## 2017 - 2018 Important Dates

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<tr>
<th>Reason</th>
<th>Summer 2017</th>
<th>Fall 2017</th>
<th>Winter 2018</th>
<th>Spring 2018</th>
<th>Summer 2018</th>
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<tr>
<td>Advising Begins</td>
<td>May 1</td>
<td>May 1</td>
<td>Nov 6</td>
<td>Feb 12</td>
<td>May 7</td>
</tr>
<tr>
<td>Advising Day (most day classes cancelled)</td>
<td>May 10</td>
<td>May 10</td>
<td>Nov 15</td>
<td>Feb 21</td>
<td>May 16</td>
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<tr>
<td>Returning student registration begins</td>
<td>May 15</td>
<td>May 15</td>
<td>Nov 27</td>
<td>Feb 26</td>
<td>May 21</td>
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<tr>
<td>New student registration begins</td>
<td>May 30</td>
<td>Jun 29*</td>
<td>Dec 4</td>
<td>Mar 5</td>
<td>May 4</td>
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<tr>
<td>Tuition due</td>
<td>Jun 12</td>
<td>Sep 15</td>
<td>Dec 29</td>
<td>Mar 23</td>
<td>Jun 15</td>
</tr>
<tr>
<td>Quarter begins</td>
<td>Jun 19</td>
<td>Sep 25</td>
<td>Jan 8</td>
<td>Apr 2</td>
<td>Jun 25</td>
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<tr>
<td>Last day to add most classes</td>
<td>Jun 22</td>
<td>Sep 29</td>
<td>Jan 12</td>
<td>Apr 6</td>
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<tr>
<td>Last day for 100% refund</td>
<td>Jun 22</td>
<td>Sep 29</td>
<td>Jan 12</td>
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<tr>
<td>Last day for 40% refund</td>
<td>Jul 6</td>
<td>Oct 13</td>
<td>Jan 26</td>
<td>Apr 20</td>
<td>Jul 12</td>
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<tr>
<td>Last day to drop classes</td>
<td>Jul 17</td>
<td>Nov 13</td>
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<td>May 18</td>
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<tr>
<td>Quarter ends</td>
<td>Aug 3</td>
<td>Dec 15</td>
<td>Mar 21</td>
<td>Jun 15</td>
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<tr>
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<td>Jun 16</td>
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<td>Faculty - grades due to registrar by 5pm</td>
<td>Aug 8</td>
<td>Dec 19</td>
<td>Mar 26</td>
<td>Jun 19</td>
<td>Aug 14</td>
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<tr>
<td>Students - grades available online</td>
<td>Aug 10</td>
<td>Dec 21</td>
<td>Mar 28</td>
<td>Jun 21</td>
<td>Aug 16</td>
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### New Student Orientation

- **Walla Walla Campus** (By App't Only: wwcc.edu/nso) - Jun 29; Jul 24; Aug 23; Sep 12
- **Clarkston Campus** - (App't Only: 509.758.3339) - Aug 23; Sep 20 & 27; Jan 10; Apr 4

## College Closures

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<th>Winter 2018</th>
<th>Spring 2018</th>
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<tr>
<td>June Sustainability Day</td>
<td>June 23, 30</td>
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<tr>
<td>Independence Day</td>
<td>July 4</td>
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<td>New Year's Day</td>
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<td>Martin Luther King, Jr. Day</td>
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Welcome to Walla Walla Community College!

I am excited to welcome our newest students to campus. Walla Walla Community College is an award winning, national leader in student success. Everyone at WWCC is deeply committed to your success. We hope that this catalog will spark an interest and begin a road map to fulfilling your future goals.

One of the best strategies to ensure your success is to read everything that the college gives you. This catalog is no exception. Please invest a little of your time to get to know the policies, processes, services, and programs we have at WWCC. I promise you the return will pay off and you will put yourself in a position to be open to more opportunities.

After exploring our catalog, I encourage you to meet with an advisor to help you with an educational plan and to answer any questions you may have.

Welcome to Walla Walla Community College!

Sincerely,

Derek R. Brandes
President

Important Phone Numbers

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<tr>
<th>Department</th>
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<tr>
<td>Admissions &amp; Records</td>
<td>509.527.4283</td>
</tr>
<tr>
<td>Toll Free</td>
<td>877.471.9292</td>
</tr>
<tr>
<td>Arts &amp; Sciences</td>
<td>509.529.5553</td>
</tr>
<tr>
<td>Associated Student Body, Clk</td>
<td>509.758.1718</td>
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<tr>
<td>Associated Student Body, WW</td>
<td>509.527.4307</td>
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<tr>
<td>Athletics/H.P.E.R. (Dietrich Activity Center)</td>
<td>509.527.4306</td>
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<tr>
<td>Bookstore</td>
<td>509.527.4255</td>
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<tr>
<td>Business Education (Accounting &amp; Office Technology Programs)</td>
<td>509.527.4215</td>
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<tr>
<td>Business Services (Cashier, Payables/Receivables)</td>
<td>509.527.4201</td>
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<tr>
<td>Clarkston Center</td>
<td>509.758.3339</td>
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<tr>
<td>Toll Free: 877.471.6629</td>
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<tr>
<td>College Style Salon</td>
<td>509.527.4247</td>
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<tr>
<td>Child Care, Clarkston (Tendercare)</td>
<td>509.758.1779</td>
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<tr>
<td>Child Care, Walla Walla (First Flight)</td>
<td>509.527.4544</td>
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<td>Disabilities Services</td>
<td>509.527.4543</td>
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<tr>
<td>eLearning (Distance Learning)</td>
<td>509.524.5145</td>
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<td>Extended Learning &amp; Community Education</td>
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<tr>
<td>Financial Aid</td>
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<td>Foundation (Institutional Development, Fund Raising, Scholarships)</td>
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<td>Health Sciences/Allied Health &amp; Safety Ed</td>
<td>509.527.4589</td>
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<td>Health Sciences/Nursing, Clk</td>
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<td>Human Resources</td>
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<td>High School Programs</td>
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<td>Instruction Administration</td>
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<td>Library Services</td>
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<td>Payroll</td>
<td>509.527.4205</td>
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<td>President</td>
<td>509.527.4274</td>
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<td>Running Start</td>
<td>509.527.4262</td>
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<td>Student Activities</td>
<td>509.527.4307</td>
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<td>Student Development Center/Advising</td>
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<td>Student Development Center/GED Testing</td>
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<td>Student Services Administration</td>
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<td>Student Support Services (TRIO)</td>
<td>509.527.4258</td>
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<tr>
<td>T.D.D. (Hearing Impaired)</td>
<td>509.527.4412</td>
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<td>Technology Services Help Desk</td>
<td>509.527.4357</td>
</tr>
<tr>
<td>Tickets/Box Office, Bookstore</td>
<td>509.527.4255</td>
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<td>Transitional Studies</td>
<td>509.527.4304</td>
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<td>Veterans Education Benefits</td>
<td>509.527.1864</td>
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<td>Walla Walla Campus Info</td>
<td>509.522.2500</td>
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<td>Toll Free: 877.992.9922</td>
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<tr>
<td>Workfirst</td>
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<td>Worker Retraining</td>
<td>509.529.1113</td>
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<td>Workforce Education</td>
<td>509.527.4582</td>
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<tr>
<td>WorkSource</td>
<td>509.524.5230</td>
</tr>
<tr>
<td>WSU Nursing @ WWCC</td>
<td>509.524.5152</td>
</tr>
</tbody>
</table>

Board of Trustees

Dr. Roland Schirman
Chair

Mrs. Darcey Fugman-Small
Vice-Chair

Mr. Tim Burt

Mr. Don McQuary

Mr. Miguel Sanchez
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*Note: The table continues with additional areas of study, but the content has been truncated for brevity.*

For the most current information see: [www.wwcc.edu](http://www.wwcc.edu)
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For the most current information see: WWW.WWCC.EDU
About This Catalog

This catalog is published for informational purposes only. Every effort is made to ensure accuracy at the time of printing. However, Walla Walla Community College reserves the right to change any provision or requirement at any time. This catalog does not constitute a contract between Walla Walla Community College and prospective or enrolled students; however, students may earn certificates/degrees based on the catalog in force at the time of entry, if continuously enrolled. Up-to-date information can be found using the eCatalog on the WWCC website at www.wwcc.edu.

Accreditation

Walla Walla Community College is accredited by the Northwest Commission on Colleges and Universities and certified by the Washington State Board for Community and Technical Colleges to offer courses in Academic Transfer Education, Workforce Education, Transitional Studies, and Extended Learning. In general, academic courses (100 level or higher) taken at this institution are transferable to most baccalaureate institutions. Walla Walla Community College is approved for veterans benefits for students eligible under the United States Code.

Documents describing the College’s accreditation are found in the office of the Vice President of Instruction and on the College’s website at www.wwcc.edu. Individuals may also contact:

Northwest Commission Colleges and Universities (NWCCU)
8060 165th Avenue NE, Suite 100 • Redmond, WA 98052
(425) 558-4224
www.nwccu.org

Commitment To Diversity

WHEREAS, Walla Walla Community College (WWCC) represents a community of people of diverse cultures, ages, sexual orientation, races, religions, abilities, ethnicities, and nationalities working and learning in an atmosphere of intellectual freedom and mutual respect; and

WHEREAS, WWCC remains committed to diversity in its students and employees that reflects the diversity of our communities; and

WHEREAS, WWCC is committed to offering courses and campus-wide activities that are inclusive and is committed to offering a diversity of perspectives and support for individual and cultural differences; and

WHEREAS, WWCC is committed to creating an educational environment that is welcoming to and encouraging of all students and community members; and

WHEREAS, WWCC is committed to helping students achieve their educational goals; and

WHEREAS, WWCC believes in the importance of providing role models among our employees that reflect the diversity of the community; and

WHEREAS, WWCC is committed to the vision of inclusiveness of all people in a climate of equality; and

WHEREAS, WWCC has no tolerance for discrimination or harassment; now

THEREFORE BE IT RESOLVED that WWCC reaffirms its commitment to initiatives that increase diversity and reflect the communities we serve; and

BE IT THEREFORE RESOLVED that WWCC strongly encourages all members of the college community to oppose acts of discriminatory behavior; and

BE IT FURTHER RESOLVED that WWCC encourages its employees and students actively to promote, develop, and value diversity on campus and in the community.

Accommodations for Students with Disabilities

Students with disabilities may request information regarding campus access and accommodations by contacting the Coordinator of Disability Support Services, Walla Walla campus: 509.527.4262, TDD 509.527.4412; or Janet Danley, Clarkston campus: 509.758.1703, janet.danley@wwcc.edu. WWCC complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA).

Equal Opportunity Statement

Walla Walla Community College District No. 20 (WWCC) is committed to provide equal opportunity and nondiscrimination for all educational and employment applicants as well as for its students and employed staff, without regard to race, color, creed, national origin, sex, sexual orientation, including gender expression/identity, genetic information, marital status, age (over 40), the presence of any sensory, mental, or physical disability, the use of trained guide dog or service animal by a person with a disability, or status as a Vietnam and/or disabled veteran, National Guard member or reservist in accordance with the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, the Federal Rehabilitation of 1973, the Americans with Disabilities Act of 1990 and any other applicable Federal and Washington State laws against discrimination. Overall Affirmative Action/Equal Opportunity program responsibility and the College's Title IX Officer is assigned to Sherry Hartford, Vice President of Human Resources 509.527.4382. The College's Section 504 Officer is Jose da Silva, Ph.D., Vice President of Student Affairs, 509.527.4300. It is considered to be the day-to-day obligation of each WWCC staff member to support this plan and to ensure that fair and equitable treatment is provided to all persons accessing the services of the College.
Student Right to Know and Safety Act
The security of all members of the campus community is of vital concern to Walla Walla Community College. In compliance with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act, Walla Walla Community College information concerning campus safety, campus crime statistics for the most recent three-year period, graduation and transfer statistics, and other right-to-know information can be found online at http://www.wwcc.edu/student-resources/student-policies/students-right-to-know/.

The College
Walla Walla Community College has grown from 850 students in 1967 to a present annual enrollment of nearly 10,000. Located on approximately 130 acres, the Walla Walla campus has become a center for innovation, education, training, and learning opportunities throughout the region it serves (Walla Walla, Columbia, Asotin, Garfield Counties, and bordering counties in Idaho and Oregon). WWCC’s Clarkston campus, located in Clarkston, Washington, serves the education and training needs of community members within Asotin and Garfield counties. The College also has education and training centers at two correctional facilities: Washington State Penitentiary in Walla Walla and Coyote Ridge in Connell, Washington.

Walla Walla Community College offers a comprehensive curriculum of academic and workforce training programs. The major areas of studies include Arts and Sciences Transfer, Workforce Education, Pre-College, and Basic Skills. In addition, WWCC offer courses through extended learning; dual-credit and alternative high school programs; workplace learning centers; outreach learning programs; and lifelong opportunities, including Kids College and Quest, a program that offers short courses to 50+ citizens.

WWCC Vision Statement
WWCC will be the catalyst that transforms our students’ lives and the communities we serve.

WWCC Mission Statement
Walla Walla Community College inspires all students to discover their potential and achieve their goals by providing relevant, equitable, and innovative learning opportunities and services.

WWCC Core Themes
Walla Walla Community College identified three core themes that manifest essential elements of its mission. The core themes are: Student Success, Strong Communities, and Resource Stewardship. Core Themes describe the fundamental aspects of the College’s mission by translating it into practice.

Institutional Values
Learning Opportunities. We value learning and encourage students to acquire a rich and wide body of knowledge, as well as a love of their chosen discipline. We provide an environment that fosters active learning and support services necessary to help all students achieve their potential. Everything we do is focused on expanding student access, retention, and completion.

