. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Critically evaluate the difference between personal opinions and sociological explanations which are based on scientific research.
- CLO\#2: Identify and demonstrate comprehension of sociological theories and/or theorists and apply them to specific social issues.
- CLO\#3: Analyze how social forces, including socialization, social institutions and social stratification based on race, class and gender impact the choices and life chances of individuals. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#4: Demonstrate an application of the sociological imagination, utilizing sociological concepts.


## SOC 205 - American Society

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Examines the organization of various American social institutions such as family, education, religion, politics, health care, criminal justice, media and economics, and analyzes distinctive features and how each are changing. Each social institution is examined in relation to how social class, gender and racial inequalities manifest, and how inequalities are perpetuated. Social change and social movements are also studied. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Critically evaluate the difference between personal opinions and sociological explanations which are based on empirical evidence.
- CLO\#2: Analyze how social institutions and social stratification based on race, class, and gender, impact the choices and life chances of individuals. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Identify and analyze social change in social institutions such as family, religion, politics, government, economics and education.
- CLO\#4: Apply the sociological perspective to critically evaluate the impact of social forces and culture on individuals.


## SOC 211 - Social Deviance and Social Control

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Recommended Prerequisite(s): SOC 204
Course Description: Examines deviance and social control from a sociological perspective, demonstrating that deviance is relative to cultural norms. Includes how deviant identities and subcultures are formed, and types of deviance that have useful functions in society. Could include topics such as crime and punishment, white-collar crime, family violence, sexual and gender variance, drug subcultures, cults and social activism leading to positive social change.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply a sociological perspective to understanding deviance, including understanding the relativity of deviance to cultural norms and the crucial difference between explaining and excusing deviant behavior that is detrimental to society. (ILO: Critical Thinking)
- CLO\#2: Identify theories in the field of social deviance and control.
- CLO\#3: Explain and analyze the distinction between deviant acts and deviant identity (master status).
- CLO\#4: Explain trends in crime rates and solutions to problems of crime and violence.
- CLO\#5: Identify and explain types of deviance that have a positive impact on society.


## SOC 213 - Race and Ethnicity in the U.S.

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: A sociological examination of the various social, political, historical, economic and legal forces affecting diverse racial and ethnic groups in the U.S. This includes an analysis of American history, families, housing, education, employment and immigration patterns and racial and ethnic interactions. Includes a focus on the intersection of race, gender and social class and on social movements that have worked to counter inequalities. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and apply sociological concepts used to describe race, ethnicity and racism, including settler colonialism.
- CLO\#2: Employ sociological explanations, based on empirical evidence, for racial patterns.
- CLO\#3: Analyze the impact of historical precedents on racial and ethnic groups and Indigenous nations today.
- CLO\#4: Identify key racial and ethnic issues and current social movements in the contemporary United States.
- CLO\#5: Analyze how systemic racism and ethnocentrism impact the life chances of individuals. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## SOC 218 - Sociology of Gender

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Introduces sociological perspectives on gender. Central themes include the social construction of gender, socialization, changes and continuities in gender norms and identities, the body, globalization and the connections between gender, power and inequality. The course emphasizes the ways in which gender intersects with race, social class and sexual orientation. The focus is primarily on U.S. and Western societies, with some cross-cultural material. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply a sociological imagination to an understanding of gender as it relates to individual lives and societal contexts.
- CLO\#2: Explain how gendered behavior, identities and bodies are socially constructed.
- CLO\#3: Explain how social institutions and globalization are gendered Including how institutionalized inequalities that affect cisgender and transgender people.
- CLO\#4: Demonstrate the ability to apply intersectionality in the study of gender. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## SOC 221 - Juvenile Delinquency

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: This course presents a philosophical, historical, and practical survey of juvenile justice administration in the United States. In the context of an interdisciplinary framework, theories, factors, and characteristics of delinquency will be presented and treatment and delinquency prevention programs will be surveyed. Course is cross-listed with CJ 201.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Describe concepts, structures, and characteristics of the juvenile justice system and its components. (ILO: Communication)
- CLO\#2: Identify and utilize key sources of information useful in studying the juvenile justice field.
- CLO\#3: Debate current issues associated with the administration of juvenile justice.
- CLO\#4: Describe or define distinctions between the juvenile and adult justice system and know the roles of police, courts, and corrections in responding to and preventing delinquency. (ILO: Communication)
- CLO\#5: Express the relationship of social institutions to delinquency.
- CLO\#6: Establish the relationship between theories of delinquency causation and programs and policy developed to prevent delinquency.
- CLO\#7: Explain historical and philosophical influences on the development of juvenile justice administration in the United States.
- CLO\#8: Recognize the importance of integrating social, education, civic, religious, and legal resources in an attempt to prevent criminality among youth.
- CLO\#9: Examine the basic values that are the foundation of the juvenile justice system and appreciate how changing values in society influence the justice system's response to juvenile crime.
- CLO\#10: Research applications of Oregon Revised Statutes that apply to delinquent behavior and punishment of youths.
- CLO\#11: Explain the organizational, structural and networking attributes among Oregon governmental and private sector correctional interventions.


## SOC 225 - Social Problems and Solutions

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Introduces students to various social problems in the U.S. from a sociological and global perspective. Social problems covered may include social inequalities, war, climate change, disinformation, health issues, crime and deviance, affordable housing and poverty. A focus on solutions will include a study of effective public policies employed by societies around the world. Major theories of sociology are introduced and applied.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate comprehension of the sociological perspective on social problems and the ability to apply this perspective.
- CLO\#2: Identify current social problems in the U.S., empirical evidence on the scope of these problems and the social structural, institutional and cultural roots of these problems.
- CLO\#3: Demonstrate comprehension of major theories in sociology and the ability to apply them to the study of social problems and solutions.
- CLO\#4: Employ a cross-cultural and global perspective in comparing social problems and policy solutions. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## SOC 228 - Environment and Society

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Examines the relationship between societies and the environment including how cultural, social, economic and political forces have impacted the natural environment. Explores the causes and consequences of topics such as population growth, consumerism, climate change, pollution and environmental racism and classism. A focus will be placed on the study of social movements, cultures and public policies that advance sustainability, including Indigenous cultures.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify how political, economic and other social institutions affect the health of the environment and of humans.
- CLO\#2: Discuss the history and development of the ideologies that have led to environmental domination as well as to concern for the environment including Indigenous cultures. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#3: Identify how environmental issues affect social groups in varying ways, especially focusing on class, race, ethnicity and gender inequalities.
- CLO\#4: Identify which social and cultural contexts have been found to produce sustainable outcomes.


## SOC 230 - Introduction to Gerontology

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Introduces students to the field of gerontology and explores the relationships between the aging individual and society.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Discuss the advantages and disadvantages of longitudinal and cross-sectional methods of studying aging.
- CLO\#2: Describe biological changes that typically occur with aging.
- CLO\#3: Describe how gender and ethnicity affect health status in later life and how family roles can evolve. (ILO: Equity, Diversity, Inclusion and Global Consciousness)
- CLO\#4: Describe the major findings from research on personality development over the life span and discuss social theories of aging.
- CLO\#5: Describe how demographic, health, sociological, and technological changes will affect families and society in the future.


## SOC 235 - The Chicano/Latino Historical Experience

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.
Course Description: Examines the diversity that resides within the Chicano, Mexicano, Latino, Hispanic and Caribbean cultural experience in the Americas, beginning from pre-Columbian times to the present. Covers pre-Columbian heritage, Spanish colonization, American conquest in the Mexican-American War and the Spanish American War, the Mexicans' role in American labor, Bracero Program, and the Chicano Movement. The class will provide a framework for understanding the ways in which distinctive social and cultural patterns arose, bringing awareness of contemporary expressions of identity and their historical origins. Fulfills cultural literacy requirement within the Associate of Arts Oregon Transfer degree. Crosslisted with HST 259.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and discuss significant events that shaped the history of the Chicana/o and Latina/o experience in the U.S.
- CLO\#2: Evaluate the difference between personal opinions and sociological explanations through the use of scientific research and the sociological imagination. (ILO: Critical Thinking)
- CLO\#3: Examine the historical and social forces which create and define contemporary Latina/o social identity, including common stereotypes and misinformed conceptualizations found in both majority and minority cultures.
- CLO\#4: Illustrate acquired knowledge regarding the social histories and cultures of Chicana/o and Latina/o peoples, including the cultural foundation and traditions of Spain and the Americas, and their influence on the experiences of Chicana/o and Latina/o peoples as residents and citizens of the United States.


## SOC 237 - Communication, Relationships and Technology

## 4 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement.

Course Description: Introduces students to the personal and social perspectives of communicating through technology and focuses on the implications of computer-mediated communication. Current themes and theories focusing on the use of technology to communicate within relationships and to gain access to resources such as health care and education are introduced and applied. A variety of topics will be explored, including online relationships, social interactions, the workplace, web-based instruction, impression management, therapy and health care. Concepts such as ethics, confidentiality, accessibility, identity, trust, and global implications will be explored.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Explain and analyze communication processes utilized on the internet.
- CLO\#2: Describe current communication issues that are changing the way in which we live and interact with one another nationally and globally.
- CLO\#3: Identify critical research on CMC, current trends and issues and apply this research to what students are observing in their everyday lives.
- CLO\#4: Apply a cross-cultural and global perspective of the diversity of CMC contexts through the reading and critical analysis of CMC research, case studies, and popular accounts. (ILO: Equity, Diversity, Inclusion and Global Consciousness)


## SOC 243 - Drugs, Crime and Addiction

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Recommended Prerequisite(s): COMM 111 and WR 121Z
Course Description: This course will introduce students to the dynamics of drug and alcohol addiction, the social and legal issues of drug abuse, as well as examine the political considerations behind contemporary drug enforcement policy. It will also explore the historical origins of the illegal drug trade. Drugs, Crime, and Addiction is a college-level transfer course and is a core requirement for students majoring in Human Services. Course is cross-listed with CJ 243.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify and describe terms, concepts and related items used in the study of substance use, abuse, treatment, prevention and policy development. (ILO: Communication)
- CLO\#2: Utilize sources of information and research related to prevention, treatment, policy options and enforcement strategies related to substance abuse.
- CLO\#3: Debate positions on key issues in the continuing controversy over public substance abuse policy in the United States. (ILO: Critical Thinking)
- CLO\#4: Explain patterns of substance abuse in relation to individuals' life cycle to include elements of each phase or stage of abuse.
- CLO\#5: Describe how body organs, tissues, and systems are impacted by drug use and abuse/addiction.
- CLO\#6: Evaluate primary and secondary approaches to substance abuse prevention as viewed in the context of strategies applied by social institutions, the criminal courts, and in various correctional interventions.
- CLO\#7: Outline the historical, social, economic, and policy developments along with issues associated with the abuse of alcohol and other substances in the United States.
- CLO\#8: Delineate the social and economic contexts, and organization of systems behind the worldwide distribution of controlled substances.
- CLO\#9: Outline key provisions of federal and state controlled substances legislation, including regulatory provisions, used in controlling the cultivation, manufacture or distribution of abused substance.
- CLO\#10: Apply knowledge and understanding about the criminal justice system's response to substance use, abuse, and related problems including investigative strategies and policies.
- CLO\#11: Analyze pharmacological aspects of drug use from ingestion to secretion.
- CLO\#12: Depict resources and include description of principles and practices along with risk and protective factors for the prevention, treatment and response to substance abuse problem in a community.


## SOC 244 - Introduction to Criminology

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: Offers an interdisciplinary perspective of crime and criminal behavior in relation to the criminal justice system. Theoretical approaches to explaining crime, criminal statistics, typologies, and victimology will be assessed. The influence of crime theory on public policy will be explored. Course is cross-listed with CJ 200.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Identify offender characteristics-including race, age, socioeconomic status- associated with criminal behaviors. (ILO: Communication)
- CLO\#2: Explain criminogenic conditions.
- CLO\#3: Outline major theories on crime causation including biological, psychological, and sociological explanations of criminal behavior.
- CLO\#4: Analyze key considerations in a plan to address a particular crime problem based on a specific theory of crime or based on a crime typology. (ILO: Critical Thinking)
- CLO\#5: Compare and contrast the characteristics of, and theories of crime associated with, classical and positive schools of criminological thought.
- CLO\#6: Analyze the impact of crime on society and advocate policy orientations that guide the public's response to the crime problem.
- CLO\#7: Assess basic concepts and theory applications associated with the branch of criminology known as victimology.
- CLO\#8: Apply basic statistical formulas and crime reporting techniques used in the study of crime.
- CLO\#9: Recognize the complex nature of crime and apply research used in the development of solutions for the prevention and control of crime.
- CLO\#10: Evaluate the value of multi-disciplinary approaches to responding to crime along with the importance of working with multiple interest groups to control crime in a community.


## SOC 280 - Cooperative Work Experience / Sociology

## Var. (1-3) Credit(s)

Prerequisite(s): Prior arrangements with CWE Instructor or Department Chair.
Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their program. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a career-related experience for students working for an approved employer. As a capstone course, students should complete this course within the last two terms of their certificate or degree.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to successfully complete the interview process.
- CLO\#2: Demonstrate the importance of completing forms accurately and meeting deadlines. (ILO: Communication)
- CLO\#3: Demonstrate the importance of an acceptable work ethic as described in the CWE Work Ethic and Professional Presence Guidelines and student's learning objectives.
- CLO\#4: Demonstrate good work performance (student's learning objectives).
- CLO\#5: Demonstrate a professional presence as described in the CWE Work Ethic and Professional Presence Guidelines while on the job.
- CLO\#6: Apply program knowledge, theories, principles, methods and technology. Gain new knowledge, skills, and experience while on the job.
- CLO\#7: Make contacts which will help in obtaining employment.


## SPAN 101 - First Year Spanish I

## 4 Credit(s)

Prerequisite(s): BT 114 or WR 115 or designated placement.
Course Description: Introduces basic skills in Spanish in speaking, writing, reading, and aural comprehension to the Novice Mid level. Special attention is given to developing cultural awareness. The sequence enables students to reach at least Novice High proficiency as defined by the guidelines of the American Council on the Teaching of Foreign Languages (ACTFL). SPAN101, SPAN 102, SPAN 103 must be taken in sequence. Courses are not suitable for heritage speakers.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly about basic life skills topics with those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior.
- CLO\#3: Use learned vocabulary words, phrases, and expressions to describe and express important ideas on topics covered in the week-by-week outline attached here, both orally and in writing. (ILO: Communication)
- CLO\#4: Comprehend and explain important ideas and some details from simple authentic audio and video sources.
- CLO\#5: Explain important ideas and basic details in face-to-face interactions when speech is limited and basic.


## SPAN 102 - First Year Spanish II

## 4 Credit(s)

Prerequisite(s): SPAN 101, and BT 113 or WR 115 or designated placement. Spanish language experience.

## Corequisite(s): WR $121 Z$

Course Description: Introduces basic skills in Spanish in speaking, writing, reading, and aural comprehension to the Novice High level. Special attention is given to developing cultural awareness. The
sequence enables students to reach at least Novice High proficiency as defined by the guidelines of the American Council on the Teaching of Foreign Languages (ACTFL). SPAN 101, SPAN102, SPAN 103 must be taken in sequence. Courses are not suitable for heritage speakers.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly about basic life skills topics with those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior.
- CLO\#3: Use learned vocabulary words, phrases, and expressions to describe and express important ideas on topics covered in the week-by-week outline attached here, both orally and in writing. (ILO: Communication)
- CLO\#4: Comprehend and explain important ideas and basic details from simple authentic audio and video sources.
- CLO\#5: Explain important ideas and some details in face-to-face interactions when speech is limited and basic.