Integrity. Integrity is an essential component of the common bond within Walla Walla Community College. Efficient accomplishment of institutional goals is based on trust and mutual respect. We value honesty, fairness and ethical behavior.

Sense of Community. We strive to build community. We value a climate where all individuals feel accepted and meaningfully involved in a common cause. We recognize we are interdependent and demonstrate respect for one another.

Teamwork. We value partnerships within the College and with members of the communities we serve. We practice collaboration in plans, actions, and shared results.

Diversity. We oppose all barriers that separate people from opportunities: barriers of socioeconomic status, race and ethnicity, age, gender, sexual orientation, and inexperience with the educational system.

Innovation. Walla Walla Community College values, respects, and rewards the enthusiastic pursuit of new ideas, creative risk-taking, and entrepreneurial endeavors. Encouraging the pursuit of excellence and innovation will help the College prepare students and staff to shape the future. Creativity is one of our most important resources in the 21st Century.

Health and Humor. We value a healthy environment that encourages humor, creativity, and enjoyment of work. We promote health, wellness, and safety within the College and the communities we serve.

Personal and Professional Growth. We value the growth of both our students and staff. We believe that our own engagement in the learning process enhances our ability to enrich our personal lives, careers, and work in the global community.

Excellence. We value superior quality and are dedicated to continued improvement in all college programs and services. We practice an ongoing systematic planning and evaluation process to ensure that our programs and services are distinctive, relevant, responsive, and of the highest quality.

Sustainability. Walla Walla Community College values the well-being of our communities and is dedicated to protecting and restoring our resources. We advocate for and demonstrate practices that promote economic and environmental sustainability.
Admissions and Registration
## New Student Checklist

If you need guidance in any of these areas, call 509.527.4262 or stop by the Student Development Center for assistance. On the Clarkston Campus, call 509.758.3339, or visit 1470 Bridge Street, Clarkston WA.

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<tr>
<th>Step 1... Admissions</th>
<th>You may apply online or submit an application to the Office of Admissions and Registrar. Once your application has been processed, you will receive an acceptance email and letter that includes your Student ID number.</th>
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</table>
| Step 2... Financial Assistance | For priority funding: Complete your FAFSA by March 1 of each year.  
• Provide supporting documents & WWCC information form by May 1.  
• Scholarships, Grants, Loans & Work-study programs are available.  
• Financial Aid applications are accepted year-round; however, funding priority will be given to students who meet early application deadlines noted above. |
| Step 3... Placement Process | Complete placement process for accurate assessment of your current skill levels. New students should start the Placement Process by going to www.wwcc.edu/placement. Retakes are approved by the testing staff on a case-by-case basis and may cost an additional fee. Various documents may be reviewed for placement. Please contact the Testing Center for a list of approved documents eligible for placement evaluation. |
| Step 4... New Student Orientation | For Fall Priority Registration, students must complete a New Student Orientation. Dates & sign up for orientation may be found online at www.wwcc.edu/nso beginning May 1. For subsequent quarters, New Student Information Sessions are also offered. |
| Step 5... Educational Advising & Career Exploration | Students are assigned an advisor based on their program of study and are required to meet quarterly for educational planning and to obtain their Quarterly Registration Number (QRN). Career exploration services are available through the Advising and Counseling Center. |
| Step 6... Registration | Students may register online any time after their scheduled registration time through the first week of the quarter. Registration times may be found through MyWWCC student portal. |
| Step 7... Payment | Tuition & Fees are usually due 10 days prior to the first day of the quarter. An automatic Payment Plan is available online at www.wwcc.edu/pay. |

## Student Responsibility to Register Under Proper Classification

The student is responsible to register under the proper classification. If there is any question regarding residency classification, the student (prior to or at the time of registration) must discuss it with the Residency Officer in the Office of Admissions and Registrar. Verification must be provided.

### Official Change of Status/Reclassification as a Non-Resident

All persons classified as residents of Washington State shall be reclassified as non-resident students whenever there is a change in legal residence to another state.

Students who have been erroneously classified as residents will be reclassified as non-residents and be required to pay the difference between the resident and non-resident tuition and fees for those quarters in which they were erroneously classified.

### Application for Reclassification

Students wishing to change their residency classification must complete a residency questionnaire found at www.wwcc.edu/admissions/residency/ and provide necessary documentation. Application for recategorization prior to registration into classes is preferred. Residency recategorization must take place within 30 calendar days of the first day of the quarter.

Students classified as non-residents will retain that status until the written application for recategorization has been approved. For more information call 509.527.4283.

### Non-Resident, U.S. Citizens

Tuition for non-resident U.S. citizens is listed online at www.wwcc.edu/tuition.

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
# ADMISSIONS AND REGISTRATION

## How to Enroll in Classes at WWCC

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<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Complete placement process. Attend New Student Orientation. Workforce Education programs: Contact the program of interest for specific entrance requirements and priority list procedures.</td>
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<tr>
<td>Students working on a degree or certificate, transferring credits from another college</td>
<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Complete placement process. Submit official transcripts from other colleges and complete a transcript evaluation form found online at <a href="http://www.wwcc.edu/traneval">www.wwcc.edu/traneval</a>. Workforce Education programs: Contact the program of interest for specific entrance requirements and priority list procedures. Attend New Student Orientation for priority registration (Walla Walla campus-required registration at <a href="http://www.wwcc.edu/nso">www.wwcc.edu/nso</a> available May 1).</td>
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<td>Students returning after an interruption in their enrollment at WWCC.</td>
<td>If less than a year interruption, submit updated information to the Office of Admissions and Registrar including verification of program of study and contact information. If a year or more, submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Complete placement process. Attend New Student Orientation for priority registration (if necessary).</td>
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<td>Students in the Running Start Program</td>
<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Complete placement process. Contact high school counselor for Quarterly Referral, Enrollment Verification Form, and transcript information. Register for and attend New Student Orientation.</td>
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<td>Students in the Alternative Education Program (AEP)</td>
<td>Enrolled high school students contact Walla Walla school administrator for an AEP referral; out-of-district applicants need a Choice Transfer release from their school district superintendent. Non-enrolled and enrolled high school students contact WWCC High School Programs Office for an AEP application. 1. Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. 2. Take or provide a college placement assessment. 3. Interview with the high school programs director. 4. Meet with an AEP advisor, register for classes, and attend a mandatory AEP orientation.</td>
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<td>Students under age 18 not enrolled in Running Start, AEP or other specific age appropriate coursework who do not have a high school diploma or equivalent.</td>
<td>Download the Underage forms online at <a href="http://www.wwcc.edu/underage">www.wwcc.edu/underage</a> or pick up at the Office of Admissions and Registration. Submit completed forms and supporting documentation to the High School Programs Office in WW or to the Clarkston Campus. Schedule appointment for student and parent/guardian for an interview and advising with the High School Programs Director, or the Director of the Clarkston campus.</td>
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<td>Students attending English as a Second Language (ESL), Adult Basic Education (ABE) or GED® preparation courses</td>
<td>Contact the Transitional Studies Department at 509.524.4808 or 509.758.3339 in Clarkston for registration information.</td>
</tr>
<tr>
<td>Students planning to take Extended Learning, Quest, Community Education</td>
<td>Extended Learning, Community Education &amp; Quest students, please contact: 509.527.4331 or email <a href="mailto:jodi.worden@wwcc.edu">jodi.worden@wwcc.edu</a>.</td>
</tr>
<tr>
<td>Students in High School Completion (HSC) who are 19 yrs of age and older</td>
<td>Submit the FREE application for admission at <a href="http://www.wwcc.edu/apply">www.wwcc.edu/apply</a>. Submit official high school transcript(s) from all high schools to the High School Programs Office. Complete placement process. Meet with High School Completion advisor for advising and registration.</td>
</tr>
<tr>
<td>International Students with F1 or F2 Visa</td>
<td>Submit International application for admission (must be completed 90 days prior to the beginning of the quarter for reporting to ICE). Submit official transcripts from secondary and post-secondary academic institutions translated into English. Submit financial affidavit of sufficient financial support for at least one year. Submit official copy of TOEFL scores (minimum Internet-based score is 61), or IELTS scores (minimum overall Band Score of 6.0). Students transferring from other U.S. institutions must provide documentation of good academic standing (2.0 GPA or better) AND verification from current US institution that the student is eligible for re-admission, financial affidavit and TOEFL/IELTS scores.</td>
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For the most current information see: [www.wwcc.edu](http://www.wwcc.edu)
**Step 2 Financial Assistance**

The Financial Aid Office at Walla Walla Community College encourages applications from all students seeking financial assistance. Financial support for students usually comes from three sources: the student, the student’s family, and financial aid programs. The Financial Aid Office is available to assist eligible students for specific college programs when their personal or family resources are not adequate to meet educational expenses. For Financial Aid information call 509.527.4301 or 509.527.4329 for Walla Walla and 509.758.1700 for Clarkston.

**Eligibility**

- Be a citizen of the United States or an eligible permanent resident.
- Have a high school diploma, or GED® certificate.
- Be enrolled in an eligible degree or certificate program offered by WWCC. Up to 45 credits of remedial coursework will be funded by financial aid if the student is accepted into an eligible program.
- Be registered with Selective Service if you are a male who is at least 18 years old, born after December 31, 1960, and not a current member of the active armed forces.
- Have financial need as determined by a federally-approved need analysis formula.
- Be in good standing on previous federal loans (not currently in default); be in good standing with previous federal or state grants (not currently in overpayment or repayment).

**How to Apply**

Students must complete and submit the Free Application for Federal Student Aid (FAFSA) and the WWCC Financial Aid Information Form. Applications are available on the web at www.fafsa.ed.gov or at www.wwcc.edu/financial-aid/.

**Deadlines**

Applications may be submitted at any time during the academic year; however, because of limited funds, the recommended application deadline for priority funding is March 1 for fall quarter enrollment. Applicants who have been admitted and have submitted all the required forms will be notified of award or denial of assistance.

A complete listing of the notification schedule for files completed can be viewed at the www.wwcc.edu/financial-aid/.

**Financial Aid Programs**

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<td>A federal grant program for students who meet federal financial eligibility criteria.</td>
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<td>Federal Supplemental Educational Opportunity Grant</td>
<td>A federal grant program for students with exceptional financial need.</td>
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<td>Washington State Need Grant</td>
<td>A Washington State program for WA resident students who meet financial eligibility criteria.</td>
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<td>State Tuition Waiver</td>
<td>A Washington State program for WA resident students with a demonstrated need.</td>
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<td>Federal Work-Study</td>
<td>A federal program which offers a job to financially qualified students. The student may work 10-15 hours per week.</td>
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<tr>
<td>State Work-Study</td>
<td>A state program which offers a job related to the student’s area of study to financially qualified students on or off campus. The student may work up to 19 hours per week depending on individual eligibility.</td>
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<td>Federal Direct Loan</td>
<td>A federal loan program with deferred repayment and variable interest rates.</td>
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<tr>
<td>Federal Perkins Loan</td>
<td>A federal loan program established to make low interest, long term loans to students who meet financial eligibility criteria.</td>
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<td>Federal PLUS Loan</td>
<td>Federal loan program for parents of dependent students. Variable interest rate with immediate repayment.</td>
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<tr>
<td>WWCC Foundation Scholarships</td>
<td>A variety of scholarships funded by the WWCC Foundation. Foundation scholarship application is available online. For more information, contact: 509.527.4275.</td>
</tr>
<tr>
<td>General Scholarship Information</td>
<td>Various scholarship applications are available at the Financial Aid office.</td>
</tr>
<tr>
<td>Athletic Scholarships</td>
<td>All athletic scholarships are awarded by the head coach of each sport.</td>
</tr>
<tr>
<td>Activity Scholarships</td>
<td>Scholarships are available through ASB clubs and organizations and various campus activities such as theater, music and art.</td>
</tr>
</tbody>
</table>
Other Financial Resources

- Bureau of Indian Affairs – available to qualified Native Americans. Information available at www.bie.edu
- Department of Vocational Rehabilitation - 509.526.2590 or 1.877.501.2233
- Veterans Administration - 509.527.1864 or 509.758.1718 in Clarkston
- WorkFirst – tuition and book assistance for qualified TANF recipients seeking training. 509.527.1865, or 509.758.1711 in Clarkston
- Basic Food Employment & Training (BFE&T) – for qualified individuals. 509.527.1865, or 509.758.1711 in Clarkston
- Worker Retraining – financial assistance to qualified dislocated workers or displaced homemakers. 509.529.1113, or 509.758.1711 in Clarkston
- Opportunity Grant – financial assistance to qualified students enrolled in high demand pathways. 509.527.4262
- Automatic Payment Plan - Call WWCC Business Services at 509.527.4204 or 509.758.3339 at the Clarkston campus for more information. Information available online at www.wwcc.edu/pay

Satisfactory Academic Progress Requirements for Financial Aid Recipients

Federal and state regulations require Walla Walla Community College to monitor the satisfactory academic progress of each student who receives financial aid. This is accomplished through a quarterly review by the Financial Aid Office before funds are disbursed to students. Satisfactory Progress means a minimum 2.0 quarterly GPA, cumulative pace of progression of 67% or higher in declared program, and the following credit completion rates:

<table>
<thead>
<tr>
<th>If you enroll as:</th>
<th>You must complete at least:</th>
<th>You will be placed on warning if you complete:</th>
<th>Aid will be suspended if you complete less than:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full time (12+ credits)</td>
<td>12 credits per quarter</td>
<td>6-11 credits per quarter</td>
<td>6 credits per quarter</td>
</tr>
<tr>
<td>¾ time (9-11 credits)</td>
<td>9 credits per quarter</td>
<td>5-8 credits per quarter</td>
<td>5 credits per quarter</td>
</tr>
<tr>
<td>½ time (6-8 credits)</td>
<td>6 credits per quarter</td>
<td>3-5 credits per quarter</td>
<td>3 credits per quarter</td>
</tr>
<tr>
<td>Less than ½ time (1-5 credits)</td>
<td>all credits enrolled for</td>
<td>total credits enrolled</td>
<td></td>
</tr>
</tbody>
</table>

Only grades of A, B, C, D, and P will count as completed credits. Grades of F, I, M, N, S, U, Q, Y, and Z do not count as completed credits.

When students withdraw or cease to attend classes, they may be required to repay financial aid funds received for that quarter. Financial aid, excluding work study, will be repaid by the student according to the Return to Title IV Funds Policy.

A copy of this policy is available from the Financial Aid Office.

Step 3 Placement Process

WWCC offers the Accuplacer placement test to assist in identifying the student's skill levels in math, reading and writing. Students must have a student identification number prior to taking the placement test. It is not a test that can be passed or failed. The “score” simply indicates the appropriate starting point for each student enrolling in core subjects. A high school transcript may be used in placement for math courses.

The Walla Walla testing schedule is available online at www.wwcc.edu/testing or at the Advising and Counseling Center. Placement testing at the Clarkston Campus is available online at www.wwcc.edu/clarkston/testing/.

Transfer students who submit official transcripts to the Office of Admissions and Registrar showing successful completion of college-level math and English with a grade of 2.0 or above are waived from taking that portion of the placement test. As part of the statewide reciprocity agreement, WWCC will accept math, reading, and writing placements from all other Washington State community and technical colleges.

Step 4 New Student Orientation

New Student Orientation sessions will be offered several times throughout the year to familiarize students with WWCC programs and degrees, education and career planning, online tools, the advising and registration process, as well as information on campus and community resources. For more information please contact the Advising and Counseling Center at 509.527.4262, or 509.758.3339 in Clarkston.

Step 5 Educational Advising & Career Exploration

WWCC provides assigned advisors to all degree seeking students. Advisors use a variety of tools and assessments to help students determine appropriate career and education plans, and develop quarterly class schedules. A quarterly advising day is set aside for students to meet with their assigned advisor to plan their schedule and review their progress toward degree completion. However, the final responsibility for meeting all graduation requirements rests with the individual student.
Career exploration courses, workshops, and individual consultations help students define their educational, personal, and career goals. A comprehensive career exploration tool is available online with a password available in the Student Development Center. Assessments relating to interest, abilities, personality, and special aptitudes are administered and interpreted by professional personnel in the Student Development Center. These assessments are specifically selected to fit the needs of the individual. Most tests are free to WWCC students. Call 509.527.4262 - Walla Walla, or 509.758.3339 - Clarkston for more information or an appointment.

**Step 6 Registration**

Registration is the process of enrolling in classes each quarter. Important dates and deadlines are published in the “Important Dates” document online at www.wwcc.edu/calendar. After completing the advising process, students will obtain a registration date and time, and a Quarterly Registration Number (QRN) from their advisor. Students are then able to register online. Students are able to make schedule changes online through the fifth day of the quarter.

Students are not allowed to attend a class unless officially registered for either credit or audit. Some classes, such as ABE, ESL, HSC, and GED®, have continuous enrollment.

Certain courses require prerequisite coursework at a minimum level of performance before a student can attend a particular class. Students who register for classes in which they have not met prerequisite requirements will be administratively withdrawn.

**Step 7 Payment**

The final step in the registration process is paying your bill. WWCC cashiers accept cash, checks, MasterCard, and Visa at Business Services or online. An automatic payment plan is available online using an SID and Quarterly Registration Number. You may set up the automatic payment plan with a bank account, MasterCard, or Discover. Information available at www.wwcc.edu/pay. Tuition and fees are usually due ten days prior to the beginning of the quarter.

Students planning to use financial aid to pay tuition will receive communication from the financial aid office when funds are available for payment. Students may track their financial aid status via the Financial Aid Portal at the WWCC website.

Students who register after the tuition due date or who pay their bill after that date will be charged a $35 registration fee.
College Academic Year

The College academic year (September to June) is divided into three quarters (fall, winter, spring) of approximately eleven weeks each. Most courses at Walla Walla Community College are offered for one quarter. Each quarter a full range of courses is available. A 7-week summer session is offered in June, July, and August when fewer courses are offered over a shorter, more concentrated time frame. Ordinarily, students must enter a course at the start of a quarter and plan to participate for the full quarter. However, students may enter certain continuously-enrolling classes at any time during the quarter with permission of the instructor. In addition, several courses are available for a mid-quarter start. Check with the Office of Admissions and Registrar to add classes. For a current College calendar please check online at www.wwcc.edu/calendar.

Credit Hours

Different courses offer different amounts of credit. Usually, the amount of credit for a course is the same as the number of hours the class meets each week. For example, a course meeting for one class hour three days a week equals three credit hours. There are some exceptions: laboratory sessions/nursing practicum/PE activity courses meet two hours for one credit. In-class time requirements of a course are not always directly reflected in the number of credits offered. The number of credits for each course is listed with the course description in the college catalog and in the quarterly class schedule. Credit hours provide an indication of the time demands of a course when considered with appropriate out-of-class preparation and study time. They are the basis for certification of successful work completed.

Transferring Credit to WWCC

Walla Walla Community College recognizes academic credits earned at other regionally accredited institutions with grades of D (1.0) or better, provided they are essentially equivalent in academic level and nature to classes offered at WWCC. Walla Walla Community College subscribes to the statewide Policy on Inter-College Transfer and Articulation among Washington Colleges and Universities endorsed by all the public and most private colleges and universities in Washington. For more detailed information, contact the Office of Admissions and Registrar 509.527.4284. To have credits evaluated, students should complete a WWCC Application for Admission and have their previous college(s) send an official transcript to the WWCC Office of Admissions and Registrar. Students fill out the Transcript Evaluation Request form available online at www.wwcc.edu/traneval, indicating the degree they are seeking and submit the online form to the Office of Admissions and Registrar.

Prior Learning Assessment (PLA)/Awarding Credit for Non-Traditional Learning

For the purposes of this section, prior learning means the knowledge and skills gained through work and life experience; through military training and experience; and through formal and informal education and training from in-state and out-of-state institutions. Prior Learning Assessment, or PLA, is a means of determining whether or not the knowledge, skills and abilities a student has gained through prior learning match the knowledge, skills and abilities a student would gain by completing a specific course. If outcomes of prior learning equal outcomes of a specific course, then credit for this non-traditional learning may be awarded.

The College supports as guidelines the principles of best practices published by the Washington State Board for Community and Technical Colleges (CTC), as well as the policies established by the Northwest Commission on Colleges and Universities. The CTC system recognizes four categories of credit for non-traditional learning listed below.

Standardized Testing - Commonly accepted higher education equivalency exams that are documented via transcript or other official record. Examples of such tests are Advanced Placement (AP); College-Level Examination Program (CLEP); DANTES Subject Standardized Tests (DSST); International Baccalaureate (IB); and Cambridge “A” Level Exam. The College accepts up to 45 credits earned through standardized testing. For scores acceptable to the College for credit, please go to www.wwcc.edu/pla.

Course Challenge - Challenge exams are sufficiently comprehensive to determine that the student has the same knowledge and skills as those students who enroll in and successfully complete the course. A student should have previous training, private study, work experience or other bona fide qualifications indicating she/he has the knowledge or abilities equivalent to course completers. Ordinarily, students will not be allowed to challenge more than one course per quarter.

Extra-Institutional Learning - Knowledge and skills acquired outside the institution and objectively verified through industry certifications, such as the NCLEX-RN; industry-recognized testing/training, such as that addressed by the American Council on Education (ACE), particularly for the military; and occupational crosswalks, such as those for police, firefighters, and AmeriCorps.

Prior Experiential Learning - Knowledge and skills acquired through experience alone, evaluated by qualified faculty via evaluation of a compilation of work. All prior learning assessment credits in this category are awarded through a prior experiential learning portfolio review, as in the HS21+ program. For college-level students, a maximum of 25% of the credits needed for degree or certificate completion may be earned through prior experiential learning assessment. Students planning to transfer should check with the receiving institution on the number of credits earned through PLA, that they will accept.

To have non-traditional learning recognized by the College, the student should consult with the Registrar in the Office of Admissions and Registrar. Please also refer to www.wwcc.edu/pla for more information.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
**College Costs**

During the 2017-2018 academic year, full-time tuition and mandatory fees are estimated to cost $4,203 for one year (15 credits per quarter for three quarters) for Washington State residents and $5,670 for out-of-state residents. Textbooks and supplies average about $1,000 per year. Room and board, personal expenses, and transportation costs for one year will vary with the individual or family. Listed below are budgets, which represent possible cost patterns for which the College may award financial aid funds after personal or family resources are deducted.

**Collection of Financial Obligations Due the College**

Walla Walla Community College, an agency of the state of Washington, is required to collect all financial obligations lawfully due the College. Business Services conducts necessary collection activities. These activities include, but are not limited to, mailed statement and demand letter, assignment of the debt, plus collection charges to collection agencies, administrative holds on academic records, and/or administrative withdrawal of privilege to attend classes.

**Student Budget 2017-2018 School Year**

<table>
<thead>
<tr>
<th>Student Budgets</th>
<th>Dependent living with parent</th>
<th>Not living with parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition &amp; Fees (est)*</td>
<td>$4,203</td>
<td>$4,203</td>
</tr>
<tr>
<td>Books &amp; Supplies</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Rent/Food/Utilities</td>
<td>$3,000</td>
<td>$9,000</td>
</tr>
<tr>
<td>Transportation</td>
<td>$1,370</td>
<td>$1,560</td>
</tr>
<tr>
<td>Misc./Personal</td>
<td>$1,671</td>
<td>$2,039</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$11,244.00</strong></td>
<td><strong>$17,802.00</strong></td>
</tr>
</tbody>
</table>

*Add $1,467 for non-resident tuition

**Refund Policy**

WWCC will refund tuition and refundable fees if official withdrawal from the college or course(s) occurs within the specified timeframe listed below.

<table>
<thead>
<tr>
<th>REFUNDS</th>
<th>WWCC will refund tuition and refundable fees if official withdrawal occurs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall, Winter, Spring</td>
<td>Up to 100% refund on or before 5th day of the quarter. Up to 40% refund from 6th day of the quarter through the first 20 calendar days.</td>
</tr>
<tr>
<td>Summer</td>
<td>Up to 100% refund on or before 4th day of the quarter. Up to 40% refund from 5th day of the quarter through the first 20 calendar days.</td>
</tr>
</tbody>
</table>

The Washington Online (WAOL) calendar for 100% refund dates may differ. There is no WAOL 40% refund period.

Refunds are handled differently for special sessions and short courses.

**Reduction of Credit Hours**

Tuition and fees may be partially refunded if students officially reduce their credit-hour load through the fifteenth calendar day of the quarter for which the fees have been paid. The refund will be based upon the credit hours remaining on the student's schedule, and the date of the drop. Refund checks/credit or debit card refunds will be processed in Business Services within approximately three weeks to the address or card given by the withdrawing student. Students who withdraw or reduce their credit-hour load and have received any form of financial aid will be required to have the refund credited to the appropriate financial aid account.

**Increase in Credit Hours**

Tuition and fees will be recalculated for every increase in credits. The tuition/fee payment is due in full to Business Services on the same day the change is made. Students are responsible for monitoring waitlisted classes which may cause an increase in credit hours, tuition, and fees.
Grading Policy

Grades and Grade Reporting
The WWCC grading system provides a permanent record of grade evaluations which reflect the student’s course achievement. Grades are available on the WWCC website approximately one week after the end of the quarter.

The following grades are used:

**Outstanding Achievement**
- A  4.0 points per credit hour
- A-  3.7 points per credit hour

**High Achievement**
- B+  3.3 points per credit hour
- B   3.0 points per credit hour
- B-  2.7 points per credit hour

**Average Achievement**
- C+  2.3 points per credit hour
- C   2.0 points per credit hour
- C-  1.7 points per credit hour

**Minimum Achievement**
- D+  1.3 points per credit hour
- D   1.0 points per credit hour

**Unsatisfactory Achievement**
- F   0.0 points per credit hour

**Grades not included in GPA calculation**
- I Incomplete – The grade of “I” may be assigned only upon the request of the student and with the concurrence of the instructor. It is given to the student who is doing passing work and has completed at least two-thirds of the course when a circumstance arises that prevents normal completion. Neither lateness in completing work nor the desire to do extra work to raise a poor grade is considered an extenuating circumstance. A student must contact their instructor and negotiate a formal agreement with the instructor specifying:
  - The work completed by the last day the student was actively involved in the course
  - The work remaining to complete the course
  - The work required to complete the course must be finished in the subsequent quarter
  - The grade to be issued if the work has not been completed by the end of the subsequent quarter

A student with an incomplete grade in a prerequisite course may enroll in subsequent course. However, the student must successfully complete the required work for the prerequisite course and replace the incomplete with a grade that meets the prerequisite requirement during the first three days of the subsequent quarter. If the student does not complete the prerequisite course in the first three days of the subsequent quarter, the College will drop the student from the current course.

If a student does not make up the incomplete grade, the instructor will submit a Grade Change Request form and the registrar will change the incomplete grade to the grade and credits agreed to in the Incomplete Grade Contract.