## SPAN 103 - First Year Spanish III

## 4 Credit(s)

Prerequisite(s): WR 121 Z or designated placement, and SPAN 102 or equivalent Spanish language experience.

Course Description: Introduces basic skills in Spanish in speaking, writing, reading, and aural comprehension to the Intermediate Low level. Special attention is given to developing cultural awareness. The sequence enables students to reach at least Novice High proficiency as defined by the guidelines of the American Council on the Teaching of Foreign Languages (ACTFL). SPAN 101, SPAN 102, SPAN103 must be taken in sequence. Courses are not suitable for heritage speakers.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly about basic life skills topics with those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior.
- CLO\#3: Use learned vocabulary words, phrases, and expressions to describe and express important ideas on topics covered in the week-by-week outline attached here, both orally and in writing. (ILO: Communication)
- CLO\#4: Comprehend and explain important ideas and basic details from simple authentic audio and video sources.
- CLO\#5: Explain important ideas and some details in face-to-face interactions when speech is limited and basic.


## SPAN 201 - Second Year Spanish I

## 4 Credit(s)

Prerequisite(s): BT 114 or WR 115 or designated placement, and SPAN 103 or two years of high school Spanish or equivalent Spanish language experience.

## Corequisite(s): WR $121 Z$

Course Description: This second-year sequence reinforces, synthesizes, and builds on the basic skills acquired in first-year Spanish in speaking, writing, reading, and listening comprehension to the Intermediate Mid level. Special attention is given to developing cultural awareness. Students are required to communicate in Spanish. Materials include literary and cultural texts, audio exercises, films, music, and contextualized exercises in grammar. The sequence enables students to read at least Intermediate High proficiency as defined by the guidelines of the ACTFL (American Council on the Teaching of Foreign Languages).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly in Spanish about basic topics to those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior including greetings, introductions, leavetakings, and formal vs informal styles of address.
- CLO\#3: Use learned vocabulary words, phrases, and expressions on a variety of familiar topics, and reiterate input in their own sentences.
- CLO\#4: Express themselves orally and in writing, across a range of tenses and moods including present, preterit, imperfect, future, imperative, and some basic subjunctive, although with some error and reformulations. (ILO: Communication)
- CLO\#5: Comprehend and explain important ideas and the details from authentic audio and video sources.


## SPAN 202 - Second Year Spanish II

## 4 Credit(s)

Prerequisite(s): WR 121 Z or designated placement, and SPAN 201 or equivalent Spanish language experience.

Course Description: This second-year sequence reinforces, synthesizes, and builds on the basic skills acquired in first-year Spanish in speaking, writing, reading, and listening comprehension to the Intermediate High level. Special attention is given to developing cultural awareness. Students are required to communicate in Spanish. Materials include literary and cultural texts, audio exercises, films, music, and contextualized exercises in grammar. The sequence enables students to read at least Intermediate High proficiency as defined by the guidelines of the ACTFL (American Council on the Teaching of Foreign Languages).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly in Spanish about basic topics to those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior including greetings, introductions, leavetakings, and formal vs. informal styles of address.
- CLO\#3: Use learned vocabulary words, phrases, and expressions on a variety of familiar topics, and reiterate input in their own sentences.
- CLO\#4: Express themselves orally and in writing, across a range of tenses and moods including present, preterite, imperfect, future, imperative, and some basic subjunctive, although with some error and reformulations. (ILO: Communication)
- CLO\#5: Comprehend and explain important ideas and the details from authentic audio and video sources.


## SPAN 203 - Second Year Spanish III

## 4 Credit(s)

Prerequisite(s): WR $121 Z$ or designated placement, and SPAN 202 or equivalent Spanish language experience.

Course Description: This second-year sequence reinforces, synthesizes, and builds on the basic skills acquired in first-year Spanish in speaking, writing, reading, and listening comprehension to the Advanced Low level. Special attention is given to developing cultural awareness. Students are required to communicate in Spanish. Materials include literary and cultural texts, audio exercises, films, music, and contextualized exercises in grammar. The sequence enables students to read at least Intermediate High proficiency as defined by the guidelines of the ACTFL (American Council on the Teaching of Foreign Languages).

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Speak clearly in Spanish about basic topics to those accustomed to dealing with nonnative speakers.
- CLO\#2: Demonstrate culturally appropriate behavior including greetings, introductions, leavetakings, and formal vs. informal styles of address.
- CLO\#3: Use learned vocabulary words, phrases, and expressions on a variety of familiar topics, and reiterate input in their own sentences.
- CLO\#4: Express themselves orally and in writing, across a range of tenses and moods including present, preterite, imperfect, future, imperative, and some basic subjunctive, although with some error and reformulations. (ILO: Communication)
- CLO\#5: Comprehend and explain important ideas and the details from authentic audio and video sources.


## SRV 101 - Service Learning

## Var. (1-6) Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Develops a personal understanding of civic engagement via direct service to a community-based organization and through critical reflection. Students may propose service projects of their own design or may choose from a list of available projects. Course emphasis is on participating in activities that address identified community needs while developing academic skills and self-awareness. May be repeated for a maximum of 6 credits.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Describe the culture (attitudes, behaviors and values) of a community organization.
- CLO\#2: Demonstrate capacity to raise essential questions in order to facilitate project completion. (ILO: Critical Thinking)
- CLO\#3: Collaborate productively on project activities with community members and/or organizational staff. (ILO: Communication)
- CLO\#4: Demonstrate the ability to meet deadlines and complete planned actions.
- CLO\#5: Identify personal safety strategies and follow established safety guidelines.


## ST 101-Occupational Skills Training I

## Var. Credit(s)

Prerequisite(s): Must be enrolled in the Occupational Skills Training program. RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), MTH 20 or designated placement, and permission of Instructor.

Course Description: Provides work-related study and learning in selected occupational environments.
Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Document workplace experience and explain personal professional growth plan.
- CLO\#2: Demonstrate work ethics at a level of competence that meets or exceeds both industry and workplace culture standards.
- CLO\#3: Develop essential communication skills of training occupation. (ILO: Communication)


## ST 109 - Skills Training Seminar

## 1 Credit(s)

Prerequisite(s): Must be enrolled in the Occupational Skills Training program. RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), and permission of Instructor.

Course Description: Provides students with the opportunity to learn strategies for workplace success as a cohort. Topics related to experiential learning are addressed, including: techniques for self-monitoring and tracking progress, sustaining positive relationships with co-workers and supervisors, working with mentors, and handling workplace conflict. Presents information regarding the role played by non-verbal communication, written and unwritten workplace policies, and positive work ethics. Provides students with basic strategies for career advancement.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and explain strategies to be a successful employee.
- CLO\#2: Identify and practice crucial communication tools utilized in the workplace. (ILO: Communication)
- CLO\#3: Create an effective resume.


## ST 199 - Skills Training Workshop

## 1 Credit(s)

Prerequisite(s): Must be enrolled in the Occupational Skills Training program. RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), and permission of Instructor.

Course Description: Offered in a number of formats dependent upon the student's area of interest.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Variable.


## ST 199L - Skills Training Workshop Lab

## 1 Credit(s)

Prerequisite(s): Must be enrolled in the Occupational Skills Training program. RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), and permission of Instructor.

Course Description: Offered in a number of formats dependent upon the student's area of interest.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Variable.


## ST 201 - Occupational Skills Training II

## Var. Credit(s)

Prerequisite(s): Must be enrolled in the Occupational Skills Training program. Permission of faculty advisor.
Course Description: Provides advanced work-related study and learning in selected occupational environments.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate work ethics at a level of competence that meets or exceeds both industry and workplace culture standards.
- CLO\#2: Demonstrate and perform skills outlined in student's workplan.
- CLO\#3: Identify and explain workplace strengths and weaknesses and areas of growth. (ILO: Communication)


## TA 141 - Fundamentals of Acting I

## 4 Credit(s)

Course Description: Introduces methods and techniques of acting as an art form. Scene work is included and performance is a part of advanced classes.

Course Level: Lower Division Collegiate
Course Learning Outcomes:

- CLO\#1: Being seen and being heard: display competence in stage movement and vocal work, resulting in the ability of the audience to see, hear, understand, and resonate with the artist. (ILO: Communication)
- CLO\#2: Preparing for a role: make the scene believable by memorization, imagination, listening, commitment, and relationship with other characters in the scene.
- CLO\#3: Active Listening: maintain focus and connection in a scene, not only with themselves but their scene partner.
- CLO\#4: Discipline: build trust as an ensemble by being on time, maintaining focus, and collaborating fully and responsibly in the creative process.


## TA 142 - Fundamentals of Acting II

## 4 Credit(s)

Prerequisite(s): TA 141
Course Description: Builds on methods and techniques of acting as an art form introduced in TA 141.
Scene work is included and performance is part of the class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Being seen and being heard: display competence in stage movement and vocal work, resulting in the ability of the audience to see, hear, understand, and resonate with the artist. (ILO: Communication)
- CLO\#2: Preparing for a role: make the scene believable by memorization, imagination, listening, commitment, and relationship with other characters in the scene.
- CLO\#3: Active Listening: maintain focus and connection in a scene, not only with themselves but their scene partner.
- CLO\#4: Discipline: build trust as an ensemble by being on time, maintaining focus, and collaborating fully and responsibly in the creative process.


## TA 143 - Fundamentals of Acting III

## 4 Credit(s)

Prerequisite(s): TA 142
Course Description: Continues developing methods and techniques of acting, growing towards a deeper understanding and proficiency in the art form. Scene work is included and performance is part of the class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Being seen and being heard: display competence in stage movement and vocal work, resulting in the ability of the audience to see, hear, understand, and resonate with the artist. (ILO: Communication)
- CLO\#2: Preparing for a role: make the scene believable by memorization, imagination, listening, commitment, and relationship with other characters in the scene.
- CLO\#3: Active Listening: maintain focus and connection in a scene, not only with themselves but their scene partner.
- CLO\#4: Discipline: build trust as an ensemble by being on time, maintaining focus, and collaborating fully and responsibly in the creative process.


## TA 144 - Improvisational Theater I

## 4 Credit(s)

Course Description: Introduces methods and techniques of the art of improvisation through exercises, theater games, and impromptu scenes. Performance is part of the class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply the concept of "yes" through improvisation, moving the scene forward by giving and accepting "bold offers."
- CLO\#2: Describe improvisational concepts and terms such as saying yes, making and accepting offers, defining, blocking, supporting your scene partner, and staying good-natured, and incorporate these concepts into a performance. (ILO: Communication)
- CLO\#3: Display interpersonal and listening skills, and identify how interactive a scene is, how connected the actors are, and how well actors follow director's instructions.
- CLO\#4: Build trust as an ensemble by being on time, maintaining focus, and collaborating fully and responsibly in the creative process.


## TA 145 - Improvisational Theater II

## 4 Credit(s)

## Prerequisite(s): TA 144

Course Description: Builds on methods and techniques of the art of improvisation introduced in TA 144 through exercises, theater games, and impromptu scenes. Performance is part of the class.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply the concept of "yes" through improvisation, moving the scene forward by giving and accepting "bold offers."
- CLO\#2: Describe improvisational concepts and terms such as saying yes, making and accepting offers, defining, blocking, supporting your scene partner, and staying good-natured, and incorporate these concepts into a performance. (ILO: Communication)
- CLO\#3: Display interpersonal and listening skills, and identify how interactive a scene is, how connected the actors are, and how well actors follow director's instructions.
- CLO\#4: Build trust as an ensemble by being on time, maintaining focus, and collaborating fully and responsibly in the creative process.


## TA 146 - Improvisational Theater III

## 4 Credit(s)

Prerequisite(s): TA 145

Course Description: Continues developing methods and techniques of improvisation, growing towards a deeper understanding and proficiency in the art of improvisation through exercises, theater games, and impromptu scenes. Performance is part of the class.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply the concept of "yes" through improvisation, moving the scene forward by giving and accepting "bold offers."
- CLO\#2: Describe improvisational concepts and terms such as saying yes, making and accepting offers, defining, blocking, supporting your scene partner, and staying good-natured, and incorporate these concepts into a performance. (ILO: Communication)
- CLO\#3: Display interpersonal and listening skills, and identify how interactive a scene is, how connected the actors are, and how well actors follow director's instructions.
- CLO\#4: Build trust as an ensemble by being on time, maintaining focus, and collaborating fully and responsibly in the creative process.


## TA 153 - Theater Rehearsal and Performance

## 4 Credit(s)

Course Description: TA153 provides experience in rehearsing and performing plays as a member of the design, technical crew, or acting ensemble. Students will be evaluated on their artistic or energetic merit, their level of understanding of the work they are doing as it relates to theater arts, and their increasing insights into the collaborative process of producing plays.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate commitment by showing up on time to rehearsals and performances, coming prepared with scripts written and/or lines learned, and participating with enthusiasm. (ILO: Communication)
- CLO\#2: Demonstrate attentive listening, connecting with the director and other actors.
- CLO\#3: Demonstrate the willingness to work on writing and rewriting monologues and scenes; to show improvement in vocal projection and articulation; and to display energy and enthusiasm in performance.


## TA 190 - Theater Practicum

## Var. (1-3) Credit(s)

Course Description: TA190 allows students to receive credit for working on college theater productions. Students will be required to participate in a formal theater production in one or more of the following areas: acting, stage or house management, technical theater, directing, marketing, costume and/or makeup. Participation during the theater event is required for credit. Course may be repeated for up to 6 credits.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Demonstrate commitment by showing up on time to rehearsals and performances, displaying a strong work ethic, and showing a commitment to the production.
- CLO\#2: Demonstrate attentive listening, connecting with the director, actors, and other participants. (ILO: Communication)


## TA 199-Special Studies: Theater Arts

Var. (1-3) Credit(s)
Prerequisite(s): Varies by course.
Course Description: Presents selected topics of study in theater arts, including theater for the deaf, communication through drama, children's theater, and directing.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Varies based on course focus. (ILO: Varies based on course focus.)


## TA 280 - Cooperative Work Experience/Theater Arts

## 3 Credit(s)

Prerequisite(s): Cooperative education is open to all students who have completed at least one-half of the required classes for their program of study and have the recommendation of the Department Cooperative Education advisor.

Course Description: Cooperative education is a supervised program of on-the-job training for college credit in a Theater-related area. Students are placed in a related industry, business, agency or organization which has been approved by the College as having the interest, personnel, and resources to serve as a training center. The goal of cooperative education is to provide a learning experience which enriches and strengthens the student's education, personal development, and vocational preparation. It joins educators and employers in developing the community's greatest asset-its human resources.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Gain college credit for a valid learning experience to fulfill degree or certificate requirements.
- CLO\#2: Apply classroom theory to real world job experience. (ILO: Critical Thinking)
- CLO\#3: Apply skills, gain experience, and make contacts which will help in obtaining a job after graduation.