- N Audit – course not taken for credit (does not appear on transcript).
- P Passing – Used for short courses, workshops and where deemed appropriate by the Vice President of Instruction.
- W Withdrawal – Students finding it necessary to withdraw from a class or the College must complete an official withdrawal form and submit it to the Office of Admissions and Registrar. Withdrawals can be processed at the Office of Admissions and Registrar throughout any drop period. Students should refer to the Important Dates document to find the last day to drop. Failure to withdraw officially from classes may result in failing grades being assigned, forfeiture of any tuition and fee refund, and overpayment of veterans benefits, financial aid, etc. Students will be responsible for refunding any overpayments received. The schedule for drop deadlines for 100% refund and 40% refund appear in the Important Dates document online and in this catalog (inside front cover); Washington Online (WAOL) dates may differ.
- Y In progress – (not a final grade). Used in courses that allow enrollment on a continuous basis during the quarter. Students who enter such courses after the quarter has begun and need additional time not to exceed two subsequent and consecutive quarters may be given time to complete course requirements.
- Z No credit – student has not met minimal objectives due to documented extenuating circumstances (accident, illness, death in family, etc.). The faculty member initiates this grade. This grade is not computed in the GPA and cannot be changed unless instructor error has occurred.

**M/Q/S/U** Mastery/Qualified/Satisfactory/Unsatisfactory – Used in a limited number of courses where students will not have their work recorded on their transcripts.

Grade Exclusion Policy

A returning student submits a Grade Exclusion Request form for a review of his or her academic record with the intent of excluding grades earned at Walla Walla Community College from computation of the WWCC cumulative GPA. This policy is designed for students who had difficulties (generally characterized by grades below “C” or 2.0 GPA) in their early term(s), left WWCC, returned later and demonstrated improved academic achievement.

In order to be eligible for grade exclusion, the student must meet the following criteria:

- At least three calendar years must have passed since the student was last enrolled at WWCC;
- Grades to be excluded must have been awarded prior to the minimum years of absence;
- Completing at least 24 credits with a cumulative GPA of 2.0 or higher since returning to the College.
- Only exclusion of all grades in the quarters prior to the absence will be considered; petitions to exclude singular courses within a quarter or singular quarters will not be considered.
• Only grades earned at WWCC can be removed under this policy.
• Only one such exclusion is permitted.
• These courses and credits may not be reinstated.
• These courses and credits may not be used as prerequisites.
• These courses and credits may not apply toward degree or certificate completion requirements.

To initiate a petition for exclusion of grades, the student should complete the online Grade Exclusion/Redline Request form. After review, if the student’s petition is approved, the excluded grades will not appear on the student’s transcript and will not be used in calculating the GPA. The excluded grades, however, will remain as part of their permanent record, and a reference to the use of the grade exclusion policy will be made on the transcript.

Adding or Dropping a Course
A student may add a course online only during the first five days of classes unless the course has continuous enrollment or given written permission by the course instructor.

A student may drop a course based on the dates listed in the “Important Dates” document found online at www.wwcc.edu/calendar and on the inside front cover of this catalog. It is the student’s responsibility to initiate a drop online if within the first five days of classes or complete the designated form in the Office of Admissions and Registrar. Failure to drop a class or withdraw from school in a timely manner may disqualify a student from receiving a refund of tuition and fees and may cause the student to receive failing grades.

Grade Point Average (GPA)
The GPA indicates the general achievement of a student. It is calculated by multiplying the number of credit hours for a course attempted by the grade points assigned to the grade for that course, taking the sum of products calculated and dividing by the total credit hours attempted. The calculation does not include courses in which the student received grades I, Z, N, Y, W, S, M, Q, U or P.

Quarterly Grades
At the end of each quarter, grades are processed for each student enrolled for credit. Students may access their quarter grades and all previous grades by viewing an unofficial transcript online.

Grade Change
Once a grade has been filed with the Office of Admissions and Registrar, the grade is regarded as final. Except for the conversion of Incomplete (I) and In-Progress (Y) marks, grade changes are accepted only under restrictive circumstances. These circumstances include:

• Clerical error in transcription or recording of grade.
• Instructor error in computation.
• Decision as the result of a grievance procedure.
• Grade resulted from academic dishonesty.

At the end of each quarter, grade reports are posted for each student enrolled for credit. If an error or omission should occur on a student’s grade report, the registrar must be notified no later than the last day of the subsequent quarter; otherwise the issued grade becomes part of the student’s permanent record and should not be changed.

Repeating a Course - Grade Forgiveness
A student may request grade forgiveness when repeating any course for which a grade of “C-” or lower was received. Students must submit the online Grade Forgiveness/Repeated Class Request form to have the highest grade calculated into the WWCC grade point average. As a result of the request, the courses with the lower grade will have an “R” identifier posted next to the grade in the permanent transcript.

All courses repeated for which a grade of “C” or better was earned will remain as part of the student’s record, and an average of those grades will be reflected in the cumulative grade point average.

The course must be repeated at WWCC or the repeat will not be shown on the WWCC transcript, and the grade point average will not be recalculated. Grade forgiveness will not be granted more than twice per course.

Note: Students planning to transfer to four-year institutions should be aware that many four-year institutions have strict policies on course repeats. We recommend checking with the transfer institution before repeating a class to determine course transferability.

Students receiving financial aid or veterans benefits should consult the respective office prior to repeating a course as financial penalties may be imposed. This procedure has no effect on admission criteria and procedures established for selected program areas.

Official Transcripts
Official transcripts are kept for all students who have completed admissions procedures and registered for credit. These transcripts are permanent records of the College.

Official copies will be forwarded to other institutions or individuals upon the student’s signed request to the Office of Admissions and Registrar. Go to www.wwcc.edu/transcripts for information and ordering. Transcript services are withheld when a student has an outstanding financial obligation to the College.

Student Academic Responsibilities

1. Advising: Every student at Walla Walla Community College seeking to complete degree or program requirements is responsible for maintaining regular contact with a college advisor. All students receiving financial aid must have a college advisor.

2. Catalog Information: Every student at Walla Walla Community College is responsible for following guidelines and information provided in the WWCC catalog.

3. Course Requirements: Students at Walla Walla Community College are responsible for requirements as outlined by the instructor. This information may be included in the course syllabus.

4. Attendance: Students are expected to attend classes regularly to ensure the successful completion of coursework. Excused absences may be permitted at the discretion of the instructor for illness, official college activities, or personal emergencies. All coursework missed must be completed to

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
the satisfaction of the instructor. The student is responsible for initiating procedures for make-up work. Career and Technical Education programs may require a minimum of hours of instruction before a student can take a licensing examination. Students should check with their instructor(s) to make sure the required hours have been completed.

5. Examinations: Students must take examinations at the time scheduled by the instructor. A request to take a final examination at another time must be approved by the instructor and the Vice President of Instruction. Proctored exams may be required for online courses and must be scheduled in the Testing Center or an approved testing location.

6. Student Progress: Students must work toward completion of degrees or certificates by working with their advisors to meet their intended educational goals in a timely manner.

7. Student Rights and Responsibilities: Students must adhere to the Rules of Conduct and Procedures of Enforcement as published in the student handbook and online at: www.wwcc.edu/studenthandbook

NOTE: Students should contact the Vice President of Student Affairs for information regarding their rights and responsibilities while attending Walla Walla Community College.

**Academic Standards Policy**

**Academic Recognition**

Each quarter, the College recognizes student academic achievement for full-time students (12 credits or more exclusive of remedial courses and cooperative work experience credits) who meet the following minimum criteria:

- Achieve a 3.85 GPA for the President’s List.
- OR—

- Achieve a 3.50 GPA for the Vice President’s List.

Students with grades of I (Incomplete), Y (In-Progress), Z (No Credit), or an F are not eligible for honor roll recognition.

**Academic Warning, Probation, Suspension**

The academic warning and suspension policy is intended to promote successful learning. With this help, students will be alerted to potential problems in time to take corrective action. The following guidelines have been established to ensure academic standards are maintained:

1. At the conclusion of each quarter, the grades of all students enrolled in that quarter will be reviewed by the Vice President of Instruction.

2. Students who have attempted 10 or more credits in the quarter and whose quarterly GPA is less than 2.0 will be notified of their situation.
   - a. The first quarter in which the GPA is less than 2.0 will cause students to receive an academic warning regarding the level of their academic achievement from the Vice President of Instruction.
   - b. If students experience two consecutive quarters of work in which the GPA is less than 2.0 each quarter, they will be placed on academic probation for the following quarter of attendance.
   - c. When students fail to earn a 2.0 GPA for three consecutive quarters, they may be suspended from attendance at the College for a period of one academic quarter (exclusive of summer). They must appear before the Academic Standards Review Board to review their situation before registering for classes.

3. Any student whose GPA is under 2.0 will be referred to services provided by the College to enhance student success.

4. Students placed on academic probation or suspension may appeal to the Academic Standards Review Board for reconsideration if they feel that unusual circumstances beyond their control contributed to their low academic achievement.

5. After academic suspension of one quarter (fall, winter, spring), a student must contact the Vice President of Instruction for a hearing before the Academic Standards Review Board for re-instatement to the College. If re-admission is allowed, the student will remain on academic probation until achieving a quarterly 2.0 GPA or higher.

**Plagiarism/Cheating**

1. Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. A student must give credit to the originality of others and acknowledge indebtedness whenever:
   - a. directly quoting another person’s actual words, whether oral or written;
   - b. using another person’s ideas, opinions, or theories;
   - c. paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
   - d. offering materials assembled or collected by others in the form of projects or collections without acknowledgement.

   People’s ideas may be contained in written text, visual text, and multi-media products, including websites, music, and written text.

2. Any student who aids or abets the accomplishment of such activity as defined in subsection one (1) above shall also be subject to reasonable action by the instructor (see below).

3. An instructor may take reasonable action against any student who is deemed to have been guilty of plagiarism. Course of action might include, but not be limited to:
   - a. student receives a warning;
   - b. student receives a lowered grade;
   - c. student receives failing grade for the course;
   - d. student is dropped from course;
   - e. student is referred to the Vice President of Student Services for violation of Student Code of Conduct

4. An instructor taking action against any student for an act of academic misconduct may report such action to the Vice President of Instruction and the Vice President of Student Services as soon as possible, but no later than five working days after the incident. Any student subject to action of an instructor for a violation of this section may seek review of that action by referring to the Grievance Procedure for Instructional Issues.
Veterans Academic Progress

Persons receiving VA education benefits are subject to the following standards of progress:

All persons utilizing VA education benefits must maintain a minimum GPA to ensure continued VA support. For any quarter of study, the GPA must be 2.0 or above. A list of all grades with their respective grade points appears in this catalog under “Grading Policy.”

Persons who fail to make satisfactory progress will be placed on Academic Probation according to WWCC’s “Academic Standards Policy” located in this catalog. Persons who are placed on Academic Probation can be reinstated to regular status by earning a 2.0 GPA for the probationary quarter.

When a student fails to earn a 2.0 GPA or higher for three (3) consecutive quarters, unless successfully appealed through the Academic Standards Review Board, the individual will be terminated from receiving VA education benefits and the VA will be notified of the unsatisfactory progress. Every effort will be made to notify the VA within 30 days, although the monitoring process may take more than the allotted time.

Persons whose financial support has been discontinued for reasons of unsatisfactory progress will not be recertified for VA education benefits until satisfactory progress is maintained for the quarter in which re-admittance by the Academic Standards Review Board was allowed and they complete a meeting with their academic advisor.

Persons who receive a grade of Incomplete (I) or In-Progress (Y) must complete an Incomplete Grade Contract with the appropriate instructor and finish the incomplete in accordance with the established policy in the Registrar’s Office. If the incomplete grade is not removed by the end of the following quarter, it will be reported to the VA and will usually result in having to repay the VA a portion of the money previously received.

Full-time study is a minimum of 12 credit hours per quarter. However, a student is not required to be full-time in order to utilize VA education benefits; their award is adjusted accordingly.

Individuals cannot be certified for remedial courses offered online, audit, or other non-credit courses.

Veterans Records of Progress

Walla Walla Community College maintains adequate records to show the progress of each student receiving VA benefits. Specific procedures include the following:

- Records of withdrawals are filed and checked with the official schedule certified by the College for funding. Appropriate forms are submitted if funding levels are reduced or increased due to the schedule change.
- Records of re-enrollment for courses leading to degrees are checked against permanent records when a program change application is submitted. This ensures that all eligible persons pursue courses and programs for which they are certified.
- A cumulative transcript of progress is on file in each veteran or eligible person’s folder. Progress or lack of progress is monitored each quarter when grades are submitted for final review. The courses are double-checked with the original certification to make certain persons eligible are making progress in courses approved for funding. Transcripts of previous education and training are included with the transcript evaluation forms to show credit granted for prior educational experiences.

Graduation Process and Ceremony

Students may apply for graduation under the catalog year requirements in effect at the initial time of enrollment or any subsequent catalog year requirements, provided the student is continuously enrolled (excluding summer quarter).

Students nearing graduation must review graduation requirements with an advisor. After determining that the student will complete the coursework required, candidates must formally apply to receive their degree/certificate and to participate in the graduation ceremony. Applications are available online and at the Office of Admissions and Registrar. For individual certificate and degree requirements, please see the department section of the catalog or a degree audit for the most recent year, available online.

The June commencement is a graduation ceremony for those students who have completed or plan to complete their degree or certificate during fall, winter, or spring of the current school year, or are within 10 credits of completion, as verified by the Credentials/Graduation Evaluator. Participation is highly encouraged but not required.

Student Records (FERPA)

In accordance with the Family Educational Rights and Privacy Act (FERPA), Walla Walla Community College enforces guidelines concerning information about the student’s permanent educational record and governs the conditions of its disclosure. Exception will be made if knowledge of the information is necessary to protect the health or safety of the student or other individuals or disclosure is required by law. The information in bullets below may be released without notification to the student on a need-to-know basis, as it is representative of public directory information. The College provides additional information to military recruiters in compliance with federal Solomon Act requirements. Students who do not want their directory information released without their consent must file a quarterly, Non-disclosure Request to the Office of Admissions and Registrar.

- Student’s Name, Address (street & e-mail), and Phone Number(s)
- Field of Study
- Enrollment Status (e.g., full- or part-time)
- Athletic Information
- Dates of Attendance and Completion
- Degrees and Awards Received

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
### Associated Student Body (ASB)/Student Government

509.527.4307 Walla Walla • 509.758.3339 Clarkston  
www.wwcc.edu/asb

Selections for student body officers are held each spring. Contact the Director of Student Activities or ASB President for details. Volunteers are also needed to help ASB officers in planning student activities. Student Government is comprised of multiple Executive Officers, Executive Assistants, and a Student Senate. News and events are available at the website listed above and on Social Media: Facebook, Twitter, and Instagram.

### Basic Food Employment & Training

509.527.1865 - Walla Walla • 509.758.1708 - Clarkston

The Basic Food Employment & Training (BFE&T) program is a partnership with Department of Social and Health Services (DSHS) that provides assistance to students enrolled in Workforce Training or Adult Basic Education pathways. Program benefits include establishing and/or maintaining eligibility for Basic Food, as well as other public benefits such as Working Connections Child Care subsidy. BFE&T provides financial aid/tuition assistance, books, and other support services available on a case by case basis. BFE&T tuition assistance provides a bridge into training while other resources such as Pell grant are pending.

### Career Services

509.527.4262 - Walla Walla • 509.758.3339 - Clarkston  
www.wwcc.edu/sdc

Career assessments and surveys relating to interests, abilities, personality, and special aptitudes are administered and interpreted by professional personnel. These tests are specifically selected to fit the needs of the individual, and are free to WWCC students. WWCC also makes available Career Coach, a software program that provides information on regional occupations and educational pathways leading to those high demand positions.

### Child Care

509.527.4544 Walla Walla • 509.758.1779 Clarkston  
www.wwcc.edu/childcare

The childcare centers are open weekdays for children ages one month to five years old. Hours and costs within the operating day are flexible to accommodate varying schedules.

### Clubs & Organizations

509.527.4307 - Walla Walla • 509.758.3339 - Clarkston  
www.wwcc.edu/asb

Any group of students can form a club to promote their common interests. Currently there are over 30 clubs in Walla Walla and 8 clubs in Clarkston. Contact the Director of Student Activities for more information or visit our website.

### College Store - Warrior’s Locker

509.527.4255 - Walla Walla • 509.758.1701 - Clarkston  
collegestore.wwcc.edu

In Walla Walla, the Warrior’s Locker is open Monday-Friday from 7:30 a.m. to 4:30 pm In Clarkston, the Warrior’s Locker is open Monday-Friday from 8:00 a.m. to 4:30 pm Summer hours may vary on both campuses.

### Other services include:

- Warrior Espresso Bar & convenience store (Walla Walla)
- Apparel, logo merchandise, gifts and greeting cards
- Course Materials & supplies
- Post Office with limited services (Walla Walla)
- ASB discount event ticket outlet
- Campus Ticket Office (Walla Walla)

### Counseling

509.527.4262 - Walla Walla • 509.758.1718 - Clarkston

Walla Walla Campus – Counseling, intervention, and referral services are available to students facing personal challenges and decisions that impact their success in college. All sessions are private and confidential. This service is available at no charge to WWCC students.

Clarkston Campus – Counseling, intervention, and referral services are available to students facing personal challenges and decisions that impact their success in college. All sessions are private and confidential. This service is available at no charge to WWCC students.

### Disability Support Services

509.527.4262 - Walla Walla • 509.527.4412 TTY  
509.758.3339 - Clarkston • 509.593.5383 - VP  
www.wwcc.edu/dss

Students may request accommodations due to a disability by contacting the Coordinator of Disability Support Services (Janet Danley, Clarkston Campus). The Coordinator will issue accommodations according to the functional limitations of the disability as they relate to the course requirements. Accommodations are modifications to the instructional setting such as extended time for exams, sign language interpreters, and adjustable tables.

### Employment

Student Help/Work Study Positions  
509.524.5230 • Walla Walla • 509.758.3339 - Clarkston  
www.wwcc.edu/studentjobs

On campus and off campus student jobs are available through the co-located WorkSource office on the Walla Walla campus. Work-study positions are available to students who qualify to receive work study funds through the Financial Aid office. Other community and regional job opportunities are also posted online.

### WorkSource

509.524.5230 - Walla Walla • 509.758.1716 - Clarkston  
www.worksourcewa.com

Services include:

- Placement and referrals  
- Job listings  
- Job seeking skills  
- Self-service computers and online labor market information
Food Service
509.527.4286 - Walla Walla • 509.758.3339 - Clarkston
www.wwcc.edu/cafes

Breakfast and lunch are prepared and served on the Walla Walla campus in the Titus Creek Café, by students enrolled in the Wine Country Culinary Institute Monday through Friday between 8:00 a.m. and 1:30 p.m., when school is in session. Students and college staff may purchase meal tickets in amounts of $50, $25, or $15 at the Business Services counter.

Snake River Grounds campus café, located in the lobby in the main building on the Clarkston Campus, offers a wide variety of delicious food selections for both breakfast and lunch but their “HEART” is in their coffee. The staff strives to provide an uplifting atmosphere and are mindful of “The Power of Coffee!” and take pride in preparing every cup served. The hours of operation are Monday-Friday, 8:00 am to 2:00 pm when school is in session.

GED® Test Administration
509.527.4267 - Walla Walla • 509.758.3339 - Clarkston
www.wwcc.edu/testing

Walla Walla Community College is an official GED (General Educational Development) testing center. Students interested in the GED testing service must register for exams at www.ged.com. After successful completion of GED exams, a certificate is issued by the State of Washington for Washington residents. The GED testing fee is $30.00 per test.

Health Insurance
509.527.4300 - Walla Walla • 509.758.3339 - Clarkston
www.wwcc.edu/studentinsurance

Reduced rates are available for student injury only insurance policies through Summit America Insurance Services. Brochures are available from the cashier or information can be obtained online by visiting www.summitamerica-ins.com/wwcc. Enrollment and payment can be processed through WWCC’s Business Services Cashier or online directly through Summit America.

Honors Program
509.527.4298 - Walla Walla • 509.758.1726 - Clarkston
www.wwcc.edu/honors

The Walla Walla Community College Honors Program offers successful and highly motivated students the chance to advance both their learning and their prospects for college, scholarship, and career advancement through uniquely challenging coursework and focused activities. The program is designed to be completed within an AA/AS degree pathway. Transcripts of Honors graduates indicate their achievement by listing the specific courses they took for Honors credits. Students may enroll in the Honors Program if they enter WWCC with a 3.5 high school GPA, or if they have earned at least 15 college credits at WWCC with a 3.5 GPA.

Housing
509.527.4262 - Walla Walla • 509.758.1718 - Clarkston
www.wwcc.edu/housing

Walla Walla Community College does not have on-campus housing or a housing director. However, the Walla Walla Campus has compiled a list of local apartment complexes and various housing opportunities (i.e., roommates, rooms in private homes, etc.) and the Clarkston Campus has information on local real estate and property management firms in the Lewiston-Clarkston Valley.

Intercollegiate Athletics
509.527.4306 - Walla Walla
www.wwcc.edu/athletics

WWCC is a member of the Northwest Athletic Conference (NWAC) and the National Intercollegiate Rodeo Association, fielding a variety of men's and women's teams. Women may compete in volleyball, soccer, basketball, golf, and softball. Men may compete in basketball, baseball, soccer, and golf. Additionally, WWCC has highly successful men's and women's rodeo teams that compete throughout the Northwest.

Intramurals
509.527.4307 - Walla Walla

Intramurals is an extracurricular sports program designed for students at the Walla Walla Campus to stay active. Programming reflects a broad spectrum of activities such as flag football, basketball, volleyball, dodgeball, whiffle ball, baseball, tennis, table tennis, billiards and bowling. Information is available on the ASB website and on bulletin boards located throughout the campus.

Sports Club at Clarkston
509.758.3339 - Clarkston

The Clarkston Campus Sports Club provides students with the opportunity to pursue individual and team sports. The Club meeting schedule is announced at the beginning of every quarter.

Library
509.527.4277 - Walla Walla, 509.758.1714 - Clarkston
M-Th 7:30am-5:30pm, F 7:30am-4:00pm
www.wwcc.edu/library

Hours vary during the summer, between quarters, on no-class days, or if campus is closed due to inclement weather. Visit the Library website for current hours. Call 509-522-2500 in Walla Walla or 509-758-3339 in Clarkston for current information during closures.

The Walla Walla and Clarkston campus libraries provide comprehensive collections and services for WWCC students, faculty, and staff. Both facilities provide computers and networked printing for academic purposes; study and listening/viewing space; “interlibrary loan” borrowing privileges from libraries throughout the country; reference help; and information skills/research/library instruction. When accessing databases, current WWCC students, faculty, and staff are prompted to login with their student/staff identification number (SID). The library provides on-site and remote access to digital, web-based resources. Ask-a-Librarian 24/7 live chat service, mobile apps, and full text article/streaming video databases are available virtually anytime, anywhere. Visit the Library in person or online for more information about library services and access to resources.
In the Student Success Center, student coaches work with students who are identified as having high demand educational pathways. Counselors, advisors and completion services, Running Start, Opportunity Grant, TRiO, and the Student Success Center help students identify and address financial and personal barriers to completing their education with the development of navigation skills and advocating for students when appropriate. Some of the services provided by TRIO are:

- Academic, college/career, and personal advising
- Free one-to-one tutoring services
- Scholarship and financial aid planning/monitoring
- Transfer planning to four-year colleges, including campus visits

The program application is available at the SSS/TRiO Office or on the web at http://www.wwcc.edu/trio/application/.
Tutoring and Learning Center
509.524.5181 - Walla Walla  •  509.751-1291 - Clarkson
www.wwcc.edu/tutoring

Students who need assistance with math, science, or writing may drop-in to the Tutoring and Learning Center (TLC) to receive help from a trained tutor. No appointment is necessary, and tutoring is free and available to all students. In Walla Walla, the Tutoring and Learning Center is located on the second floor of the main building in room 244. On the Clarkson Campus, the Tutoring and Learning Center is located on the main floor. Hours are updated each quarter on the WWCC website.

Nursing tutoring is also available for first and second year nursing students in the Health Sciences building in Walla Walla and in the TLC in Clarkson.

Veterans Affairs
509.527.1864 - Walla Walla  •  509.758.1718 - Clarkson
www.wwcc.edu/vets

School Certifying Official: Norma Sandoval
norma.sandoval@wwcc.edu

A veterans education benefit specialist is located on the Walla Walla Campus to assist veterans attending both the Walla Walla and Clarkson campuses with obtaining VA Education Benefits. The main function of the Veterans Affairs office is to assist veterans/dependents/service members with the application process and to monitor usage of education benefits for compliance with Department of Veterans Affairs policies and procedures.

Veterans Benefits Approval Statement: Selected programs of study at Walla Walla Community College are approved by the Workforce Training and Education Coordinating Board’s State Approving Agency (WTECB/SAA) for enrollment of those eligible to receive benefits under Title 38 and Title 10, USC.

Walla Walla Community College does not and will not provide any commission, bonus, or other incentive payment based directly or indirectly on success in securing enrollment or financial aid to any persons or entities engaged in any student recruiting or admissions activities or in making decisions regarding the award of student financial assistance.

Compliance with VA’s 85/15 Rule: Schools should limit student enrollment to 85% veteran enrollment per cohort. In the event that a veteran wishes to enroll in a class that has already reached the 85% cap, he or she may do that but will not be eligible for VA funding. Chapter 35 and 31 students may still enroll even if the 85 percent has been realized.

WorkFirst
509.524.4790 - Walla Walla  •  509.758.1711 - Clarkson
www.wwcc.edu/workfirst

WorkFirst provides education and training services for TANF (Temporary Assistance to Needy Families) recipients. WorkFirst Financial Aid/Tuition Assistance provides tuition, books and fees for students engaged in customized job skills training, post-employment training, Transitional Studies (ABE, GED®, and ESL), and vocational/work-based training. WorkFirst Tuition Assistance provides a bridge into training while other resources such as Pell grant are pending. Assistance to apply for other funding sources is provided.

Worker Retraining
509.529.1113 - Walla Walla  •  509.758.1711 - Clarkson
www.wwcc.edu/wrt

Worker Retraining assists qualifying student enrolled in workforce training, adult basic education, or English language acquisition pathways. Eligibility categories include Unemployment Benefit recipients or those who have exhausted within the past 48 months, displaced homemakers, vulnerable or underemployed workers, formerly self-employed, and Veterans who have been discharged from the U.S. armed services within the past 48 months. Worker Retraining services include career exploration and career pathway planning, educational planning, screening for funding resources, and assistance with tuition, fees, and books while other resources such as Pell grant are pending.

Workforce Education Services (WES)
509.529.1113 - Walla Walla  •  509.758.1711 - Clarkson

Workforce Education Services (WES) provides educational and career navigation for students enrolled in workforce training pathways and/or basic education for high school completion, GED, and English language acquisition. WES programs include Basic Food Employment & Training, Perkins (one-on-one tutoring services), WISE Grant, Worker Retraining, and WorkFirst. WES services promote up-front connections to resources and ongoing support for students in workforce training pathways.

Services include:
• Career exploration and career pathway planning
• Educational planning including financial aid navigation, budgeting for college, and financial literacy
• Tuition assistance to bridge into training
• Support services available on a case-by-case basis

WSU Nursing @ WWCC

WSU offers Bachelors, Masters, and Doctoral Degrees in Nursing on-site at WWCC. The program courses are in various modalities including online and ITV.