## WLD 101 - Welding Fundamentals I

## 3 Credit(s)

Course Description: Introduces basic theory of oxy/fuel cutting/welding, Shielded Metal Arc Welding, and Gas Metal Arc Welding, with emphasis on safety. Includes basic skill development in preparation of metal, welding, and cutting.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform all tasks in accordance with all program and industry standards
- CLO\#2: Operate welding machine setup and adjustment. Identify electrodes using AWS system. (ILO: Critical Thinking)
- CLO\#3: Independently assemble, set up and operate oxy fuel welding system. Produce industry quality welds in the flat and horizontal positions. Weld configurations to include but lap and T welds.
- CLO\#4: Safely and independently set up, light and adjust an oxy fuel cutting system. Produce industry quality straight and circular cuts on varying thicknesses of plate.
- CLO\#5: Produce sound welds using E6010/11 in the flat and horizontal position. Configurations to include lap, square groove butt and multiple pass $T$ weld.
- CLO\#6: Demonstrate safe operation practices of bandsaws, pedestal and angle grinders.


## WLD 102 - Welding Fundamentals II

## 3 Credit(s)

Prerequisite(s): WLD 101
Course Description: Continues study in oxy/fuel cutting/welding, and Shielded Metal Arc Welding, with emphasis on safety.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform all tasks in accordance with all program and industry standards.
- CLO\#2: Independently demonstrate proper welding machine setup and adjustment. Identify electrodes using AWS system. (ILO: Critical Thinking)
- CLO\#3: Produce industry quality welds using E 7018 in the flat, horizontal positions and vertical positions. Welds will include beads, lap, 3 and 6 pass $T$ weld.
- CLO\#4: Safely and independently set up and adjust a plasma cutting system. Produce industry quality straight and circular cuts on varying thicknesses of plate.
- CLO\#5: Set up, adjust and perform air carbon arc gouging on carbon steel.
- CLO\#6: Fabricate a vessel to drawing specifications. The weldment will have a performance indicator or destructive test as the scoring guideline.


## WLD 104 - Blueprint Reading - Mechanical

## 3 Credit(s)

Prerequisite(s): MTH 20 or designated placement, and RD 90 or WR 91 or designated placement.

## Recommended Prerequisite(s): MTH 63

Course Description: Introduces mechanical blueprints using multi-view projection, sectional views, auxiliary views, title blocks, and drawing formats which are the basis for all graphical communication in the manufacturing industry today. Knowledge of the techniques used on blueprints is necessary in the industry whenever descriptions of size, shape, and arrangement are used to produce, service, or sell a product. This course also introduces students to blueprint and drawing techniques which will be built upon with additional modules in the program. Dual numbered as MET 105.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of words commonly used in drawings and identify their definitions as well as their abbreviations on standard industry blueprints.
- CLO\#2: Demonstrate ability to derive missing linear and/or angular dimensional values on an industry standard blueprint.
- CLO\#3: Demonstrate competency of multi-view drawing techniques used on blueprints in industry where descriptions of size, shape, and arrangement are used to produce, service, or sell a product. (ILO: Critical Thinking)
- CLO\#4: Demonstrate a working knowledge of sectional and auxiliary views, which are the two common methods used to show hidden features, and/or surfaces that are at angles other than 90 degrees.
- CLO\#5: Demonstrate a working knowledge of various standard-drawing title block notes and drawing formats used in industry.
- CLO\#6: Identify structural shapes, other views: i.e. conventional brakes, auxiliary, enlarged, alternate, developed and revolved views.
- CLO\#7: Identify and use welding symbols and abbreviations for basic joints.


## WLD 111 - Technology of Industrial Welding I

## 6 Credit(s)

Prerequisite(s): Permission of Instructor.

Course Description: Covers the fundamentals of welding as required by the metal fabrication industry.
Provides extensive hands-on training in shielded metal arc welding (SMAW), oxygen/acetylene, and plasma cutting of ferrous metals. Also develops skills needed for American Welding Society-based (AWS) certifications and employment in the welding/fabrication industry.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform all tasks in accordance with all program and industry standards.
- CLO\#2: Properly set up welding machine and adjust according to WPS. (ILO: Critical Thinking)
- CLO\#3: Demonstrate welding process operations for cutting and joining ferrous metals.
- CLO\#4: Produce sound welds in the five basic joint configurations.
- CLO\#5: Utilizes the tools and skills necessary for basic welding shop fabrication.


## WLD 111D - Technology of Industrial Welding for Diesel

## 6 Credit(s)

Prerequisite(s): Must be currently enrolled in Diesel Technology Program.
Course Description: Covers the fundamentals of welding required by the metal fabrication industry. Diesel students will be introduced to the principles of electric and gas welding and cutting.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform all tasks in accordance with all program and industry standards.
- CLO\#2: Properly set up a welding power source for SMAW in accordance to Weld Procedure Specification. (ILO: Critical Thinking)
- CLO\#3: Demonstrate welding process operations for cutting and joining ferrous metals.
- CLO\#4: Produce sound welds in the five basic joint configurations.
- CLO\#5: Identify steps necessary to repair breaks and cracks in mild steel components.
- CLO\#6: Demonstrate proper machine set up for Gas Metal Arc Welding. (GMAW)


## WLD 111M - Technology of Industrial Welding for Manufacturing

## 6 Credit(s)

Prerequisite(s): Must be currently enrolled in Manufacturing Technology Program.

Course Description: Covers the fundamentals of welding required by the metal fabrication industry. Manufacturing students will be introduced to the principles of electric and gas welding and cutting.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform all tasks in accordance with all program and industry standards.
- CLO\#2: Properly set up SMAW power source according to applicable Weld Procedure Specifications. (ILO: Critical Thinking)
- CLO\#3: Demonstrate welding process operations for cutting and joining ferrous metals.
- CLO\#4: Produce sound welds in the five basic joint configurations using GMAW.
- CLO\#6: Set up and operate Gas Tungsten Arc Welding equipment for use on carbon steel.


## WLD 112 - Technology of Industrial Welding II

## 6 Credit(s)

## Prerequisite(s): WLD 111

Course Description: Provides students with further instruction in Shielded Metal Arc Welding (SMAW) in the vertical and overhead positions. Students will also be introduced to Gas Metal Arc Welding (GMAW) processes on mild steel. Fitting joints to AWS D1.1 specifications will also be introduced.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstrates personal adoption of the "culture of safety" in the classroom and in the welding lab.
- CLO\#2: Fit up and produce acceptable welds in 3G vertical and 4G overhead on varying thicknesses of plate.
- CLO\#3: Perform back gouging and cutting using the Air Arc and PAC Processes.
- CLO\#4: Identify, set up and adjust basic components of a GMAW system for mild steel. (ILO: Critical Thinking)
- CLO\#5: Produce beads and basic weldments using GMAW on mild steel in the flat and horizontal positions.
- CLO\#6: Independently inspect, set-up and perform maintenance specific to the SMAW and GMAW welding power sources.


## WLD 113 - Technology of Industrial Welding III

## 6 Credit(s)

Prerequisite(s): WLD 112

Course Description: Allows students to work towards mastery of Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) on both ferrous and non-ferrous materials in all positions. OR-OSHA-based safety training and non-ferrous alloy identification complete the course.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstrates personal adoption of the "culture of safety" in the classroom and in the welding lab.
- CLO\#2: Independently set-up for GMAW operations on ferrous metals.
- CLO\#3: Use GMAW to make groove welds on low carbon steel.
- CLO\#4: Set up for FCAW operations on low carbon steel. (ILO: Critical Thinking)
- CLO\#5: Use FCAW to make fillet welds in flat and horizontal positions on low carbon steel.
- CLO\#6: Use FCAW to make groove welds in flat and horizontal positions on low carbon steel.


## WLD 121 - Fabrication and Repair Practices I

## 5 Credit(s)

Prerequisite(s): WLD 111
Course Description: As the first of a series of two fabrication and repair courses, students are given a fundamental overview of the various fabrication and repair practices used in the steel fabrication industry, and safety in welding and fabrication. Course is based on the American Welding Society Entry Level Requirements (AWS EG2.0 and AWS QC10) utilizing the Instructor's experience, in accordance with the American Welding Society AWS D1.1 (Structural Welding Code - Steel). Fit-up and alignment of parts to assemble various weldments and pipe joints and the basic procedures of planning, sketching, cost evaluation, ordering, layout, metal preparation, part fabrication, tack-up, and final welding will be introduced and applied. Shop math, distortion control, how to use squares, protractors, levels, clamps and string lines used in the fit-up process are also taught.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Perform all tasks in accordance with all program and industry standards.
- CLO\#2: Perform sound weldments on all five basic weld joints and in all positions.
- CLO\#3: Work cooperatively with others and contribute to group with ideas, suggestions, solutions and effort (team building).
- CLO\#4: Reference and utilize required texts to properly execute fabrication techniques. (ILO: Information Literacy)
- CLO\#5: Utilizes the tools and skills necessary for basic welding shop fabrication.


## WLD 122 - Fabrication and Repair Practices II

## 5 Credit(s)

Prerequisite(s): MET 101 and WLD 111

Course Description: The second of two fabrication and repair courses, builds on skills developed in WLD 121 and provides an overview of the various fabrication and repair practices used in the steel fabrication industry. Safety in welding and fabrication is emphasized. The course is based on the American Welding Society's entry-level requirements (AWS EG2.0 and AWS QC10) utilizing the instructor's experience, and in accordance with the American Welding Society AWS D1.1 Structural Welding Code - Steel. Students receive instruction in fit-up and alignment of parts to assemble various weldments and pipe joints, and the basic procedures of planning, sketching, cost evaluation, ordering, layout, metal preparation, part fabrication, tack-up, and final welding will be introduced and applied. Advanced shop math, distortion control, and how to use squares, protractors, levels, clamps and string lines used in the fit-up process are included.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate the ability to fabricate large and small weldments using advanced fabrication tools and the platen table.
- CLO\#2: Use advanced alignment and leveling methods as well as advanced part assembly and tack welding.
- CLO\#3: Fabricate an advanced welding project safely (individual or class) utilizing concepts to design, drawing, dimensioning, tolerance, materials lists, cut lists, squaring, lay-out, tacking, and welding sequence methods.
- CLO\#4: Use advanced tools/guides/manuals to properly set-up and maintain all welding/cutting machines for metal fabrication.
- CLO\#5: Determine acceptable weld size (by code) for various material thickness and joint configuration. (ILO: Critical Thinking)


## WLD 160 - American Welding Society Certification Seminar: Plate

## 1 Credit(s)

Prerequisite(s): WLD 112

Course Description: Covers the definition, application and interpretation of the American Welding Society (AWS) Structural Welding Code D1.1. Students will cut and assemble test weldments in accordance with AWS specifications using FCAW and SMAW processes. Inspection of completed weldments will be done by third party AWS Certified Weld inspector. If passed successfully, students will be awarded the AWS Unlimited 3 G and 4 G all position welding qualification.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and apply safe shop procedures required to function at an industry accepted level while performing welding processes associated with the SMAW welding procedure.
- CLO\#2: Use American Welding Society Code D1.1 as it applies to SMAW, GTAW and/ or FCAW on pipe. (ILO: Critical Thinking)
- CLO\#3: Perform qualification welds in the 3G and 4G positions on 1" A/36 mild steel plate.
- CLO\#4: Prepare weldments for guided bend testing.
- CLO\#5: Conduct, evaluate and successfully remediate weld specimen guided bend test resulting in certification.


## WLD 199 - Special Studies: Welding

## Var. (1-3) Credit(s)

Prerequisite(s): May vary depending on course subject offerings.
Course Description: Provides study for students in technical programs to areas linked to industry. State-of-the-art equipment is used for industry standard-level instruction.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate application of safety policies and procedures.
- CLO\#2: Independently apply fabrication and layout procedures.
- CLO\#3: Identify industry terminology, materials and processes specific to the subject. (ILO: Critical Thinking)
- CLO\#4: Produce industry quality components utilizing processes and procedures specified within by Instructor.


## WLD 211 - Technology of Industrial Welding IV

## 6 Credit(s)

## Prerequisite(s): WLD 113

Course Description: Covers the advanced techniques in welding mild steel, stainless steel, aluminum, and exotic metals using the flux cred arc welding (FCAW) and gas metal arc welding (GMAW) processes. Includes flux cored and solid wire with machine and spool guns. Also advances skills needed for American Welding Society certification and employment in the welding/fabrication industry.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "culture of safety" in the classroom and the welding lab.
- CLO\#2: Properly set up machines for GMAW operations on stainless steel and aluminum.
- CLO\#3: Properly set up machines for FCAW operations on mild steel, stainless steel and aluminum. (ILO: Critical Thinking)
- CLO\#4: Demonstrate knowledge of metal transfer and shielding gases, beading and puddling, and fabrication of weld joints, using the FCAW and GMAW processes.


## WLD 212-Technology of Industrial Welding V

## 6 Credit(s)

Prerequisite(s): WLD 111, WLD 112, WLD 113, WLD 211
Course Description: Covers advanced techniques in welding mild steel, stainless steel, aluminum, and
exotic metals using the Gas Tungsten Arc Welding (GTAW) process. Also advances skills needed for American Welding Society certification and employment in the welding/fabrication industry.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "culture of safety" in the classroom and the welding lab.
- CLO\#2: Properly set up machines for GTAW operations on mild steel, stainless steel and aluminum.
- CLO\#3: Demonstrate electrode and filler metal selection, shielding gases, beading and puddling, and fabrication of weld joints, using the GTAW process. (ILO: Critical Thinking)


## WLD 213 - Technology of Industrial Welding VI

## 6 Credit(s)

Prerequisite(s): WLD 212
Course Description: Focuses on welding large and small diameter, ferrous and non-ferrous pipe using the SMAW, GMAW, and GTAW welding processes. Includes pattern development, machine and manual oxyacetylene cutting, plasma cutting, layout, fit-up, inspection, and testing techniques. Also advances skills needed for American Welding Society (AWS) and American Society of Mechanical Engineers (ASME) certifications and employment in the welding/fabrication industry.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "Culture of Safety."
- CLO\#2: Fit weldments to industry standards using hand and machine beveling equipment.
- CLO\#3: Perform open root welds on pipe in the 2G, 5G, and 6G positions using SMAW. (ILO: Critical Thinking)
- CLO\#4: Produce open root welds on mild steel plate in the 3G and 4G using GMAW.
- CLO\#5: Produce open root weld on mild steel plate in the 3G and 4G using GTAW.
- CLO\#6: Perform open root welds on pipe in the 2G, 5G, and 6G using GTAW.


## WLD 220 - Machine Tool Maintenance and Repair

## 3 Credit(s)

Prerequisite(s): WLD 113, and BT 114 or WR 121 Z or designated placement, and MTH 60 or MTH 63 or designated placement.