For information on pre-requisites, admission, financial aid, or any administrative issues, please contact Karina Aispuro at WSU-Tri-Cities at (509-372-7202) or kaispuro@wsu.edu

For Information on Walla Walla area clinical placements, please contact Marcia Middleton-Kaplan at WSU-Walla Walla at 509-524-5151 or m.middleton-kaplan@wsu.edu.
Upon successful completion, the student will receive a Certificate of Educational Competence (High School Equivalency) from the Washington State Board for Community and Technical Education.

The Clarkston Campus serves the surrounding region of Asotin and Garfield counties. Over 1300 full- and part-time students are enrolled annually in the following programs:

- Associate Degree in Arts Degree (AA)—College Transfer Program. The Associate in Arts Degree serves as the first two years of a four-year Bachelor Degree. The Clarkston Campus transfers students to multiple colleges - primarily WSU, Lewis-Clark State College, and the University of Idaho through articulation agreements.
- Associate Degree in Applied Arts and Sciences (AAAS)—two-year Professional-Technical Degree in specific professional-technical programs
- One-Year Professional-Technical Certificate

Adult Learning Campus
Adult basic education (ABE) including reading, writing, and math for adults. English as Second Language (ESL) is available as evening instruction for those needing to improve their English language skills.

Associated Student Body Clubs in Clarkston
- Cultural Club
- Second-Year Nursing
- Ambassador's Club
- First-Year Nursing
- Sports Club
- Phi Beta Lambda
- TRIO
- Phi Theta Kappa
- School Newspaper

For Information Call 509.758.3339

Professional Technical Degrees
- Accounting Technology
- Business Administration with Emphasis
  - Administrative Assistant Emphasis
  - Health Information Technology Emphasis
  - Legal Information Technology Emphasis
  - Business and Management
- Plant Operations - Mechanic
- Welding

Certificates
- Bookkeeping
- Medical Transcription
- Office Assistant
- Medical Billing Specialist
- Welding

English as a Second Language
Offered to individuals whose native language is not English.

Extended Learning Opportunities
Special workshops, seminars, and short courses are offered throughout the year to meet the continuing education needs of those already employed but required to update skills necessary in their professions. Courses available include a wide variety of computer classes, first aid, flagging, nursing assistant, parenting, childcare, EMT, advanced EMT, phlebotomy, and medical lab technology; entrepreneurship workshops, and business workshops, and trades courses in welding and fabrication.

GED® Preparation
This program is designed to help students pass the four GED® tests; reasoning through Language Arts, Social Studies, Science, and the arts, and Mathematics. Spanish GED® tests are also available. The student must be a resident of Washington State, 19 years of age or older or, if between the ages 16 to 19, must have a release signed by the local high school. Upon successful completion, the student will receive a Certificate of Educational Competence (High School Equivalency) from the Washington State Superintendent of Public Instruction and the Executive Director of the Washington State Board for Community and Technical Education.

Health Science Education
509.758.1702 – Clarkston

The following Health Science Education Programs are offered on the Clarkston campus:

**Allied Health and Safety Education**
- Nursing Assistant Certificate
- Emergency Medical Technician Certificate
- Phlebotomy Certificate
- CPR, HIV/AIDS, First-Aid Certificates

**Medical Assisting**
- Medical Assisting Certificate

**Nursing**
- Associate in Nursing DTA/MPR degree which is accredited by the Accrediting Commission for Education in Nursing (ACEN).
- Optional Practical Nurse Certificate exit. Students may choose to exit at the PN level; this option is not accredited by ACEN.

**Counseling**
509.758.3341 – Clarkston

Counseling, intervention and referral services are available to students.

**Advising**
509.758.3339 – Clarkston

Advising is available to all degree- and certificate-seeking students on the Clarkston Campus. Advisors assist students using a variety of tools and assessments to determine appropriate educational and career pathways, and to develop quarterly class schedules that will lead to certificate and/or degree completion. However, the final responsibility for meeting all graduation requirements rests with the individual student. Call to schedule an appointment with an advisor.

**Childcare On-Campus**
509.758.1779 – Clarkston

The Tender Care childcare center is open weekdays, 6:30 AM to 6:30 PM, for children infant one to six years old. Hours within the operating day are flexible to accommodate varying schedules.

**Student Support Services/TRiO**
509.758.1721 – Clarkston

The Student Support Services program aims to increase student retention, graduation and transfer rates for 280 enrolled participants. Students must either be a first generation college student (neither parent has graduated from a four-year college), low income, or a student with a disability. Students must be pursuing an associate’s degree at WWCC and planning to transfer to a four-year college after completing the associate’s degree.

Some of the services provided by SSS/TRiO are:
- Personal, career, and academic advising
- Free one-to-one math and science tutorial services
- Scholarship and Financial Aid planning/monitoring
- Transfer planning to four-year colleges including campus visits
- Financial Literacy Education

The program application is available at the SSS/TRiO office or on the web at [http://www.wwcc.edu/clarkston/trio/application](http://www.wwcc.edu/clarkston/trio/application)

**Tutoring**
509.758.1291 – Clarkston

Free drop-in tutoring is available in the Tutoring and Learning Center located on the main floor, throughout the instructional
day. Individual peer tutoring for TRiO students can be arranged with the TRiO advisor.

Information
Persons interested in knowing more about the Clarkston Campus are encouraged to visit the campus located at 1470 Bridge Street, or call: 509.758.3339.

Transitional Studies
509.524.4808 or 509.527.4646 – Walla Walla
509.758.3339 - Clarkston

The Department of Transitional Studies provides a variety of program options for students who are preparing for entry into college level coursework, vocational-technical programs, and the workforce. Students are in a supportive, challenging environment that respects and honors diversity.

Transitional Studies offers a variety of courses and services to help students upgrade skills in reading, writing, communication, and mathematics. High school classes that meet Washington State graduation requirements are offered. Students may also prepare for the General Education Development (GED®) examination. Instruction in the English language for non-English speakers is available daily.

Classes are held on the main campus and at various sites throughout the College's service area. For more information, call the Transitional Studies Department 509.524.4808 or 509.527.4646 in Walla Walla and 509.758.3339 in Clarkston.

The following programs and courses are offered by the Department of Transitional Studies.

Alternative Education Program
The Alternative Education Program provides students an educational opportunity outside the traditional high school system. Selected students between 16 and 20 years of age, who have not earned a high school diploma, but have a sufficient amount of time to complete high school requirements, may be eligible to participate.

The program, which is a joint venture with the Walla Walla School District, covers the cost of tuition and books for program participants.

Washington residents who are currently enrolled in a Walla Walla high school should contact a Walla Walla High School administrator for a transfer referral and a program application. The AEP office will then schedule an interview for the student with the High School Programs Director and administrators from the Walla Walla School District to determine placement for the student. Students living outside the Walla Walla School District need to request a Choice Transfer from their superintendent.

Washington residents, whose graduation year has already past, may have been out of school for a long period of time and might like extra support in the classroom. Students test below college level in reading or math on the CASAS; may have not earned a GED® or High School (HS) diploma. HS 21+ encourages lifelong learning and prepares students to transition into I-BEST or other college programs to further training and education or to acquire family-wage jobs. On-going pre- and post-CASAS assessment is required. Class fees are $25 per quarter.

Basic Education for Adults - GED
GED® preparation classes are designed for individuals who wish to prepare for the college entrance exam or for the four subject tests included on the General Education Development (GED) Exam. Courses integrate content from the following subject areas: Reasoning through language arts-writing, science, social studies and mathematical reasoning. On-going pre- and post-CASAS assessment is required. Class fees are $25 per quarter.

English Language Acquisition
English Language Acquisition classes are offered to Limited English Proficient students to develop communication skills, function effectively in jobs, pursue a higher degree, and participate as members of the community. Course pathways include Adult High School 21+ program, GED® tests, college or current or future work. Students enrolled in IDEA (Integrated Digital English Acceleration) courses learn English and college and job skills. Classes may be taught using a team teaching model to facilitate classroom and on-line learning. On-going pre- and post-CASAS assessment is required. Class fees are $25 per quarter.

I-BEST - Integrated Basic Education Skills
Pathway training programs are designed for students to improve their English language or basic skills while earning college-level certificates or two-year degrees. In the I-BEST program, classes are team taught by one content instructor and one basic skills instructor. Students may also receive additional academic support for college courses. Each I-BEST program includes the opportunity to build reading, math and English skills through basic skills and developmental levels with the goal of reaching college level and earning work ready certificates and degrees.

I-BEST students meet at least one of the following criteria:

- Students test below college level in reading or math on the CASAS;
- Students don’t have their high school diploma or GED®;
- Students who have their high school diploma or GED® but have been out of school for a long period of time and test below college level on CASAS in reading or math, and would like extra support in the classroom.

For more information about I-BEST offerings contact 509.524.4808.

OCSUP - Occupation Support Program
Occupational Support related instruction series includes classes in communications, quantitative reasoning, mathematics, human relations, leadership, and career planning. Courses are offered as related instruction support for students completing

ADDITIONAL EDUCATIONAL OPPORTUNITIES

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

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professional technical degree and certificate training programs. Courses are designed to meet employer demand in creating a competitive, productive, innovative and disciplined workforce.

To meet the completion requirements of the AAAS degree, students are required to complete a minimum of 16 credit hours of related instruction. The Occupational Support courses are included in the related instruction requirements. Entrance Requirements: A placement test offered by the Student Development Center or instructor permission. Check the tuition and fees schedule available online.

Pre-College Studies
Courses are offered in reading, writing, college experience, and math. Coursework prepares students for success in college level courses and professional technical programs. Students are placed in the appropriate course after being assessed by ACCUPLACER in reading, and writing. Check the tuition and fee schedule available online.

eLearning
eLearning courses offer students a flexible alternative to on-campus classes. Students participate in the course at a time, and from a place most convenient to them. eLearning students can be students seeking to earn their AA Degree entirely online to those in the workplace looking to take one or two classes for career development. To look for courses available online, search the eSchedule, filtering for “eLearning” or contact your advisor.

Evening College
Evening College on the Walla Walla campus is open M-Th from 4:30-9:30 during the academic year. Many of our evening classes are offered in a hybrid format (meeting one night per week while the remainder of the course work is online) to provide students with more course options in the evening. Students needing more flexibility to attend school find they can often take two or three classes by combining both hybrid evening and online courses. Course work is available in AA Transfer, Business Transfer, and Pre-Nursing, as well as selected other degree pathways. To find available Evening Colleges courses, search the eSchedule, filtering the time for courses starting after “4:30 pm” or contact your advisor.

High School Completion & Dual Enrollment Options

High School Completion
509.527.4324 - Walla Walla  •  509.758.3339 - Clarkston

High School Completion provides another alternative for students needing to complete their high school diploma and earn dual credit. In order to enroll in the program, students must bring official transcripts from all high schools they have attended. Students must apply for admission to the College and complete the college placement assessment prior to meeting with a high school programs advisor. Washington State residents who are 19 years old or older pay reduced tuition, which may be found in the current tuition and fee schedule available online. Non-residents are eligible for this program but may be subject to paying out-of-state tuition rates. High school completion students may enroll in college-level courses or high school level courses for the credits needed for a Washington diploma. Interested applicants should call the high school programs office to make an advising appointment after submitting all high school transcripts for review.

Running Start
509.527.4262 - Walla Walla  •  509.758.3339 - Clarkston

The Running Start program provides an opportunity for juniors and seniors in public high schools to enroll in courses at WWCC. This program provides eligible students an opportunity to attend college courses and earn college credits while completing high school graduation requirements. Home-schooled and private school students must enroll in a public high school to participate in this program. Running Start students qualify by completing the placement assessment process. Once determined eligible, students must meet with their high school counselor, in addition to a WWCC advisor to identify and enroll in appropriate courses. Running Start students are required to pay quarterly fees (and additional tuition as applicable) based on a combination of their high school and college enrollment and must pay for their own textbooks. Students may qualify for fee waivers and textbook assistance by providing documentation to their Running Start advisor by the first day of the quarter.

Professional Technical - Tech Prep
509.527.1876 - Walla Walla  •  509.758.3339 - Clarkston

Tech Prep is a collaborative program between WWCC and regional high schools where students have the opportunity to earn college credits in Career and Technical Education courses offered in the high school. Participating high school instructors integrate college content into their curriculum to match Student Learning Objectives/Outcomes in each articulated course. To earn college course credit, high school students must successfully complete the course requirements with a “B or above”.

College in the High School
509.529.5553 - Walla Walla  •  509.758.3339 - Clarkston

College in the High School (CHS) allows students to take academic transfer courses for college credit while enrolled at a local high school. Through a cooperation agreement between the high school district and the college, students earn high school and college credit for the same course. High school students enrolled in CHS are officially enrolled at the partnering college. High school teachers work closely with WWCC faculty to make sure that course content, goals, ways of evaluating student learning, and instructor credentials all match those of the same course when it is taught on the college campus.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Community Connections
Agriculture Center of Excellence

The Agriculture Center of Excellence is one of ten Centers of Excellence in Washington designed to collaborate with business, industry, and the educational system to develop a highly-skilled workforce, which is critical to the success of the economy and families of Washington State. The Center serves as a resource for the creation and sharing of model curricula, educational pathways, degree/certificate programs, industry-specific skill standards, and best practices. It strives to foster a culture of cooperation within the agriculture industry and collegiate communities to develop and maintain a synergistic interconnectedness of the State’s economy, workforce development, and educational systems. www.agcenterofexcellence.com.

Business and Professional Development

Programs for Business and Professional Development are offered in the Department of Extended Learning. Education and training opportunities are provided in areas of management and personnel development to businesses, agencies, organizations, and individuals in the Walla Walla Community College District. Training is provided in the form of seminars, workshops, and online courses. Call 509.527.4331 for more information.

The Center for Enology and Viticulture

The Center was established in January 2000 to provide students with hands-on experience in growing high-quality grapes and making premium wine at commercial scale, as well as wine sales and marketing. It is home to one of the first licensed and bonded teaching wineries at a community college in the United States. The Center also houses a certified grape juice and wine testing laboratory (ETS) and culinary arts/commercial kitchen - a satellite of the College’s highly-regarded Wine Country Culinary Institute. Located near the Center is the seven-acre Stan Clarke vineyard, which has 15 different grape varieties and is used to teach viticulture management. Grapes from the vineyard make up the majority of wine produced by College Cellars.

The Center for Enology and Viticulture offers courses that allow students to earn certificates in Viticulture and in Fermentation Science, an Associate degree in Applied Arts and Sciences in Enology & Viticulture, and a transfer Associate Degree in Applied Arts and Sciences in Enology & Viticulture. Students may also choose to earn an Associate in Applied Arts and Sciences Degree in Wine Business.

Courses are tailored to meet the specific needs of the wine industry with special emphasis given to Washington grape varieties and wines. The Center also offers industry-focused short courses and seminars throughout the year to meet the educational needs of the Pacific Northwest wine industry. For current information, interested students should contact: 509.524-5170.

Community Education

Community Education is for all ages! It is a place you can take up a new hobby, study another language, get up to speed with technology, and much more. You will find learning opportunities designed to be relaxing and fun - no tests, no grades, and no credits. Here you will find Community Kitchens, Kids College, wine knowledge, health/fitness classes, social media, professional development, customer service training and continuing education. Call 509.527.4331 for more information.

Foundation

The Walla Walla Community College Foundation is an independent, institutionally related 501(c)(3) non-profit organization. Our mission is to assure access to all students and educational excellence at Walla Walla Community College. We do this by providing scholarships and emergency assistance to WWCC students, strengthening the work and services of the college, and making strategic investments to ensure that WWCC programs are “best-in-class.” The Foundation raises community support from individuals, businesses, and private foundations in order to guarantee that any student, regardless of income status, can have the chance to improve their lives through education at WWCC.

QUEST: Your Next Learning Adventure

Quest is a membership driven institute that encourages learning, socializing, and active participation in classes and activities. Through Quest you will find learning opportunities designed the way you like them - no tests, no grades and no credits. Join Quest and build friendships, develop new skills, increase your knowledge and share the journey with like-minded peers-all 50+. Call 509.527.4331 for more information.

William A. Grant Water & Environmental Center (WEC)

The William A. Grant Water & Environmental Center (WEC) is a unique college and community facility whose mission is to serve as a place where people with diverse interests and values can learn, share knowledge and work together to create a healthy and sustainable natural environment and thriving local economies. The WEC supports stakeholders working to resolve complex water and environmental issues and concerns, while also serving as a place of collaborative learning, research and stewardship.

The WEC coordinates the WWCC Watershed Ecology, Natural Resources Technology & Management, and Irrigation Technology degree programs, plus four 2+2 degree programs in natural resources that transfer to WSU. In addition, the WEC provides work, meeting space and support services for five co-located partners: Confederated Tribes of the Umatilla Indian Reservation; Sustainable Living Center; UNIBEST International; Department of Ecology Watermaster; and Walla Walla Watershed Management Partnership. The WEC also hosts meetings and events for numerous collaborating partners, and conducts collaborative community and youth education programs such as Make a Splash! and the Return to the River Salmon Festival.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

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Degrees
### Transfer Degrees Summary Chart

For all transfer options listed below, students should contact the transfer institution for any additional requirements, procedures for admission, and to determine an appropriate education plan.

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>DESCRIPTION</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate in Arts – DTA*</td>
<td>Designed to fulfill general education requirements at Washington State baccalaureate institutions.</td>
<td>90</td>
</tr>
<tr>
<td>Associate in Science – Option I</td>
<td>Designed for students majoring in biological sciences, chemistry, geology, environmental/resource science, &amp; earth science.</td>
<td>90</td>
</tr>
<tr>
<td>Associate in Science – Option II</td>
<td>Designed for students majoring in engineering, computer science, physics, &amp; atmospheric sciences.</td>
<td>90</td>
</tr>
<tr>
<td>Associate in Biology – DTA/MRP**</td>
<td>Designed to streamline and facilitate preparation for upper division coursework in Biology at many baccalaureate institutions in Washington state.</td>
<td>90</td>
</tr>
<tr>
<td>Associate in Business – DTA/MRP**</td>
<td>For students transferring to a baccalaureate institution to major in business.</td>
<td>93 or more</td>
</tr>
<tr>
<td>Associate in Math Education – DTA/MRP**</td>
<td>For students planning to major in secondary math education at a baccalaureate institution.</td>
<td>90</td>
</tr>
<tr>
<td>Associate in Nursing – DTA/MRP**</td>
<td>Completion of this degree allows a student to be eligible to take the National Council Licensure Examination-Registered Nurse (NCLEX-RN) for licensure as a Registered Nurse. Passing the NCLEX-RN exam and completion of this transfer degree provide the general education and nursing courses for direct transfer with only one additional year of study to complete the Bachelor of Science in Nursing (RN-to-BSN pathway).</td>
<td>135</td>
</tr>
<tr>
<td>Associate in Science in Electrical and Computer Science Engineering, MRP**</td>
<td>Designed to prepare students for majors in Electrical or Computer Science Engineering.</td>
<td>96-101</td>
</tr>
<tr>
<td>Associate in Science in Civil and Mechanical Engineering, MRP**</td>
<td>Designed to prepare students for majors in Civil or Mechanical Engineering.</td>
<td>100</td>
</tr>
</tbody>
</table>

*DTA stands for Direct Transfer Agreement. **MRP stands for Major Related Program.

### Associate in Applied Science-Transfer Degrees Summary Chart

AAS-T degrees are dual purpose degrees intended to prepare students for employment in specific fields and for transfer to specific baccalaureate degree programs.

AAS-T degree generally will not be accepted in transfer in preparation for bachelor degree programs in the same way the Associate degrees listed above are. While the general education component will transfer, it may not satisfy all the general education components at a baccalaureate institution. Each degree has a specific articulation with specific schools. Please see the individual department websites for information regarding articulation agreements for the degrees listed below.

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAS-T Agricultural Business</td>
<td>115</td>
</tr>
<tr>
<td>AAS-T Agricultural Business and Economics</td>
<td>100</td>
</tr>
<tr>
<td>AAS-T Agricultural Science and Technology – Food Science</td>
<td>105</td>
</tr>
<tr>
<td>AAS-T Agricultural Science and Technology – Organic Agriculture</td>
<td>110</td>
</tr>
<tr>
<td>AAS-T Agricultural Technology and Production Management</td>
<td>115</td>
</tr>
<tr>
<td>AAS-T Animal Science – Animal Management</td>
<td>108</td>
</tr>
<tr>
<td>AAS-T Animal Science – Pre-Veterinary</td>
<td>108</td>
</tr>
<tr>
<td>AAS-T Early Childhood Education</td>
<td>91</td>
</tr>
<tr>
<td>AAS-T Enology and Viticulture</td>
<td>117</td>
</tr>
<tr>
<td>AAS-T Human and Social Services</td>
<td>91-108</td>
</tr>
<tr>
<td>AAS-T Plant Operations</td>
<td>97-132</td>
</tr>
<tr>
<td>AAS-T Plant and Soil Science</td>
<td>109</td>
</tr>
<tr>
<td>AAS-T Turf Management</td>
<td>114</td>
</tr>
<tr>
<td>AAS-T Watershed Ecology – Earth Sciences</td>
<td>101</td>
</tr>
<tr>
<td>AAS-T Watershed Ecology – Environmental and Ecosystem Sciences</td>
<td>106</td>
</tr>
<tr>
<td>AAS-T Watershed Ecology – Forestry</td>
<td>96</td>
</tr>
</tbody>
</table>

Each degree includes areas of study representing the breadth requirements to be completed. By completing these courses, students will develop skills and understanding related to the College wide outcomes -- communication, critical thinking, information/technology, and community engagement -- that shape the overall objectives of each degree.
Residence Requirements
A minimum of 30 credits that apply toward the degree earned at WWCC, and;
A minimum of two (2) quarters enrolled at WWCC, and;
Last 12 credits to be earned in Professional-Technical programs at WWCC unless waived by the Vice President of Instruction. This requirement does not apply to students earning transfer degrees [Associate of Arts degrees (AA), Associate of Science-Transfer degrees (AS-T), Major Related Program Direct Transfer Agreements (MRP/DTA)].

Students who leave WWCC without a transfer degree may transfer the required remaining credits from an accredited college back to WWCC to have their degree posted. Students need to meet the above requirements and send an official transcript from the transfer college to WWCC. For more information, please contact the Office of Admissions and Registrar.

Transfer Policy and Information
Walla Walla Community College offers courses in most academic areas. These courses meet requirements for associates’ degrees and will transfer to baccalaureate institutions within guidelines established by those schools. The courses and degrees offered are designed to enable the student to make a successful transition to a baccalaureate institution. Students who plan to transfer to a specific college or university should work with a transfer advisor both at the community college and at the baccalaureate institution they plan to attend.

While the agreements with Baccalaureate institutions assure the transfer of credit, the admission to a particular university or university program is not assured. Each institution has separate admission criteria which can be based on grades, prerequisite coursework, test scores, and other considerations.

Students who plan to transfer to a university should attend a college transfer workshop, work with a community college advisor, and make early contact with their intended transfer school.

Many universities have representatives who visit WWCC. Students are encouraged to visit with these representatives when they are on campus.

Ultimately, it is the student’s responsibility to become knowledgeable about the admission and graduation requirements of the baccalaureate institution he or she plans to attend.

For more information about transfer programs, contact Advising and Counseling (509.527.4262) or the Transfer Center (509.527.3679) in Walla Walla and (509.758.1721) in Clarkston.

Reciprocity Agreement
Washington Community and Technical Colleges (CTC) offer reciprocity to students transferring within the CTC system who are pursuing the Direct Transfer Agreement (DTA) Degree or the Associate in Science-Transfer (AS-T) Degree. Students who have completed an individual course that met distribution degree requirements or fulfilled entire areas of their degree requirements at one college will be considered to have met those same requirements if they plan to complete the same degree when they transfer to another community or technical college in Washington. These degree requirements include Communication Skills, Quantitative Skills, or one or more Distribution Area requirements. Students must initiate the review process and must be prepared to provide necessary documentation. For complete information, students should contact the Vice President of Instruction or the office of Admissions and Registrar.

Wash. Reverse Articulation Program
Washington Community and Technical Colleges (CTC) have developed and adapted the following guidelines for reciprocity of transfer coursework from the Washington State Public Baccalaureates. If a student transfers an individual course that meets a Communication Skills, Quantitative Skills, or Distribution Requirement at the sending baccalaureate-granting institution for a specific bachelor’s degree, that course is considered to have met that same requirement at the receiving CTC for an associate’s degree, even if this course does not have an exact equivalent and even if the course credit is awarded through prior learning credit or completed at the 300 or 400 level.

If a student transfers an individual course that meets a Diversity Requirement at the sending baccalaureate-granting institution for a specific bachelor’s degree, that course is considered to have met that requirement at the receiving CTC for a specific associate’s degree, even if this course does not have an exact equivalent and even if the course credit is awarded through prior learning credit.

The receiving college retains the right to impose unique, local prerequisite and graduation requirements. Such requirements may include but are not limited to learning communities/coordinate studies requirements, writing-intensive course requirements, and/or physical education/health requirements.

Transfer Rights and Responsibilities
Source: www.wsac.wa.gov

Student Rights and Responsibilities
Students have the right to clear, accurate, and current information about their transfer admission requirements, transfer admission deadlines, degree requirements, and transfer policies that include course equivalencies.

Transfer and freshman-entry students have the right to expect comparable standards for regular admission to programs and comparable program requirements.

Students have the right to seek clarification regarding their transfer evaluation and may request the reconsideration of any aspect of that evaluation. In response, the college will follow established practices and processes for reviewing its transfer credit decisions.

Students who encounter other transfer difficulties have the right to seek resolution. Each Institution will have a defined process for resolution that is published and readily available to students.

Students have the responsibility to complete all materials
required for admission and to submit the application on or before the published deadlines.

Students have the responsibility to plan their courses of study by referring to the specific published degree requirements of the college or academic program in which they intend to earn a bachelor’s degree.

When a student changes a major or degree program, the student assumes full responsibility for meeting the new requirements.

Students who complete the general education requirements at any public four-year institution of higher education in Washington, when admitted to another public four-year institution, will have met the lower division general education requirements of the institution to which they transfer.

College and University Rights and Responsibilities

Colleges and universities have the right and authority to determine program requirements and course offerings in accordance with their institutional missions.

Colleges and universities have the responsibility to communicate and publish their requirements and course offerings to students and the public, including information about student transfer rights and responsibilities.

Colleges and universities have the responsibility to communicate their admission and transfer related decisions to students in writing (electronic or paper).

Transfer Agreements

Direct Transfer Agreements with Baccalaureate Institutions

The baccalaureate (four-year) colleges and universities in Washington state listed below subscribe to the Inter-college Relations Commissions (ICRC) Guidelines for Direct Transfer Agreement (DTA). The DTA associates' degrees are recognized as fulfilling most, if not all, of the general education requirements for these institutions. Students who complete a DTA will normally be granted junior standing upon admission. Students should check with their intended transfer institution for further details regarding any additional general education, major prerequisites and admission requirements. This list is subject to change. See your advisor for updated information and details of transfer.