Course Description: Focuses on troubleshooting problems commonly encountered in welding and fabricating equipment. Students will learn basic electrical principles and apply them to simple repair tasks on welding power sources. Removal and replacement of mechanical components on welding equipment and shop equipment (band saws, shears, drill presses, etc.) will round out the students' ability to function independently in the shop setting.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Explain the basic electrical concepts associated with welding power sources, include possible hazards encountered during troubleshooting and how to avoid them.
- CLO\#2: Troubleshoot and prescribe repair solution for power sources commonly used in Shielded Metal Arc Welding.
- CLO\#3: Troubleshoot and repair power sources commonly used in Gas Metal and Gas Tungsten welding equipment.
- CLO\#4: Demonstrate basic maintenance procedures on SMAW, GMAW and GTAW equipment including proper maintenance records for equipment. (ILO: Communication)
- CLO\#5: Identify and explain maintenance requirements of general shop fabrication equipment (band saw, drill press, angle grinders, sanders, shears and ironworkers etc.). Follow appropriate recording procedures.
- CLO\#6: Independently demonstrate basic maintenance procedures on engine driven welder/generator machines.


## WLD 221 - Welding Codes, Procedures and Inspections

## 3 Credit(s)

Prerequisite(s): BT 113 or WR 115 or designated placement, and MTH 20 or designated placement.
Course Description: Studies the differences between various welding codes e.g., American Welding Society D1.1 Structural Steel, ASME Section IX Power Piping, API Pipeline, and others. Focuses on welding procedure specification (WPS), procedure qualification record (PQR), and welder qualification record (WQR). Covers visual inspection, destructive, and non-destructive testing of welds in accordance with the American Welding Society D1.1 and D1.4 welding codes.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Recognize where AWS welding codes are required for welding application and select correct code to apply to the welding application.
- CLO\#2: Select and write appropriate WPS required for a specified weldment using the various welding codes.
- CLO\#3: Identify and evaluate relevant welder certifications.
- CLO\#4: Use AWS D1.1 Structural Steel Welding Code to accurately determine base metal and filler metal combinations. (ILO: Critical Thinking)
- CLO\#5: Use appropriate AWS codes and testing procedures to accurately inspect weldments.
- CLO\#6: Apply the appropriate destructive and non-destructive test methods on welds based on required strengths and anticipated weakness.


## WLD 250A - Selected Topics in Welding: FCAW

Var. (2-6) Credit(s)
Prerequisite(s): Student must be an Industrial Welding Technology major.
Course Description: Focuses on further development of skill in Flux Cored Arc Welding as identified by the student and instructor. An individualized plan will be developed to further the students' technical and practical application of self-shielded and/or gas shielded flux core welding in all positions on carbon steel.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "Culture of safety."
- CLO\#2: Create a plan to improve the identified skill set including: process details, WPS (if applicable), timeframe and practical assignment list. (ILO: Communication)
- CLO\#3: Produce industry quality weld samples according to student plan.


## WLD 250B - Selected Topics in Welding: GTAW

## Var. (2-6) Credit(s)

Prerequisite(s): Student must be an Industrial Welding Technology major.

Course Description: Further development of skill in Gas Tungsten Arc Welding, as identified by the student and instructor. An individualized plan will be developed to further the students' technical and practical application of GTAW on, but not limited to: mild steel, stainless steel, and aluminum.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "Culture of safety."
- CLO\#2: Create a plan to improve the identified skill set including: process details, WPS (if applicable), timeframe and practical assignment list. (ILO: Communication)
- CLO\#3: Produce industry quality weld samples according to student plan.


## WLD 250C - Selected Topics in Welding: SMAW

## Var. (2-6) Credit(s)

Prerequisite(s): Student must be an Industrial Welding Technology major.
Course Description: Will focus on further development of skill in Shielded Metal Arc Welding as identified by the student and instructor. An individualized plan will be developed to further the students' technical and practical application of self-shielded and/or gas shielded flux core welding in all positions on carbon steel.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "Culture of safety."
- CLO\#2: Create a plan to improve the identified skill set including: process details, WPS (if applicable), timeframe and practical assignment list. (ILO: Communication)
- CLO\#3: Produce industry quality weld samples according to student plan.


## WLD 250D - Selected Topics in Welding: GMAW

Var. (2-6) Credit(s)
Prerequisite(s): Student must be an Industrial Welding Technology major.
Course Description: Course will focus on further development of skill in Gas Metal Arc Welding as identified by the student and instructor. An individualized plan will be developed to further the students'
technical and practical application of Gas Metal Arc Welding in all positions on carbon steel and aluminum.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Daily demonstration of personal adoption of the "Culture of safety."
- CLO\#2: Create a plan to improve the identified skill set including: process details, WPS (if applicable), timeframe and practical assignment list. (ILO: Communication)
- CLO\#3: Produce industry quality weld samples according to student plan.


## WLD 250F - Selected Topics: Welding Capstone Project

## Var. (2-6) Credit(s)

Prerequisite(s): WLD 113 and student must be an Industrial Welding Technology major.

Course Description: Course designed to build on trade related practices such as welding, project design, layout, project finishing, planning and estimating. Students will utilize the aforementioned areas to independently complete a project to meet requisite hours for the class. Applicable welding processes may be GTAW, FCAW, GMAW and SMAW. Students will complete a detailed planning packet with drawings, schedules, pricing and inspection points where grades will be derived.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Develop Safety plan for project.
- CLO\#2: Develop project plan, drawings material list, applicable WPS, assembly sequence, job planning and estimating. (ILO: Critical Thinking)
- CLO\#3: Perform assembly and tacking procedures using appropriate welding procedures.
- CLO\#4: Perform welding procedures according to applicable WPS for the selected process.
- CLO\#5: Perform grinding, sanding, burnishing or other applicable finish procedures as described in plan to ready project for grading.


## WLD 250P - Selected Topics: CNC Plasma Cutting

## 3 Credit(s)

Prerequisite(s): MTH 60 or MTH 63 or higher-level math or designated placement, and WLD 112.
Recommended Prerequisite(s): MFG 140

Course Description: Introduces students to the basics of CNC plasma cutting. Participants will learn operation and set-up procedures for CNC plasma as well as geometry creation and programming. This course is recommended for anyone interested in CNC plasma cutting for industry applications or artwork.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Demonstrate a working knowledge of introductory CNC Plasma Cutting.
- CLO\#2: Demonstrate improved mathematics, as derived points must be calculated. (ILO: Quantitative Literacy and Reasoning)
- CLO\#3: Apply improved technology applications as programs must be written and tested on machinery.
- CLO\#4: Demonstrate three-dimensional thinking to determine cutter paths.
- CLO\#5: Demonstrate proper safety practices in the lab and workplace.


## WLD 260 - American Welding Society Certification Seminar: Pipe

## 1 Credit(s)

Prerequisite(s): WLD 212

Course Description: Covers the definition, application and interpretation of the American Welding Society (AWS) Structural Welding Code D1.1. Upon completion of this class students are eligible to take the AWS practical FCAW, GTAW and/or SMAW Unlimited Tests. If passed successfully, students will be awarded the AWS Unlimited 6G welding certification.

Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Identify and apply safe shop procedures required to function at an industry accepted level while performing welding processes associated with the SMAW welding procedure.
- CLO\#2: Use American Welding Society Code D1.1 as it applies to SMAW, GTAW and/ or FCAW on pipe. (ILO: Critical Thinking)
- CLO\#3: Perform qualification welds in the 6G position on A36 Pipe.
- CLO\#4: Prepare weldments for guided bend testing.
- CLO\#5: Conduct, evaluate and successfully remediate weld specimen guided bend test resulting in certification.


## WLD 280 - Cooperative Work Experience/Welding

## Var. (1-3) Credit(s)

Prerequisite(s): Prior arrangements with CWE Instructor or Department Chair.

Course Description: Cooperative Work Experience is an educational program that enables students to receive academic credit for on-the-job, experiential learning based on skills acquired in their programs. Together, the instructor, employer, and student establish learning objectives that specify the significant and appropriate learning which is expected to result from the work experience. This course offers a careerrelated experience for students working for an approved employer. As a capstone course, it should be completed within the last two terms of a certificate or degree program.

## Course Level: Career/Tech Preparatory

## Course Learning Outcomes:

- CLO\#1: Successfully complete the interview process. (ILO: Communication)
- CLO\#2: Complete forms accurately and meet deadlines.
- CLO\#3: Apply program knowledge, theories, principles, methods and technology while gaining new knowledge, skills and experience while on the jobsite.
- CLO\#4: Make contacts which will help in obtaining employment.

WR 90 - Fundamentals of Composition

## 4 Credit(s)

Prerequisite(s): Designated placement.

Course Description: Introduces the basic five-paragraph essay form while reinforcing sentence skills and paragraph development. Critical thinking and reading are emphasized. Prepares students for transfer-level coursework and, specifically, for WR 115. If a high proficiency is demonstrated with in-class writing and student self-identifies as challenging WR 115, there is a process that allows students to meet the outcomes for WR 115 and be eligible to enroll in WR $121 Z$.
Course is graded on a pass/no pass basis. Course does not transfer.
Course Level: Postsecondary Remedial

## Course Learning Outcomes:

- CLO\#1: Communicate written thought in a clear and organized manner to effectively inform, persuade, describe, and convey ideas in academic, work, community, and family settings. (ILO: Communication)
- CLO\#2: Improve the ability to think critically, including making connections between ideas, logically analyzing, evaluating, and clarifying information as both readers and writers in various reading and writing assignments.


## WR 91 - Fundamentals of Academic Literacy

## 5 Credit(s)

Prerequisite(s): Placement into WR 90 and RD 90

Course Description: Combines reading and writing requirements in order to accelerate progress and prepare students for transfer-level coursework and, specifically, for WR 121Z. If a student in this course demonstrates a high proficiency with in-class writing and meets the course learning outcomes, the student may be able to register for WR 121 (waiving WR 115 placement). Each student is required to attend a lab session two hours a week. An embedded tutor will provide additional support during class and lab sessions. Course graded on a pass/no pass basis. Course does not transfer.

## Course Level: Postsecondary Remedial

## Course Learning Outcomes:

- CLO\#1: Develop and demonstrate academic curiosity and emerging analysis by asking logical questions about readings, demonstrating reading skills that are appropriate for the material/discipline, and responding appropriately in writing to what has been read.
- CLO\#2: Read, recognize, and write a clearly articulated thesis and supportive statements on an arguable issue.
- CLO\#3: Demonstrate mechanical proficiency in both reading and writing using proper grammar, varied and complex sentence structures, reading/writing organization, and college vocabulary. (ILO: Communication)
- CLO\#4: Recognize and develop concrete examples to support ideas.
- CLO\#5: Read, comprehend, and write in response to a prompt on cause and effect.
- CLO\#6: Demonstrate an awareness of audience and purpose.
- CLO\#7: Demonstrate ownership of learning.


## WR 110 - Understanding English Grammar

## 2 Credit(s)

Prerequisite(s): RD 90 and WR 90 or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: Designed to explore structures of the English language and apply skills gained to proof and edit college level writing. Students will be able to make conscious choices of grammatical formats to express themselves clearly and to minimize grammar errors in their own papers.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply grammar skills by completing advanced prescriptive writing in collaboration with peers.
- CLO\#2: Demonstrate the appropriate use of various resources to locate specific information on grammar rules and usage.
- CLO\#3: Identify and correct grammar usage errors. (ILO: Communication)


## WR 115 - Introduction to Expository Writing

## 3 Credit(s)

Prerequisite(s): RD 90 and WR 90, or WR 91 (WR 91 substitutes for both RD 90 and WR 90), or designated placement.

Course Description: WR115 reviews the basic conventions, purposes, and strategies of college-level writing, with an emphasis on in-class writing. The course will survey a variety of rhetorical modes and prepare students for impromptu questions and essays.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop writing with concrete examples relevant to the intended audience.
- CLO\#2: Express ideas in a clear and readily understandable manner.
- CLO\#3: Apply knowledge of voice and style relevant to the audience and the specific writing task.
- CLO\#4: Identify the demands of various rhetorical modes of writing. (ILO: Critical Thinking)
- CLO\#5: Write fluent sentences of varying length and complexity that follow the conventions of English grammar and usage.
- CLO\#6: Perform required writing tasks in a timely manner, with little or no outside mediation. (ILO: Communication)


## WR 115R - Corequisite Support for WR115

## 1 Credit(s)

Prerequisite(s): Designated placement.
Course Description: This support course focuses on the foundational skills and concepts needed to persist and succeed in WR 115 Introduction to Expository Writing. In an interactive setting, students will receive
appropriate support in the strategies and conventions of college-level writing with an emphasis on in-class writing and reading comprehension.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop writing with concrete examples relevant to the intended audience. (ILO: Communication)
- CLO\#2: Express ideas in a clear and readily understandable manner. (ILO: Communication)
- CLO\#3: Apply knowledge of voice and style relevant to the audience and the specific writing task.
- CLO\#4: Identify the demands of various rhetorical modes of writing.
- CLO\#5: Write fluent sentences of varying length and complexity that follow the conventions of English grammar and usage. (ILO: Communication)
- CLO\#6: Perform required writing tasks in a timely manner, with little or no outside mediation.


## WR 121Z - Composition I

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: WR $121 Z$ engages students in the study and practice of critical thinking, reading, and writing. The course focuses on analyzing and composing across varied rhetorical situations and in multiple genres. Students will apply key rhetorical concepts flexibly and collaboratively throughout their writing and inquiry processes. Formerly offered as WR 121 / WR121.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply rhetorical concepts through analyzing and composing a variety of texts (ILO: Communication )
- CLO\#2: Engage texts critically, ethically, and strategically to support writing goals. (ILO: Critical Thinking )
- CLO\#3: Develop flexible composing, revising, and editing strategies for a variety of purposes, audiences, writing situations, and genres. (ILO: Communication)
- CLO\#4: Reflect on knowledge and skills developed in this course and their potential applications in other writing contexts. (ILO: Critical Thinking )


## WR $122 Z$ - Composition II

## 4 Credit(s)

Prerequisite(s): WR $121 Z$ or equivalent, or designated placement.
Course Description: WR122Z builds on concepts and processes emphasized in WR $121 Z$, engaging with inquiry, research, and argumentation in support of students' development as writers. The course focuses on composing and revising in research-based genres through the intentional use of rhetorical strategies. Students will find, evaluate, and interpret complex material, including lived experience; use this to frame and pursue their own research questions; and integrate material purposefully into their own
compositions. Formerly offered as WR 122 / WR122.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply rhetorical concepts to achieve writing goals within a given discourse community. (ILO: Communication)
- CLO\#2: Locate, critically evaluate, synthesize, and integrate multiple perspectives from a variety of sources. (ILO: Critical Thinking)
- CLO\#3: Engage in research and writing as recursive and inquiry-based processes, participating in the communal and conversational nature of academic discourses. (ILO: Communication)
- CLO\#4: Develop strategies for generating, drafting, revising, and editing texts based on feedback and reflection.
- CLO\#5: Reflect on knowledge and skills developed in this and other courses and potential transfer to future contexts. (ILO: Critical Thinking)


## WR 199 - Special Studies: Writing

## Var. (1-3) Credit(s)

Prerequisite(s): Varies by course.

Course Description: WR199 explores special topics in writing, including novel and journal writing as well as discipline-specific discourse conventions and professional preparedness.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Varies based on course focus.


## WR 227Z - Technical Writing

## 4 Credit(s)

Prerequisite(s): BA 131 or CIS 120 (formerly offered as CS120), and BT 114 or WR $121 Z$ or designated placement.

Recommended Prerequisite(s): Public speaking ability is an asset. CIS 125WW and graphics ability or desktop publishing skills.

Course Description: WR227Z introduces students to producing instructive, informative, and persuasive technical/professional documents aimed at well-defined and achievable outcomes. The course focuses on presenting information using rhetorically appropriate style, design, vocabulary, structure, and visuals. Students can expect to gather, read, and analyze information and to learn a variety of strategies for producing accessible, usable, reader-centered deliverable documents that are clear, concise, and ethical. Formerly offered as WR 227 / WR227.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Apply key rhetorical concepts through analyzing, designing, composing, and revising a variety of deliverable documents for technical/professional contexts.
- CLO\#2: Engage in project-based research, applying appropriate methods of inquiry for clearly defined purposes (e.g., user experience research and client/organization research).
- CLO\#3: Collaborate with various stakeholders to develop and apply flexible and effective strategies for managing projects.
- CLO\#4: Develop and adapt document design and composition strategies to meet the demands of diverse clients, organizations, and multicultural audiences. (ILO: Communication)
- CLO\#5: Examine and respond to individual and professional ethical responsibilities across organizational contexts.


## WR 241 - Imaginative Writing I

## 4 Credit(s)

Prerequisite(s): WR 115 or designated placement.

Course Description: WR241 introduces students to the craft of imaginative writing, offering them opportunities to express themselves through literary mediums. Students will study models of short stories, poetry, personal memoirs, and do original work in each of these genres. Includes analysis and discussion of students' work.

Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop the craft of writing through everyday practice. (ILO: Communication)
- CLO\#2: Develop and write short fiction through assignments focusing on characterization, setting, plot, dialogue, and the elements of fiction.
- CLO\#3: Develop and write poetry through a variety of poetry assignments.
- CLO\#4: Evaluate and offer constructive feedback on other students' writings.


## WR 242 - Imaginative Writing II

## 4 Credit(s)

## Prerequisite(s): WR 241

Course Description: WR242 continues the study of imaginative writing, building on WR241 and offering students further opportunities to express themselves through literary mediums. Students will study models of short stories, poetry, personal memoirs, and do original work in each of these genres. Includes analysis and discussion of students' work.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop the craft of writing through everyday practice. (ILO: Communication)
- CLO\#2: Develop and write short fiction through assignments focusing on characterization, setting, plot, dialogue, and the elements of fiction.
- CLO\#3: Develop and write poetry through a variety of poetry assignments.
- CLO\#4: Be able to evaluate and offer constructive feedback on other students' writings.


## WR 243 - Imaginative Writing III

## Prerequisite(s): WR 242

Course Description: WR243 completes the year of imaginative writing, building on WR 241 and WR 242 and offering students further opportunities to express themselves through literary mediums. Students will study models of short stories, poetry, personal memoirs, and do original work in each of these genres. Includes analysis and discussion of students' work.

## Course Level: Lower Division Collegiate

## Course Learning Outcomes:

- CLO\#1: Develop the craft of writing through everyday practice. (ILO: Communication)
- CLO\#2: Develop and write short fiction through assignments focusing on characterization, setting, plot, dialogue, and the elements of fiction.
- CLO\#3: Develop and write poetry through a variety of poetry assignments.
- CLO\#4: Evaluate and offer constructive feedback on other students' writings.


## Governance and Foundation

## Board of Education

- Indra Nicholas

Zone 1, Josephine County

- Pat Fahey

Zone 2, Josephine County

- Vanessa Jones

Zone 3 (Interim), Jackson County

- Jonathan Bilden

Zone 4, Jackson County

- Gary Plano, Ed.D.

Zone 5, Jackson County

- Roger Stokes

Zone 6, Jackson County

- Maria Ramos Underwood

Zone 7, Jackson County

## Administration

- Randy Weber, Ed.D.

President

- Juliet Long

Vice President, Student Learning and Success

- Lisa Stanton

Vice President Operations and Finance
Chief Financial Officer, College Services

- Jamee Harrington

Vice President, People, Culture and Safety / Chief Human Resources Officer

## Foundation Board

- Valerie Barr, President
- Ian Foster, Vice President
- Jennifer Krauss Phillippi, Co-Treasurer
- Deelia Warner, Co-Treasurer
- Andy Linerud, Secretary
- Claudia Sullivan, Liaison for Board of Education
- Cynthia Ackerman
- Peter Angstadt
- Jerry Brienza
- Mark Gibson
- Ron Goss
- Karen Kahn
- Kingsley Kelley
- Laura Magstadt
- Kristin Miller
- Nicholas Naumes
- Tony Retiz
- Juan Rivera
- John Salisbury
- Tanner Smith
- Grant Walker
- Josh Welch
- Anna Manley, Interim Executive Director


## Management, Faculty and Staff

www.roguecc.edu/Directory

- Hollie Adair

Director, TRIO-EOC/ETS; B.A., English and Secondary Education, University of North Dakota, Grand Forks, ND, magna cum laude, 2003; M.A., Counseling, University of North Dakota, Grand Forks, ND, 2013

- Tamara Adams

Test Proctor II, Academic Success; A.A.0.T., Business \& Education, Rogue Community College, Grants Pass, OR, 2013; B.S., Innovation \& Leadership, Southern Oregon University, Ashland, OR, magna cum laude, 2018; M.A., Master of Arts Leadership in Higher Education, Bushnell University, Eugene, OR, 2023

- Corrie Alexander

Faculty, Science; B.S., Biology, Oregon State University, Corvallis, OR, 2000; M.S., Science Education, Oregon State University, Corvallis, OR, 2002; M.S., Biology, University of Nebraska, Kearney, NE, 2015

- Andrea Anderson (Andie)

Director, Apprenticeship; BA, Anthropology, Southern Oregon University, Ashland, OR

- Kati Averyt

Director, HR \& Payroll Operations, Human Resources; B.S., Business Administration and Management, Western Governors University, Salt Lake City, UT, 2017; M.S., Management and Leadership, Western Governors University, Salt Lake City, UT, 2018; AA, General Studies, Rogue Community College, Grants Pass, OR, 2009

- Dillon Ayers

Media Specialist II, Instructional Media; A.A.0.T., Rogue Community College, Grants Pass, OR, 2012; B.S., Criminal Justice Southern Oregon University, Ashland, Oregon, 2017

- Robert Bagwell

Faculty, Business Technology; B.S., Computer Science/Minor in Math, California State University, East Bay, Hayward, CA, 1985; M.B.A., University of Phoenix, San Ramon, CA, Honors, 1995; CIPP Privacy Credential - 2007

- Amanda Baird

Payroll \& Benefits Specialist, Human Resources; B.S., Business Management, Southern Oregon University, Ashland, OR

- Susan Bame

Resource Coordinator, Advising; B.A., English Education and Business Education, Glenville State College, Glenville, WV, magna cum laude, 1978; M.A., Conflict Resolution, Antioch University McGregor, Yellow Springs, OH, 2001; Machine Shorthand, Stenotype Institute of Lima, OH, 1985

- Makiko Barrey

Faculty, Counseling; B.S., Psychology, Southern Oregon University, Ashland, OR, 2005; M.S., Applied Psychology: Mental Health Counseling, Southern Oregon University, Ashland, OR, 2008

- Marissa Barrientos Shepherd

Faculty, Science (Chemistry); B.S., Chemistry, California Institute of Technology, Pasadena, CA, 2012; M.S., Chemistry, University of California, Riverside, Riverside, CA, 2015; Ph.D, Inorganic Chemistry, University of California, Riverside, Riverside, CA

- Lucia Bartscher

Coordinator, Diversity, Equity and Inclusion (DEI); B.A., Communications, Loyola University, New Orleans, New Orleans, LA

- Katelyn Bender

Program Support Specialist III, Apprenticeship; A.A.0.T., Rogue Community College, Grants Pass, OR, 2020

- Robert Blevens

Maintenance Technician, Facilities Management Planning and Construction (FMPC)

- Mary Ann Blinkhorn

Faculty, Science; B.S., Biology (Wildlife), Missouri State University, Springfield, MO; M.S., Biology Missouri State University, Springfield, MO

- Laura, Bowles

Program Coordinator III, High School Partnerships; M.S., Management and Leadership, Western Governors University, Millcreek, UT, 2023; B.S., Innovation and Leadership, Southern Oregon University, Ashland, OR, magna cum laude, 2021; A.A.S., Marketing, Rogue Community College, Grants Pass, OR, Phi Kappa Theta, President's List, 2013; A.A.S., Business Technology, Rogue Community College, Grants Pass, OR, Phi Kappa Theta, President's List, 2013

- Karl Brake

Faculty, Visual Arts and Design; A.A., Liberal Arts, College of Southern Idaho, Twin Falls, Idaho, 1981; B.F.A., Painting and Drawing, Boise State University, Boise, ID, magna cum laude, 1983; M.F.A., Drawing and Painting, Utah State University, Logan, UT, Vice-President's Fellowship for Creative Research and Activity, 1987; Graduate Scholar in Residence, Painting, School of Visual Arts, New York City, 1984

- Sheri Bransfield

Procurement Specialist, Contract and Procurement; A.A.S., Accounting, Rogue Community College, Grants Pass, Oregon, 1996; Business Assistant Certificate, Rogue Community College, Grants Pass, Oregon, 1996; Certified Professional Public Buyer, 2013

- Virginia Brech (Ginny)

Academic \& Career Coach, Advising; B.S. Human Development and Family Science, Oregon State University, Corvalis, OR; A.A.O.T., Psychology, Rogue Community College, Grants Pass, OR, 2016

- Margaret Brewer

Faculty, Nursing (ADN); A.A.S., Nursing, Harry S Truman City College of Chicago, Chicago IL; B.S.N., Nursing Southern Indiana University, Evansville Indiana; M.S.N., Leadership, Nursing Leadership, Grand Canyon University, Phoenix, AZ; Post Graduate Certificate in Healthcare Simulation from Boise State University 2019

- Brenda, Bridges

Financial Aid Specialist, Financial Aid; B.S., Anthropology/Archaeology/Sociology, Willamette University, Salem, OR, Dean's List, 1991; M.A., Anthropology/Archaeology/Osteology, Oregon State University, Corvallis, OR, Dean's List

- Sara Bristol

Communications Strategist, Marketing; B.A., Communication/Journalism, Southern Oregon University, Ashland, OR, 1999

- Kari Brooks

Library Specialist II, Library Services; B.A., Cultural Anthropology, UCLA-University California, Los Angeles, Los Angeles, CA, 1988

- Rachelle Brown

Executive Assistant to the President - Governance/Operations, President's Office; B.A., Communications- Media Studies, The Pennsylvania State University, University Park, PA, 2012

- Michael Bullard

Department Coordinator/Faculty, Manufacturing/Engineering Technology; A.A.S., Manufacturing/ Engineering Technology Rogue Community College, Grants Pass, OR, Honor Roll; A.A.S., Industrial Welding Technology, Rogue Community College, Grants Pass, OR

- Elijah Bunnell

Faculty, Mathematics; B.S., Mathematics, Southern Oregon University, Ashland, OR, 2006; M.S., Mathematics, Oregon State University, Corvalis, OR, 2009

- Jennifer Burkes

Administrative Assistant III, Student Learning and Success; B.A., Writing and Literature, Southern Oregon University, Ashland, OR, 1996

- Elizabeth Butler

Internet Strategist, Marketing; A.G.S., Computer Science, Rogue Community College, Grants Pass, OR, 2016; Website Development, 2016; Website Design, 2016; Adobe Applications Technician, 2016; Digital Graphics Design, 2002

- Tammy Canady

Director, Business Office; M.B.A., Southern Oregon University, Ashland, OR, Honor Society Phi Kappa Phi, 2016

- Jan Carpenter

Program Support Specialist V, Adult Basic Skills (ABS); A.G.S. Business, Front Range Community College, Fort Collins, CO, Phi Theta Kappa, 2012; A.G.S., Sociology, Rogue Community College, Grants Pass, OR, Honors, 2017

- Thayer Chandler (Navarro)

Dean of Instruction, Student Learning and Success; B.A., Anthropology, University of Oregon, Eugene, OR, magna cum laude, 2005; Ed.M., Education, Ottawa University, Phoenix, AZ, 2007

- Sara Channell

Transition Specialist, TRIO-EOC (Educational Opportunity Center); B.S., Environmental Studies, University of Central Florida, Orlando, FL; M.P.A., Public Administration, University of Montana, Missoula, Montana

- Kevin Chavez Martinez

Transition Specialist, TRIO-ETS (Educational Talent Search); B.S., Psychology, Southern Oregon University, Ashland, OR, 2017

- Andrew Childress

Coordinator, Access and Disability Resources; B.A., Drama, San Diego State University, San Diego, CA, 1998; M.S., Rehabilitation Counseling, San Diego State University, San Diego, CA, Thelma J. Manjos Outstanding Student Award, 2002

- Tiffany Clarkin

Department Chair/Faculty, Massage Therapy; B.A., Biology with Human Biology emphasis, California State University, Hayward, Hayward, CA, 1990; Physical Therapy Aide Certificate, 1985; Swedish Esalen Massage Certificate, 1993; Oregon Licensed Massage Therapist, 1994-2022; Medical Massage Therapist Certification, 2015

- Debora Coen

Coordinator/Faculty-Writing, Humanities; B.A., English, Italian (double major), The University of Texas at Austin, Austin, TX, magna cum laude, Phi Beta Kappa, 1998; M.A., English, University of Oregon, Eugene, OR, 2000

- Sandy Contreras

Library Specialist, Library Services

- Natalie Coppedge

Student Records Specialist, Enrollment Services; B.A., Human Communication, Southern Oregon University, Ashland, OR; M.A. Management, Southern Oregon University, Ashland, OR

- Niki Coulter

Faculty, Social Science; B.A., History/Psychology/Biology, Utah State University, Logan, UT, summa cum laude; M.A., History/ Psychology, Utah State University, Logan, UT, cum laude; Psychology/History, University of Melbourne, Melbourne, Victoria-Australia, PhD work; Qualified Mental Health Counselor; Wildland Firefighter; Forest Service Law Enforcement Grade 4

- Leslie Cox

Institutional Research Analyst and Reporting Coordinator, Institutional Research

- Amber Crews

Financial Aid Advisor, Financial Aid; A.G.S., Business, Rogue Community College, Southern Oregon University, Ashland, OR; Business Assistant Certificate

- Steven Crum

Faculty, Science; B.S., Biology, University of California, Riverside, Riverside, CA, 2008; Ph.D., Urban Ecology and Climatology, University of California, Riverside, Riverside, CA, 2017

- Michaela Darling

Registration Management Specialist, Enrollment Services; A.A., Liberal Arts and Sciences, Las Positas Community College, Livermore, CA, magna cum laude, 1998; B.A., Computer and Video Imaging, University of Silicon Valley (formerly Cogswell Polytechnical College), San Jose, CA (formerly Sunnyvale, CA), magna cum laude, 2003

- Fredrick DeLong

Network Administrator, IT - Network Services

- Forrest Denison

Facilities/Operations Assistant-lead, Facilities Management Planning and Construction (FMPC)

- Dean Denison

Maintenance Technician, Facilities Management Planning and Construction (FMPC)

- Arlene Dowell

Administrative Assistant III, Student Learning and Success

- Annie Droullard

Faculty, Mathematics; B.S., Mathematics, George Fox University, Newberg, OR, summa cum laude, 2000; M.S., Mathematics, Oregon State University, Corvallis, OR, 2002

- Katilyn Eccleston

Access Specialist, Access and Disability Resources; B.S., Psychology, Southern Oregon University, Ashland, OR, 2013; B.S., Sociology, Southern Oregon University, Ashland OR, 2013; A.A.O.T., Rogue Community College, Grants Pass, OR, All Oregon Academic Team, 2011

- Curt Erikson

Faculty, Social Science; Ph.D., Counseling/Psychology, Pacific States University in alliance with UC-San Diego, San Diego, CA, Beta Beta Beta Biological Honorary Fraternity, 1975; M.S., Counseling/Psychology, Chapman University, Orange, CA, 1970; B.S., Biology and Psychology, Northern Arizona University, Flagstaff, AZ, 1965; Licensed Psychology and Marriage Family Therapy, California, 1970 to present

- Frankie Everett

Director, Financial Aid; B.A., Health, Linfield College, McMinnville, cum laude, 2002; M.A., Teaching, Oregon State University, Corvallis, magna cum laude, 2003

- Alesha Farrar

Administrative Assistant III, Counseling; A.A.S., Business Technology, Rogue Community College, Medford, OR, 2017; Business Assistant, 2017; Business Assistant - Customer Service, 2017; Business Assistant - Information Specialist, 2017; Business Assistant - Retail Sales and Service, 2017

- Kevin Fay

Assistant-Lead/Electrician, Facilities Management Planning and Construction (FMPC); General Journeyman Electrical License

- Robert Felthousen

Library Department Chair, Library Services; A.A.0.T., Rogue Community College, Grants Pass, OR, Phi Theta Kappa Honor Society, 2001; B.A., Writing, Southern Oregon University, Ashland, OR, summa cum laude, 2004; MLIS, Library and Information Science, University of Washington, Seattle, WA, 2006

- Julia Fisher

Faculty, Counseling; B.S., Psychology, Oregon State University, Corvallis, OR, magna cum laude, 2005; M.S., Counseling, Oregon State University, Corvallis, OR, 2006; Nationally Certified Counselor, 2007; Licensed Professional Counselor, 2012; Board Approved Clinical Supervisor, 2021

- Xandria Fowler

Library Specialist II, Library Services; A.A.0.T., English, Rogue Community College, Grants Pass, OR, PTK Honor Society, 2005

- Bea Frederickson

Administrative Assistant III, Student Learning and Success; B.A., English, German, Math, Central Washington State College, Ellensburg, WA, 1965

- Kimberly Freeze

Dean of Instruction, Student Learning and Success; Ph.D., Clinical Psychology, California Southern University, Costa Mesa, CA, summa cum laude, 2019; M.S., Psychology and Human Behavior, National University, San Diego, CA, magna cum laude, 2018; B.S., Organizational Leadership, Simpson University, Redding, CA, magna cum laude; RYT Yoga Trainer, 2018; Entrepreneurship Specialist, 2017"

- Judith Friesen

Administrative Assistant III, Emergency Services

- Michael Friesen

Faculty, Industrial Welding Technology

- Jodie Fulton

Director, Contract and Procurement; A.A., Music, Southern Oregon University, Ashland, OR, 1984; B.S., Liberal Arts, Linfield University, McMinnville OR, 1992; Human Resource Management, 1992 (Linfield); Certified Professional Public Buyer, 2014; Certified Public Procurement Officer, 2014

- Jill Galusha

Human Resources Specialist, Human Resources

- Angelina Garcia

Transition Specialist, TRIO-ETS (Educational Talent Search); B.A., English Literature and Psychology, Southern Oregon University, Ashland, OR, Honor student, 2000

- Doug Gardner

Department Chair/Faculty, Mathematics; B.S., Mathematics, University of Oregon, Eugene, 1988;
B.S., Psychology, University of Oregon, Eugene, OR, 1988; M.S., Mathematics Education, University of Oregon, Eugene, OR, 1991

- Todd Giesbrecht

Department Chair/Faculty, Industrial Welding Technology; A.A., Welding, Rogue Community College, White City, OR, 1986; AWS, ASME, API Welding Certifications

- Erika Giesen

Department Chair/Faculty, Social Science; M.A., Women's Studies, University of Arizona, Tucson, AZ, 2001; Sociology, New Mexico State University, Las Cruces, NM

- Analisa Gifford

Assistant Registrar, Enrollment Services; B.A., Sociology, University of Oregon, Eugene, OR, 2004

- Danielle Green

Help Desk Technician, IT - Network Services; A.A., Computer Support Technician, Rogue Community College, Grants Pass, OR, 2012

- Pamela Green

Program Specialist, TRIO-SSS; A.S., Business Administration/ Management, Rogue Community College, Grants Pass, OR, 1988; B.S., Business Administration, Northwest Christian University, Eugene, OR, magna cum laude, 2007; M.B.A., Business Administration, Northwest Christian University, Eugene, OR, magna cum laude, 2010

- Lindsay Griffiths

Accounting Support Specialist, RCC Foundation

- Laura Haga-Duffy

Director, Auxiliary Services and Shipping \& Receiving, Auxiliary Services; M.S., Management and Leadership, Western Governors University, Salt Lake City, UT, 2017

- April Hamlin

Dean of Student Success, Student Learning and Success; B.A., Psychology, Seattle Pacific University, Seattle, WA, 1998; M.S., Education, Eastern Oregon University, LaGrande, OR, 2006; Massage Therapy, 2002;

- Sherrie Hamner Maintenance/Custodian, Facilities Management Planning and Construction (FMPC)
- Jamee Harrington

Vice President, People, Culture and Safety; B.S., Communication, with a minor in Gender, Sexuality, and Women's Studies, Southern Oregon University, Ashland, OR, cum laude, 2010; M.S., Management and Leadership, Western Governor's University, Salt Lake City, UT, 2017; Mediation \& Conflict Resolution, 2010; Senior Professional in Human Resources (SPHR), 2017; Certified Labor Relations Professional (CLRP), 2019

- Gary Heigel

Faculty, Emergency Services; B.A., Human Resources George Fox University, Newberg, OR, 1992; M.Ed., Adult Education, Colorado State University, Fort Collins, CO, 2020; Paramedicine, Oregon Health Sciences University, Portland, OR, 1984; Paramedic, 1984; Critical Care Transport Provider, 2006; Certified Flight Paramedic, 2009

- Eric Hennings

Faculty, Automotive Technology; A.A.S., Automotive Technology, Universal Technical Institute, Phoenix, AZ, 1992; ASE Master Technician; ASE Advanced Engine Performance Specialist; Toyota Master Diagnostic Technician

- Jeanine Henriques, Ph.D.

Dean of Instruction, Student Learning and Success; Ph.D., Public Safety specializing in Criminal Justice, Capella University, Minneapolis, MN, 2010; M.A., Business/Organizational Leadership, Vanguard University of Southern California, Costa Mesa, CA, 2005

- Virginia Hull (Peggy)

Faculty, Social Science and Human Services; M.Ed., English, Southern Oregon University, Ashland OR, summa cum laude, 1997; M.S.W., Social Work, Portland State University, Portland, OR, 2006

- James Hurst (Jim)

Lead Assistant, Facilities Management, Planning and Construction (FMPC)

- Andrew Huston

Instructional Technology Administrator, IT Services; A.S., Computer Networking, Rogue
Community College, Grants Pass, OR, 2004; PC Microprocessor Systems Technician, 2004

- Michael Hutchison

Maintenance Custodian, Facilities Management Planning and Construction (FMPC)

- Alan Jackson

Faculty, Computer Science; B.A., English Education with a minor in Theater Education, Whitworth University, Spokane, WA, 1994; M.B.A., Business Administration, Southern Oregon University, Ashland, OR, 2013; CISSP, 2015; CISM, 2017

- Trina Janssen

Program Coordinator II, TRIO-EOC; A.S., Psychology, College of the Siskiyous, Weed, CA

- Amy Johnson

Assistant to Dean of Student Success, Student Learning and Success; A.A.O.T., Rogue Community College, Grants Pass, OR, 2014; B.S., Business Administration, Southern Oregon University, Ashland, OR, magna cum laude, 2021; Social/Behavioral/Educational Research

- Nikki Johnson

Director, Advising and Military Services, Military Services; B.S., Business and Health \& Physical Education, Colorado Christian University, Lakewood, CO, 1998; M.B.A., Business Administration, Northwest Christian University, Eugene, OR, 2016

- Jessica Jones

Coordinator (Operations), Financial Aid; A.A.O.T., Oregon Tech, Klamath Falls, OR, 1996

- Wendy Jones

Coordinator, Risk Management

- Alice Jordan

Administrative Assistant III, Student Learning and Success

- Denise Kerr

Data Management Specialist III, Curriculum \& Scheduling; A.A.S., Business Technology -
Accounting Option, Rogue Community College, Grants Pass, OR, 2017; B.A., Speech
Communication, Portland State University, Portland, OR, 1990

- Nichol Koenig (Nikki)

Program Coordinator, Advising; A.A.S., Business, Rogue Community College, Grants Pass, OR, Phi Theta Kappa, 2009

- Jennifer Konarske

Faculty Coordinator Medical Assistant Program, Allied Health Occupations; B.S., Health and Physical Education, Southern Oregon University, Ashland, OR, summa cum laude, 2019; Certified Medical Assistant, 2015 - current

- Kristi Kowalski

Faculty, Adult Basic Skills (ABS); A.A.O.T., Rogue Community College, Grants Pass, OR, 1997; B.A., International Studies, George Fox University, Newberg, OR, cum laude, 1999; M.A.T., Southern Oregon University, Ashland, OR, 2007

- Mark Kurtz

Maintenance Custodian, Facilities Management Planning and Construction (FMPC)

- Sonya Lagorio

Accounting Specialist II, Accounts Receivable, Business Office

- Veronica Lambert

Program Support Specialist IV, Small Business Development Center (SBDC); A.A.0.T., Psychology, Rogue Community College, Grants Pass, OR, 2014; B.S., Psychology, Southern Oregon University, Ashland, OR, 2016

- Frank Lauterio (Michael)

Maintenance/IPM Coordinator, Facilities Management Planning and Construction (FMPC);
A.A.O.T., Biological Sciences, Rogue Community College, Grants Pass, OR, 2019; Landscape Technician 2016

- Jeanne Lee

Contract Specialist, Contract and Procurement; B.A., Applied math, Computer Science, Spanish, Western Michigan University, Kalamazoo, MI

- Don LeFave Jr.

Faculty, Computer Information Science; A.A.S., Computer Information Systems, Treasure Valley Community College, Ontario, OR, Phi Theta Kappa, 2011

- Sonia Lemacks

Transition Specialist, TRIO-ETS; B.S., Psychology, Southern Oregon University, Ashland, OR, 1992; M.S., Education Counseling, Oregon State University, Corvalis, OR, 2002

- Juliet Long

Vice President, Student Learning and Success; B.S., Computer Science/CIS, Southern Oregon State College, Ashland, OR, magna cum laude, 1994; M.Ed., Educational Leadership, Concordia University, Portland, OR, 2019; M.A., Education, University of Phoenix, Tempe, AZ, 2001; Graduate Certificate in Community College Leadership, Higher Education Leadership, University of Nebraska, Lincoln, Lincoln, Nebraska, 2020

- Nicole Longoria

Transition Specialist, Admissions and Recruitment; B.S., Social Science, Western Oregon University, Monmouth OR, 2015; M.A.

- Nichole Lott

Science Lab Technician III, Science; B.S., Biology University of Oregon, Eugene, OR, 1999

- Cara Lumpkin

Assistant to the Vice President, People, Culture and Safety; A.A., Business Administration, Rogue Community College, Grants Pass, OR; B.A., Business Administration, Washington State University

- Lori Lundine

Faculty, Adult Basic Skills (ABS); B.S., Biology, University of Redlands, Redlands, CA

- Paula Lupini Brooks

Dean's Assistant, Student Learning and Success; A.G.S., Communications, Olympic Community College, Bremerton, WA, Phi Theta Kappa and National Dean's List, 2007; Business Assistant, Rogue Community College, 2013

- Marie Maguire-Cook

Department Chair/Faculty, Academic Success; Ed.M., Education, Oregon State University, Corvallis, OR, magna cum laude, 2002; B.A., Business Management, Northwest Christian University, Eugene, OR, cum laude, 2000; A.A.S., Electronic Office Technology, Rogue Community College, Grants Pass, OR, 1996; Business Assistant, 1994; Legal Office Assistant, 1994

- Tiffany Malsberger

Director, Admissions and Recruitment; A.A.0.T., Rogue Community College, Grants Pass, OR, Phi Theta Kappa, 2012; B.A., Human Services, Southern Oregon University, Ashland, OR, 2016; M.A., Business Management and Leadership, Western Governors University, Salt Lake City, UT, 2022

- Anna Manley

Interim Executive Director, RCC Foundation; B.A., Business Administration, Vanguard University, Costa Mesa, CA, 1990; M.A., Educational Leadership, San Diego State University, San Diego, CA, 1996

- Ryan Maple

Coordinator/Faculty (World Languages), Humanities; B.A., English and Spanish, University of Oregon, Eugene, OR, cum laude, 1997; M.A., Spanish, University of Oregon, Eugene, OR, 2000

- Lorri Jo McIntosh

Faculty, Practical Nursing; M.S., Nursing, University of Phoenix, Phoenix, Arizona; A.S.N., Nursing, Central Oregon Community College, Bend, OR

- Rene, McKenzie

Director, Student Engagement; B.A., Business Management, Northwest Christian College, Eugene, OR, magna cum laude, 2002; M.Ed., Adult Education, Oregon State University, Corvallis, OR, magna cum laude, 2008; Ph.D., Philosophy and Community College Leadership, Oregon State University, Corvallis, OR; Computer Analyst Certificate, 1992

- Rosalyn Mendoza

Registration Management Specialist, Enrollment Services; B.A., Spanish, University of Oregon, Eugene, OR, 2013

- Bridey Mendoza-Moore

Department Chair/Faculty, Early Childhood and Elementary Education; M.S., Early Intervention/Early Childhood Special Education, University of Oregon, Eugene, OR, 2001; B.A., Psychology, Reed College, Portland, OR, 1996

- Mary Middleton

Department Coordinator/Faculty, Mathematics; B.S., Mathematics, Fort Lewis College, Durango, CO, cum laude, 2001; M.S., Mathematics, University of Colorado, Colorado Springs, CO, 2003

- Ryanne Mitchell

Graphics Specialist, Marketing; B.F.A., Graphic Design/lllustration, Oklahoma State University, Stillwater, OK, 1996

- Cailin Mondo

Academic and Career Coach, Advising; B.A., Psychology, California State University, Stanislaus, Turlock CA, Magna cum laude, 2016; M.S., Higher Education Administration, Bay Path University, Longmeadow, MA, Summa cum laude, 2020

- Carmen Mons

Assistant Coordinator/Faculty (Dental), Allied Health Occupations; B.S., Dental Hygiene, Oregon Institute of Technology, Klamath Falls, OR, magna cum laude; M.S., Higher Education with a Specialization in Integrative Studies, Capella University, Minneapolis, MN, President's List; Certified Dental Assistant through the Dental Assisting National Board

- Catherine Murphy

Office Coordinator, Facilities Management Planning and Construction (FMPC)

- Deborah Murphy

Faculty, Early Childhood and Elementary Education; B.S., Elementary Education and English, State University of New York, New Paltz, NY, 1975; M.Ed., Elementary Education, Specialization in Early Childhood Education, State University of New York, New Paltz, NY, 1977

- Kevin Murphy

Faculty, Mathematics; B.S., Eastern Oregon University, La Grande, OR, summa cum laude; Ph.D., Theoretical Chemistry, University of Georgia, Athens, GA

- Fiona Nevin

Transition Specialist, Admissions and Recruitment; B.A., Communication Oregon State University, Corvallis, OR, magna cum laude, 2018; M.A., Interdisciplinary Studies, Communication, History of Technology, Oregon State University, Corvallis OR, magna cum laude, 2020

- Katie Nollenberger

Faculty, Adult Basic Skills (ABS); B.A., French, University of Oregon, Eugene, OR; M.A., TESOL (Teaching English to Speakers of Other Languages), Gonzaga University, Spokane, WA

- Tracie Olsen

Program Support Specialist IV, Academic Success; A.A.0.T., Humanities, Rogue Community College, Grants Pass, OR, magna cum laude, 2008

- Rachel Ostroskie

Transition Specialist, Admissions and Recruitment; A.G.S., Rogue Community College, Grants Pass, OR, 2016; B.S., Innovation and Leadership, Southern Oregon University, Ashland, OR, summa cum laude, 2020

- Sharon Owen

Groundskeeper, Facilities Management Planning and Construction (FMPC); A.G.S., Rogue Community College, Grants Pass, OR

- Manuel "Manny" Pacheco Jr.

Coordinator/Faculty, Social Science (Human Services); B.S., Social Sciences/Human Services, Southern Oregon University 2008, Ashland, M.S., Mental Health Counseling, Southern Oregon University 2010, M.S., Master in Management, Southern Oregon University, 2021

- Rose Passione

Advising Coordinator, Financial Aid; B.A., Music, George Fox University, Newberg, OR, summa cum laude, 2004

- Ailym Pinero Requena

Transition Specialist (Latino Outreach and Recruitment), Admissions and Recruitment; B.S., Medicine Central University of Venezuela, Caracas, Venezuela, 1984; A.G.S., Rogue Community College, Medford Oregon, 2019; CNA 2019

- Donna Plummer

Program Coordinator, STEP; A.A.S., Business Technology, Rogue Community College, Grants Pass, OR, Phi Theta Kappa, Alpha Zeta Pi, 2008; B.S., Business Management/Psychology, Southern Oregon University, Ashland, OR, 2013

- Melissa Polen

Department Chair/Faculty, Business Technology; B.S., Business Administration, Southern Oregon University, Ashland, OR, 2007; M.B.A., Marylhurst University, 2010

- Julie Raefield-Gobbo

Community and Government Relations Coordinator, President's Office; B.A., Psychology, University of San Francisco, San Francisco, CA, cum laude, 1982; M.A., Counseling Psychology, Loyola Marymount University, 1985; Experiential Psychotherapy Post-Graduate Training, 19851987; McGraw-Hill Supervisory Skill Training of Trainers Certificate, 1993

- Iris Reagan

Faculty, Nursing (ADN); B.S.N., Science of Nursing, Southern Oregon University, Ashland, OR, Sigma Theta Tau, 1990; M.S., Science of Nursing and Health Administration, University of Phoenix, Phoenix, AZ, Sigma Theta Tau, 2005; M.A., Health Administration, University of Phoenix, Tempe, AZ, Sigma Theta Tau, 2005

- Michelle Rhodes

Dean's Assistant, Student Learning and Success; A.A.S., Business Technology, Rogue Community College, Grants Pass, OR, 2013; Business Assistant, 2013; Small Business Management, 2013

- Pete Ridgeway

Department Chair/Faculty, Automotive Technology; A.A.S., Automotive Technology, Rogue Community College, Grants Pass, OR, 1992; A.S.E. Master Technician

- Rusty Riis

Department Chair/Faculty, Emergency Services; B.S., Emergency Medical Services Administration, Eastern Oregon University, La Grande, OR, 2022; A.A.S., Paramedicine, Rogue Community College, Grants Pass, OR, 2010

- Nadine Roper

Advising Case Manager II, TRIO-SSS; Ed.M., Adult Education, Southern Oregon University, Ashland, OR, Phi Kappa Phi, 2022; B.S., Psychology, Southern Oregon University, Ashland, OR, Magna cum laude, 2020; A.S.O.T., Business, 2023, A.A.O.T., 2017; AGS, Alpha Zeta Pi, 2017, Rogue Community College, Grants Pass, OR

- Clyde Rounds

Groundskeeper, Facilities Management Planning and Construction (FMPC); A.A.S., Computer
Technology, Rogue Community College, Grants Pass, OR, Phi Beta Kappa, 2015

- Chiharu Sai

Coordinator/Faculty (Music), Humanities; D.M.A., Manhattan School of Music; M.M., Arizona State University; B.M. Willamette University

- Nicole Sakraida

Dean, Enrollment Management, Student Learning and Success; B.A., Spanish, Seattle University, Seattle, WA, 2004; M.Ed., Universidad San Francisco de Quito, Quito, Ecuador, 2007

- Terrie Sandlin

Coordinator, Outcomes and Assessment; M.Ed., Education and Human Resource Studies, Colorado State University, Fort Collins, CO, summa cum laude; B.S., Criminal Justice, Southern Oregon University, Ashland, OR, summa cum laude

- Jim Shaw

Faculty/Advisor, Emergency Services; A.S., Emergency Medical Technology-Paramedic, Rogue Community College, Medford, OR, 2003; B.S., Public Safety, Emergency Management, Capella University, Minneapolis, MN, summa cum laude, 2015

- Karen Shaw

Program Specialist, TRIO-SSS; B.A., English, California State University, Sacramento, CA, 2017;
A.A., Interdisciplinary Studies-Arts \& Humanities, Social \& Behavioral Sciences, Folsom Lake College, Folsom, CA, 2015

- Deneen Silva

Director, Nursing and Allied Health Occupations; B.S.N, Oregon Health and Science University, Ashland, OR, 2000; M.S., Nursing-Nursing Leadership in Healthcare, Gonzaga University, Spokane, WA, Sigma Theta Tau, 2020

- Jodi Simons

Director, TRIO-SSS; B.A., Psychology \& Sociology, Oregon State University, Corvallis, OR, 2000;
Ed.M., Adult Education and Higher Ed Leadership, Oregon State University, Corvalis, OR, 2013

- Helaine Smith

Faculty, Science; M.S., Environmental Education, Southern Oregon University, Ashland, OR, 2009; B.S., Biology, Southern Oregon University, Ashland, OR, 2000; B.S., Environmental Studies, Southern Oregon University, Ashland, OR, 2000

- Laura Smith

Science Lab Technician II, Science; B.S., Forestry and Wildlife Management, Virginia Tech, Blacksburg, Virginia, 1990; M.S., Forestry - International Resource Conservation and Development, University of Montana, Missoula, MT, 1998; Professional Farrier Certification, 2003

- David Snell

Instructional Systems Specialist, Outcomes and Assessment; B.A., Creative Writing, Pacific University, Forest Grove, OR; M.Ed., Instructional Design, Western Oregon University, Monmouth, OR

- Sally Snyder

Assistant to the VP of Student Success and Learning; B.A., Theater Arts, University of Oregon, Eugene, OR, 1993

- Lisa Stanton

Vice President of Operations and Finance; B.A., Accounting, University of Portland, Portland, OR, 1995; M.B.A., Business, Northwest Christian University/Bushnell, Eugene, OR, Sigma Beta Delta, 2013

- Lynda Surran

Accountant II, Budget Services; B.A., Journalism, University of Oregon, Eugene, OR, 1980

- Ruth Swain

Director, RCC Small Business Development Center (SBDC); B.A., Business Marketing General Studies, Eastern Washington University, magna cum laude; Certified Fund Raising Executive (CFRE); Certified Growth Wheel Adviser

- Sean Taggart

Director of Risk Management and Deputy Title IX Coordinator, Risk Management; M.S., Security Studies, Angelo State University, San Angelo, TX, 2016; B.S., Criminal Justice, Sam Houston State University, Huntsville, TX, cum laude, 2014; Certified Protection Professional

- Laurie Taylor

Accounting Specialist I, Business Office; A.A., Rogue Community College, Grants Pass, OR, 2020

- Clayton Terpening (Clay)

Maintenance Technician, Facilities Management Planning and Construction (FMPC)

- Julie Toledo

Career Connected Learning Navigator, High School Partnerships; B.A., Geography, Southern Oregon University, Ashland, OR, 2000; M.A., Career and Technical Education, Concordia University, Portland, OR, 2021

- Ann-Margret Trausch

Department Chair/Faculty, Electronics Technology; Ph.D., Higher Education Administration, Capella University, Minneapolis MN, 2008; M.A., Industrial Technology/Education, Humboldt State University, Arcata, CA, 1992; B.S., Industrial Technology, Humboldt State University, Arcata, CA, 1990; Instructional Design for Online Learning, 2005; Human Performance Improvement and

Training Systems, 2006; International Society of Certified Electronics Technicians, 2007; A.A.O.T., Electronics, Riverside City College, Riverside, CA, 1986

- Verne Underwood

Department Chair/Faculty, Humanities; B.A., English, University of Oregon, Eugene, OR, Phi Beta Kappa, 1987; M.A. English, University of Oregon, Eugene, OR, 1989; Ph.D., English Renaissance Literature, Arizona State University, Tempe, AZ

- Darren Van Lehn

Director, Athletics; B.S., Sociology \& Human Communication, Southern Oregon University, Ashland, OR, magna cum laude, 2007; M.S., Sports Management \& Athletic Administration, Southern New Hampshire University Online, summa cum laude, 2017

- Suzanne VanBuren

Faculty, Nursing (ADN)

- Svetlana Varner-Garske

Faculty, Mathematics; B.S., Applied Mathematics, Chernivtsi State University, Ukraine; M.S., Applied Mathematics, Chernivtsi State University, Ukraine

- Shannon Wade

Accounting Specialist III - Lead, Accounts Payable, Business Office; A.A.S., Office Technology, Accounting, Rogue Community College, Grants Pass, OR, 2000; Office Assistant Certificate, 1999

- Melissa Weast

Support Services Specialist V, Nursing (ADN); A.A.S., Criminal Administrative Management, Oregon Institute of Technology, Klamath Falls, OR, 1985

- Randy Weber

RCC President, President's Office; A.S., Health, Physical Education, Barton County Community College, Great Bend, KS, 1998; B.S., Sport Management, University of Kansas, Lawrence, KS, 2000; M.S.E., Sport Administration, University of Kansas, Lawrence, KS, 2003; Ed. D., Educational Leadership, Baker University, Baldwin, KS, 2009

- Catherine Whitsel

Administrative Assistant III, Admissions and Recruitment; B.S., Speech and Language Pathology, Northern Michigan University, Marquette, MI, Summa cum laude, 2007; M.S., Publishing, Pace University, New York, NY, 2011

- Barbara Wicks

Student Records Specialist, Enrollment Services; A.A.O.T., Rogue Community College, Grants Pass, OR, 1995; B.S., Environmental Studies, University of Oregon, Eugene, OR, 1998

- Marita Wilder

Data Management Specialist II - Curriculum and Scheduling; B.A., California State University Northridge, Northridge, CA, 2013

- Richard Charles Williams

Faculty, Humanities; B.A., Political Science, International Relations Emphasis, CSU Northridge, Northridge, CA, 1989; M.A., English, American Literature and Composition, Humboldt State, Arcata, CA, 1998; M.A., Religious Studies, University of Wales, Trinity Saint David, Lampeter, Wales, UK, 2012

- Sarah Wofford

Accounting Specialist II, Accounts Receivable, Budget Services; A.G.S., Rogue Community College, Grants Pass, OR, PTK, 2011; B.A., Marketing Management, Western Governors University, Salt Lake City, UT, 2020; Bursar, 2019

- Angelica Woods-Reuter

Administrative Assistant II (Call Center), Admissions and Recruitment; A.A.0.T., Rogue Community College, Grants Pass, OR, Alpha Zeta Pi, 2009; A.G.S., Rogue Community College, Grants Pass, OR, Alpha Zeta Pi, 2008

- Christina M. Wooten

Faculty, Business Technology

- Bernyne Wright

Financial Aid Advisor, Financial Aid; A.A.S., Business-Accounting, Rogue Community College, Grants Pass, OR, 1999

## Adjunct Faculty

Rogue Community College values the contributions of its many adjunct faculty members who may serve as tutors, instructors, counselors, coordinators, or lab assistants.

The following are faculty who were contracted to teach part-time in 2022-23.

| Debra Abarca | Liz Hardy | Eric Pemberton |
| :---: | :---: | :---: |
| Joyce Adams | Heidi Harless | David Penicook |
| Joshua Allphin | John Harrison | Douglas Perkins |
| Tiburcio Alvarez III | Cynthia Hauser | Karen Peterkin |
| Richard Amneus | Jennifer Haynes-Clark | Sarah Peters |
| Lorraine M Andresen | Gabrielle Headings Calderon | Paula Peterson |
| Pamela Arbogast | Eugene Hebert | Gerald Petitt |
| Frank Armstrong | Else Heckert | Virginia Petitt |
| Brandon Atkins | Trevor Heinsohn | Charles Phenix |
| Alfred Augustine | Theodore Helard | Emily Pinkerton |
| Johnny Baker | Duane Henderson | Karen Pleasant |
| Brian Ballou | Robert Hendrix | Elissa Poillon |
| Maria Barajas | Anthony Herrera | Robert Poll |
| John Barber | Holly Hertel | Paul Porter |
| Catherine Barber | Margueritte Hickman | James Powell |
| Rebecca Barker | Matthew Hilliker | Kellie Quinn |
| Sadie Barr | Brent Hirunpugdi | Adam Quinn |
| Andrew Bates | David Hobbs | Travis Raber |
| Maria Battrick | Joann Hoeber | Karen Ramorino |
| Christopher Baumer | Shelly Hohl | Kerith Reid |
| Stacey Beck | Matt Holben | Desiree Remick |
| Jon Bennett | Jesse Holcomb | Richard Renfro |
| Debra Benson | Natalie Holliday | Jennifer Richards |
| Glenn Berg | Stephen Holst | Regina Richardson |
| Gulestan Bharucha | Rosemarie Holub | Brandon Rigaud |
| Miranda Black | Diane Hoover | James Robertson |
| Julia Bloom | Raelyn Horton | Eveline Robinson |
| Richard Blum | Kendall Houck | Charles Rogers |
| Shayla Bogart | Mark Huddleston | Candelaria Romero |
| Larry Bohn | Kierra Huggins | Barbara Rountree |
| Paul Boothroyd | Joseph Hyatt | Todd Rufener |
| Benjamin Boyd | Martha Ibarra | Fred Saada |
| Lisa Bradshaw | Douglas Ice | Heidi Saleska |
| Jillease Brand | James Inglehart | John Salisbury |
| Jane Brockman | Jennifer Jackson | Josefina Samano |
| Jackson Brown | Noah Jarvie | Heather Sandberg |
| Cara Brown | Jami Johnsen | Dennis Sauro |
| Benjamin Bryan | Melissa Johnson | Robert Schaller |
| Angela Bryant | Shirley Johnson | Sharon Schmidt |
| Steven Buckland | Kelly Johnson | William Schmidt |


| Genee Bull | Christina Jones | Janelle Scofield |
| :---: | :---: | :---: |
| Timothy Busald | Brandon Jones | Sarah Scott |
| Sage Bushman | Ian Jungers | Michael Sellers |
| Aaron Bustard | Irene Kai | Bracken Sharp |
| Catriona Callies | Jesse Kalman | Manuel Sharp |
| Cathryn Campbell | Beau Kapp | Kilee Smith |
| Roger Cantwell | Elizaveta Katorcha | Moreland Smith |
| Natasha Carbin | Frederick Katz | Adelaide Smith |
| Galyn Carlile | Jeremy Kekacs | Joshua Smith |
| Steven Carlino | Erin Kerr | Larry Smith |
| Susan Carr | Nicole Kieffer | Jerry Snodgrass |
| Regina Castellon | Jesse Kiene | Sammi Snyder |
| Gregory Chandler | Christine Kiltz | Karl Sorenson |
| Robert Cogliser | Genevieve Klam | Beth Spears |
| Kenneth Collins | Melissa Klise | Joe Spurgeon |
| Carrie Collonge | Jeremy Knight | Serena St. Clair |
| Daniel Cook | Michelle Knighten | Timothy Stacy |
| Dorian Corliss | Thomas Kowalski | Alison Steel |
| William Cort | Lutz Kramer | Teri Steele |
| Dominique Cox | Joann Krausser | Ryan Stidham |
| Michael Cox | Grover Kuhs | Megan Stillwell |
| Ace Cranford | Rod LaCoste | Randi Stuart |
| Allen Crawford | Mickey Laney-Jarvis | Todd Stubbs |
| Sharon Crawford | Catherine Larive | Steven Stuckey |
| Anthony Cremo | Samuel Lashley | Bryan Studebaker |
| Kevin Culhane | Vincent Lasnik | Karen Sullivan |
| Gabriel Darland | Felicia Leavitt | Dorothy Swain |
| Chelsea Daugherty | Ellie Leonhardt | Daniel Swanson |
| Corbin Davey | David Lesh | Thomas Sweeney |
| Victor Davila | Joseph Longo | James Sweeney |
| Sharon Davis | Gabriela Lozano | Joanne Taylor |
| Jordan DeHarty | Paula Lynam | David Thanes |
| Robert DeKorte | Chelsea Majkut | Charles Thomas |
| Randy Delonge | Robert Mannenbach | Aaron Thompson |
| Heidi Demello | Richard Martin | Peter Thompson |
| Kaitlyn Dempsey | Haley Martin-Sherman | Ann Thompson-Hague |
| Kelsey Dennis | David Masters | Michael Torguson |
| Gary DeSimone | James Mau | Franklyn Tosh |
| Cynthia Dettman | Russell McAlmond | Peter Ulrich |
| Cameron Deupree | Jessica McClain | James Van Brunt |
| George Doersch | Dave McKeen | Ray Van Couvering |
| Scott Donnelly | Marcia McLeod | Kylee Vargas Sanabria |
| Robert Dooly | Maureen McNally | Lawrence Venables |
| Thomas Dorigan | Brenda McNellis | David Vincent |
| Peter Droesch | Rosario Medina | Christopher Wade |
| Delaine Due | Marisela Mendoza | Randall Wade |
| Talley Dunn | Kristi Mersino | Sarah Walendy |
| Regina Dusenbury | Eileen Micke-Johnson | Britta Walker |
| Felicity Elworthy | Kristopher Miller | Tami Walz |
| Andrea Enriquez | Tamlynn Miller | Yan Wang |
| Jennifer Eufusia | Justin Miller | Joshua Ward |
| Michael Evans | Susan Miller | Julie Wardle |
| Martha Fabian-Krause | Kyle Miller | Deelia Warner |


| Michael Fazio | Mollie Mish | Larry Weaver |
| :---: | :---: | :---: |
| Mandi Feetham | Rhonda Misner | Diane Weaver |
| Maria Elena Fernandez | Sandra Mitchell | Darrell Webb |
| Rogelio Fernandez | Michelle Mitchell | Cindy Wedekind |
| Donna Fiore | Cody Moreno | Richard Westensee |
| Anne-Marie Franchini-Smith | Barbara Mount | Marina Whitchurch |
| Michelle Freeman | Kenneth Muhlestein | Eston White |
| Justa Freeman | Wade Nasholds | Tristan Wilhelm |
| Kiersta Fricke-Gostnell | Jeremy Nelson | Drew Wilkerson |
| Diane Gallas | Christine Nelson | Kathy Willahan |
| Galen Garretson | Kevin Newins | Ted Willhite |
| Kristen Gaskin | Crystal Niedermeyer | Joseph Williford |
| Francine Gentile | Pamela Nordquist | Ryan Willits |
| Frances George | Suzanne Norwood | Gavin Wilmott |
| Philip Getsinger | Rhonda Nowak | Lynda Wilson |
| Dennis Gettman | Petra Nye | Jeffrey Winfrey |
| Victor Gobel | Leland Ortis | William Wonnacott |
| Hayley Goerisch | Travis Osborne | Mary Ann Woodman |
| Robert Goldenberg | Humberto Osorio | Breanna Zabel |
| Emma Gonzalez-Bencomo | Cassandra Osorio | Evgenia Zamorskaia |
| Courtney Gordon | Mackenzie Ososke | Curtis Ziegler |
| Jeffrey Gratias | Jeremy Ostrowicki | Steve Ziel |
| Paula Greist | Joye Otto | Martin Zottola |
| Cindy Griffis | Mark Otto |  |
| Hugh Griffiths | Deborah Page |  |
| Brandon Grissom | Theresa Palanjian |  |
| Kathryn Gronemyer | Lauren Parker |  |
| Paul Gulrich | Anuj Patel |  |
| Frances Gunson | Trysha Patryson |  |
| Aina Hale | Paul Patterson |  |
| Chelsea Hamblin | Kenneth Paul |  |
| Jett Hamik | Aaron Pawol |  |
| Evalyn Hansen |  |  |
| Corey Hansen |  |  |

## RCC Emeriti

The RCC Board of Education may grant president, vice president, dean or faculty emeritus status to retiring employees. Emeritus status is reserved to honor individual(s), at retirement, who have provided outstanding and distinguished service to the College, which means work that exceeds average, satisfactory performance in carrying out the routine responsibilities of his/her appointment and demonstrates an extraordinary impact on the College or the community.

The nomination process includes a nomination letter from the president or Board Chair before June 30th of the employee's retirement year. The title of emeritus may be awarded posthumously. The recommendation must be approved by a majority of the Board.

| Peter Angstadt, Ph.D. | Ralph Henderson |  |
| :---: | :---: | :---: |
| President Emeritus | Faculty Emeritus, | Eleanor Marie Saunders |
|  | Instruction/Career and | Mueller |
| Laura Ault | Technical Education | Faculty Emeritus, Business |
| Faculty Emeritus, Business |  | Technology/Social Science/ |
| Technology | Dorcas Herr | History |
|  | Faculty Emeritus, Language |  |
| Harvey Bennett | Arts | Larry Mullaly |
| President Emeritus |  | Director Emeritus, Operations |
|  | Doc Holliday | and Special Projects |
| D. Thomas Bradbeer | Faculty Emeritus, |  |
| Dean Emeritus, Human Resources and College Advancement | Mathematics | Robert Murphy |
|  |  | Faculty Emeritus, Social |
|  | Marilyn "Jeanne" Howell | Science |
| Bill Broeffle | Associate Dean Emeritus, |  |
| Faculty Emeritus | Instructional Services | Sheri Muzzioli |
|  |  | Classified, Emeritus |
| Jerry Bryan | Robert Hutsell |  |
| Faculty Emeritus, Humanities | Faculty Emeritus, Jobs | Harold O'Connors, Ph.D. |
|  | Program | Faculty Emeritus, Respiratory |
| Leslie Bryan |  | Care; Coordinator, Academic |
| Faculty Emeritus, Adult Basic | Charlotte Hutt | Research and Assessment |
| Education | Faculty Emeritus, |  |
|  | Mathematics | Mary O'Kief |
| Kathleen A. Burkey |  | Faculty Emeritus, Grants and |
| Dean Emeritus, Redwood Campus | Terrance Johnson, Ph.D. Faculty Emeritus, Science | Planning Coordinator |
| Pedro Cabrera |  | Sue Orris |
| Faculty Emeritus, Respiratory Care | Cathy Kemper-Pelle, Ph.D. President Emeritus | Faculty Emeritus, Counseling |
| Sue Calkins |  | Mollie Owens |
| Faculty Emeritus, Adult Basic | Barbara "Bobbi" Kidder | Faculty Emeritus, Humanities |
| Education | Faculty Emeritus, |  |
|  | Humanities | Walt Padgett |
| Jeannette Cappella |  | Faculty Emeritus, Art |
| Faculty Emeritus, Language Arts | Dennis Kimzey |  |
|  | Faculty Emeritus, | Cyndy Patterson |
| Galyn Carlile, Ph.D. <br> Dean Emeritus, Instruction/Growth Initiatives | Mathematics | Faculty Emeritus, Computer |
|  |  | Science |
|  | Alex Kozlowski |  |
|  | Faculty Emeritus, |  |


| Carolyn Chancler | Individualized Career | Henry Pete |
| :---: | :---: | :---: |
| Faculty Emeritus, Adult Basic Education | Training | President Emeritus |
|  |  |  |
|  | Lutz Kramer | Mary Pierce |
| Rex Chapman Faculty Emeritus, Business and Office Technology | Faculty Emeritus, | Faculty Emeritus, Reference |
|  | Humanities | and Instruction Librarian |
|  |  |  |
|  | Patti Kramer | Bonnie Reeg |
| Margaret Cunningham | Faculty Emeritus, Academic | Faculty Emeritus, Disability |
| Faculty Emeritus, Academic Skills | Skills; High School | Services/Tutoring Center/ |
|  | Outreach Coordinator | Academic Skills |
| Kori Ebenhack |  |  |
| Vice President Emeritus, Student | Kathy Krauss, Ph.D. | Linda Renfro |
| Affairs | Faculty Emeritus, | Dean Emeritus, Instruction |
| Steven Flannery |  | Wyatt Rosborough |
| Faculty Emeritus, Academic Skills | Michael Laam | Faculty Emeritus |
|  | Associate Dean Emeritus, |  |
| Stephen Foster | Instruction | John Salinas |
| Faculty Emeritus, |  | Faculty Emeritus, Science |
| Manufacturing/Mechatronics | B.C. Lamb |  |
|  | Faculty Emeritus, Business | Wanda Sherman |
| David Fuller, Ph.D. | Technology |  |
| Faculty Emeritus, Science |  | Mary Slater |
|  | Eric Larson | Faculty Emeritus |
| Gary Gates | Dean Emeritus |  |
| Faculty Emeritus, Science |  | Curtis L. Sommerfeld |
|  | Gaia Layser | Vice President, Emeritus |
| Francine Gentile | Faculty Emeritus, Counselor |  |
| Faculty Emeritus, Social |  | Lori Sours |
| Science/Human Services | Rick Levine | Faculty Emeritus, Academic |
|  | President Emeritus | Success |
| Linda Goodyear-Stevenson |  |  |
| Faculty Emeritus, Developmental | John Lopez | Serena St. Clair |
| Studies and Humanities | Associate Dean Emeritus, Instruction | Faculty Emeritus |
| Wayne Grinolds |  | Sylvia Thomas |
| Faculty Emeritus | Cheryl Markwell | Faculty Emeritus, Counseling |
|  | Vice President Emeritus, |  |
| Tenison Haley | Instruction | Greig Thomson |
| Dean Emeritus |  | Faculty Emeritus, Human |
|  | Greg Marton | Services/Social Science |
| Sue Hall | Faculty Emeritus, Social |  |
| Faculty Emeritus, Nursing | Science | Jim Van Brunt <br> Faculty Emeritus, Science |
| Roger Harding | Barb McAuley |  |
| Faculty Emeritus, Small Business | Classified, Emeritus | Laurie Van Riper |
| Management |  | Faculty Emeritus, Adult Basic |
|  | Larry Mclane | Education |
| Richard Harms | Faculty Emeritus, |  |
| Faculty Emeritus, Developmental | Motorcycle Technology | Randy Wade, Ph.D. |
| Studies | Lee Merritt | Technology |
|  | Dean Emeritus |  |


| Cynthia Hauser | Marion Miller | Linda Wagner |
| :--- | :--- | :--- |
| Associate Dean Emeritus, | Faculty Emeritus, Business |  |
| Instruction | and Office Technology | Faculty Emeritus, Nursing |
|  | Tom Miller | Dottie Walters |
|  | Faculty Emeritus, Library | Faculty Emeritus |
|  | Billie Miracle | Phil Wickham |
|  | Faculty Emeritus, Art | Faculty Emeritus |

## Errata

2023-24 Catalog Errata

| Program, <br> Course, or <br> Topic Heading | Correction | Date of Correction |
| :---: | :---: | :---: |
| Human Services Transfer to Southern Oregon University Associate of Applied Science | In program pre-requisites, COMM 115 is not an alternate to COMM 1112. | 7-13-2023 |
| NRS 232 | Course pre-requisite was originally listed as BI 234 and NRS 110 or advanced placement as an LPN. Course edited to indicate only NRS 110 as corequisite (or advanced placement as an LPN.) | 7-26-2023 |
| NRS 233 | Course pre-requisite was originally listed as NRS 232. Course edited to indicate NRS 232 as a corequisite. | 7-26-2023 |
| Addiction Studies Certificate | In the first fall term, students can complete WR 115 or higher; total fall term credits adjusted from 7-9 to 7-10 and total program credits adjusted from 24-26 to 24-27. | 8-3-2023 |


[^0]:    El programa HOLA Summer Bridge es un evento anual GRATUITO diseñado para ayudar a los estudiantes Latinx a ingresar en Rogue Community College. El objetivo de este programa es ayudar a aumentar la preparación universitaria. La clase de una semana incluye Aprender a ser un estudiante universitario, investigar los especializaciones y carreras de la universidad / colegio, y identificar cómo conseguir dinero gratis para su educación.

[^1]:    ATM

    Automated teller machines provided by Allpoint are available in the following locations:

    - Redwood Campus, Student Center.
    - Table Rock Campus, Student Entry Commons.

    The Allpoint ATM locator may be found at the Allpoint ATM website. Call 800-809-0308 option 2 to access the voice assistance ATM locator.

    Problems with an ATM should be reported by calling 800-948-5884.

[^2]:    Notes:
    ${ }^{1}$ University-recommended courses. Check with the specific transfer institution for more details.
    ${ }^{2}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

    For approved Humanities, Social Science and Science, see Associate of General Studies program map for Approved Electives

[^3]:    Notes:
    ${ }^{1}$ Prerequisite courses may have additional requirements.
    ${ }^{2}$ Approved Computer Information Science or Computer Science class, CIS 120 / CS120 or above, or documented computer proficiency within the past ten years.