Bastyr University  
Central Washington University  
City University  
Cornish College of the Arts  
Eastern Washington University  
The Evergreen State College  
Gonzaga University  
Heritage University  
Northwest University  
Pacific Lutheran University  
Saint Martin’s University  
Seattle Pacific University  
Seattle University  
University of Washington  
UW - Bothell  
UW - Tacoma  
Washington State University  
WSU - Tri-Cities  
WSU - Vancouver  
Western Governors University  
Western Washington University  
Whitworth College

Other Transfer Agreements

Walla Walla Community College has articulation agreements with a number of baccalaureate institutions such as Central Washington University, Eastern Oregon University, Lewis-Clark

State College, University of Idaho, Washington State University, Oregon State University, and Western Governors University. For the most accurate list of all transfer agreements, visit www.wwcc.edu/transfer or call the Transfer Center at: 509.527.4262

**Major Related Program Agreements (MRP)**

To help transfer students better prepare for the junior year, two-year and baccalaureate institutions work together to create transfer associate pathways outlining the appropriate courses for students to be well prepared to enter the major upon transfer. Major Related Program (MRP) pathways follow one of the two statewide transfer agreements - the DTA format or the Associate in Science (AS-T) format. (See Transfer Degrees Summary Chart for a list of MRP's)

**Associate in Arts Degree Requirements**

**(Direct Transfer Agreement)**

This degree is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should plan their programs at Walla Walla Community College in accordance with the requirements of the institution to which they plan to transfer.

To earn the Associate in Arts Degree (AA-DTA), a student must complete at least 90 credit hours in designated college transfer courses numbered 100 or above with a minimum college-level GPA of 2.0, and include a minimum of 63 credit hours in general education courses to fulfill the learning outcomes as described in this section.

**Important Notice**

Within the Associate in Arts Degree, 75 of the 90 credits should be fully transferrable as defined by the receiving baccalaureate institution. Transfer students should plan their degrees in accordance with the requirements of the institution to which they plan to transfer. They should also be aware that colleges within universities may have admission requirements significantly higher than the 2.0 GPA required for the AA Degree, and they may look at performance in specific classes in determining a student’s admission.

Selecting the appropriate courses in fulfilling the AA Degree saves students time and expense in completing the requirements of a bachelor's degree. Courses that are considered upper division (junior-senior level) at a baccalaureate institution may need to be repeated if taken at a community college.

Students may meet graduation requirements in the catalog current at the time of their initial enrollment, provided enrollment toward their educational objective is continuous (from quarter to quarter) during the academic years involved. Otherwise, graduation requirements will be those listed in the catalog in use at the time of graduation.

Students intending to transfer courses from professional-technical degrees should consult with a department advisor, Advising and Counseling staff, and an advisor at the baccalaureate institution where they plan to transfer.
AA-DTA Degree Requirements

Communications [C] 13 credits
*Diversity [D]
Humanities [H][HP] 15 credits
Natural Science [NS] 15 credits
Quantitative Skills [Q] 5 credits
Social Science [SS] 15 credits
Physical Education [PE] 3 credits
Electives 24 credits
AA-DTA Degree Total 90 credits

This is met through distribution areas and does not increase the # of credits required for the degree. (See Diversity Requirements)

See the AA-DTA master list of transferable courses for specific details

Important Requirements for the AA-DTA Degree

Intermediate Algebra Proficiency

All students must be proficient in intermediate algebra. This requirement may be satisfied by completion of high school mathematics through second year algebra (as determined by WWCC Math Department review of HS transcript), by course challenge or other placement examination demonstrating mastery of intermediate algebra skills, or by completion of an intermediate algebra course equivalent to MATH 78 with a minimum grade of C or a mathematics course for which intermediate algebra is a prerequisite.

Electives - 24 credits

Other college-level courses, of which a maximum of 15 credits may be in college-level as defined by WWCC and 9 credits must be fully transferable as defined by the receiving Institution (please see Master List of Transferable Courses).

Diversity Requirement for the AA-DTA

The diversity requirement is in support of the values of our college. Courses meeting the WWCC Diversity requirement are distributed throughout the General Education categories and are double-designated with other distribution requirements.

All approved “[D]” Diversity courses:
ART 124 Women Artists in History
CMST 201 Intercultural Communications
DRAM 281 Beginning Playwriting
ENGL 147 Comics as Literature
ENGL 210 Myth and Folklore
ENGL 245 American Literature
ENGL 251 Voices of Women in Literature
ENGL 265 World Literature
GWST 107 Gender Perceptions in American Films
GWST 124 Women Artists in History
GWST 180 Human Sexuality
GWST 200 Introduction to Women’s Studies
GWST 215 Women in U.S. History (formerly WST 280)
GWST 220 Gender & Society
GWST 251 Voices of Women in Literature
HIST 105 Roots of World Issues
HIST 215 Women in U.S. History
HIST 250 Introduction to Latin America
HPER 268 Diversity in Sports
HUM 107 Gender Perceptions in American Film
HUM 109 World Arts and Culture
HUM 110 Four Perspectives
MUSC 105 Music Appreciation
PHIL 103 Asian Philosophy
PHIL& 115 Critical Thinking
PSYC& 180 Human Sexuality
PSYC 205 Social Psychology
SOC& 101 Introduction to Sociology
SOC 205 Racial and Ethnic Relations
SOC 206 Social Gerontology and the Aging Revolution
SOC 208 Sociology of Intimate and Family Relations
SOC 220 Gender & Society

Course Designators For Degree Requirements

These designators are included in course descriptions to indicate which degree requirements specific courses meet.

Communications [C]
Diversity [D]
Humanities [H]
Humanities - Performing/Fine Arts [HP]
Natural Science [NS]
Quantitative Skills [Q]
Physical Education [PE]
Social Science [SS]

Note: Courses that are denoted with an “&” behind the department code are commonly shared among Washington community and technical colleges. Ex. ENGL& 101

Associate in Science Transfer Degree

The Associate in Science Transfer Degree is intended for students majoring in science who wish to transfer to baccalaureate institutions in Washington. Four different options are offered: 1) biological science, chemistry, geology, environmental/resource sciences, and earth science, 2) computer science, physics, atmospheric science, and engineering, 3) electrical and computer science engineering, or 4) civil and mechanical engineering. This degree allows students to concentrate on fulfilling pre-major coursework in their intended field of study.

A cumulative GPA of 2.0 or higher is required for successful completion of this degree.

Coursework is concentrated in specific mathematic and science requirements. Additional coursework in general education, humanities and social sciences will be required at the transfer institution. Some remaining general education requirements may be satisfied with upper division courses. Students need to meet with department advisors at the baccalaureate institution to determine an appropriate educational plan.
Associate in Applied Arts and Sciences Degree

An Associate in Applied Arts and Sciences (AAAS) Degree is designed primarily for students planning to enter a career directly upon graduation. Requirements include the following:

- A minimum of 90 quarter credits in an approved program.
- Six quarters of instruction or the instructor’s recommendation.
- Last 12 credits to be earned at WWCC unless waived by the Vice President of Instruction.
- A minimum of 30 quarter credits within the specified program must be taken in residence.
- A cumulative GPA of 2.0.
- A minimum of 16 credits in related instruction.
- Certain professional-technical programs require minimum proficiency levels and/or a minimum number of clock hours of attendance.
- Most professional-technical programs have program-specific requirements; see course sequences and degree requirements listed under each program.

Related Instruction Requirements: 16 Credits

Additional related studies courses may be developed or approved. See a current quarterly class schedule for additional information.

Courses designated as meeting related instruction requirements for certificates and degrees are listed in each professional-technical program course sequence. These courses utilize the following initials:

W = Written Communications
M = Computation/Mathematics
H = Human Relations
O = Oral Communications
J = Job Seeking Skills
L = Leadership Development

WRITTEN COMMUNICATIONS:
At least three (3) credits from the following list:

ENGL& 101 .........................English Composition
BUS 137 ...........................Business Communications
WRITE 100 ........................Applied Writing

COMPUTATION / MATHEMATICS:
Students should check with their advisor for the minimum level of computation required in their program. At least four (4) credits from the following list:

BUS 112 ............................Business Mathematics
OCSUP 105 .........................Introduction to Quantitative Problem Solving for the Trades
OCSUP 106 .........................Applied Mathematics I
OCSUP 107 .........................Introduction to Technical Mathematics
MEDA 105 ..........................Health Occupations Mathematics

HUMAN RELATIONS:
At least two (2) credits from the following list:

BUS 102 ............................Customer Service
BUS 157 ............................Human Relations in Business

OCSUP 101 ..........................Job Psychology: Workplace and Educational Success Skills
PSYC 100 ..........................General Psychology
PSYC 111 ..........................Effective Interpersonal Relationships
MEDA 114 ..........................Therapeutic Relationships
XXX 192 ............................Program Specific Cooperative Seminar I
WMT 135 ............................Cultures of Water

ORAL COMMUNICATIONS:
At least three (3) credits from the following list:

CMST& 220 ..........................Public Speaking
CMST 102 ..........................Interpersonal Communication
OCSUP 102 ..........................Oral Communication in the Workplace
CMST 201 ..........................Intercultural Communication

JOB SEEKING SKILLS:
At least three (3) credits from the following list:

AGPR 100 ..........................Orientation to Agriculture
BUS 292 ............................Business Leadership Seminar
CS 292 ..............................Cooperative Seminar II
OCSUP 103 ..........................Job Seeking Skills
PSYC 140 ..........................Career and Life Planning
EV 108 .............................Wine Industry Employment
FCA 100 ............................Introduction to Firefighting

LEADERSHIP:
At least one (1) credit from the following list:

OCSUP 299 ..........................Principles of Leadership
BUS 192 ............................Business Leadership Seminar
POLS 125, 126, 127 ..............Student Leadership
XXX 299 ............................Program Specific Leadership
CS 292 ..............................Cooperative Seminar II
MEDA 192 ..........................Medical Assisting Seminar

Certificates and Endorsements

Students who complete core courses in one year of an approved professional-technical program and nine credits of related instruction may receive a certificate upon request from the student.

A Short Program Endorsement may be provided to completers of state authorized programs upon request from the student. The authorized Short Program Endorsement requires 19 credits (or fewer) and is completed in one quarter (or fewer). Refer to the appropriate program for sequence information.

Workforce Program Information

Professional-Technical programs provide instruction in the knowledge and skills required in a wide variety of occupations. Students who plan to enter education beyond high school. Students prepare for employment by completing a two-year degree, the Associate in Applied Arts and Sciences, or by completing shorter-term certificate programs. Also offered are refresher, update, and improvement courses for students with occupational experience. Programs are taught by skilled, industry-knowledgeable instructors who are guided by industry advisory committees and state and national industry skill standards. In many fields Professional-Technical education may enhance employment opportunities.
opportunities by providing the student with the education and industry certifications desired by employers.

**Alternatives for the Transfer of Professional-Technical Programs**

Some colleges and universities offer special transfer arrangements for students in professional-technical programs to work toward a baccalaureate degree. Other alternatives for the transfer of professional-technical programs are being developed by individual colleges. Students should contact the admissions office at the baccalaureate institutions for specific details.
Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate. A minimum of 63 credits of general education/core courses is required.

Residence Requirements for Transfer Degrees:
- A minimum of 30 credits that apply toward the degree earned at WWCC.
- A minimum of two (2) quarters enrolled at WWCC.

Course Designators and Requirements
- **COMMUNICATIONS [C]**
  At least 13 credits, including one course from each of the three subject areas.
- **HUMANITIES [H] [HP]**
  A minimum of 15 credits from three different subject areas. One course must be from the English Literature courses listed under the Humanities section. Only 5 credits allowed in Modern Languages. Only 5 credits allowed in Performance/Fine Arts.
- **SOCIAL SCIENCE [SS]**
  A minimum of 15 credits from three different subject areas. One course must be from Anthropology, Psychology, Sociology, or History.
- **QUANTITATIVE SKILLS [Q]**
  5 credits. Each of these courses requires a prerequisite of Intermediate Algebra proficiency. Please see the college catalog for specific prerequisite course numbers.
- **PHYSICAL ED [PE]**
  Three (3) activity credits required. Waived for military service and by physician recommendation only. A maximum of three (3) Physical Education Activity credits are allowed in the degree.
- **NATURAL SCIENCE [NS]**
  A minimum of 15 credits from two different subject areas. One course must have a lab. Only 5 credits in Math allowed. Under Biology courses, Anatomy & Physiology, Botany, Ecology, and Zoology each count as different subject areas.
- **ELECTIVES**
  24 credits total. Nine credits must be fully transferable as defined by the ICRC* guidelines. All courses listed in the Master List of Transfer Courses meet this criteria. A maximum of 15 credits college-level/restricted elective courses allowed. Preparation courses for the major may be included in this course work. Students should consult with their advisor and intended transfer institution for transferability of courses.

© Diversity: One diversity © course is required for degree completion. Courses meeting the WWCC Diversity requirement are distributed throughout the general education categories and are double-designated with other distribution requirements.

Note: not all classes are offered every quarter.

*Intercollegiate Relations Commission

Walla Walla Community College does not discriminate on the basis of race, color, national origin, sex, disability, or age in programs and activities. Document last updated 6/17.
### My Plan

You can access your academic plan created by your advisor through MyWWCC -> Advising/Registration -> Planned Schedules. Check your degree progress via Degree Audit. Go to MyWWCC -> Academics tab -> Degree Audit.

<table>
<thead>
<tr>
<th>Arts Degree</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications [C]</td>
<td>13 Credits</td>
</tr>
<tr>
<td>Humanities [H] [HP]</td>
<td>15 Credits</td>
</tr>
<tr>
<td>Social Science [SS]</td>
<td>15 Credits</td>
</tr>
<tr>
<td>Quantitative Skills [Q]</td>
<td>5 Credits</td>
</tr>
<tr>
<td>Natural Science [NS]</td>
<td>15 Credits</td>
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<tr>
<td>Physical Activities</td>
<td>3 Credits</td>
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<tr>
<td>Electives</td>
<td>24 Credits</td>
</tr>
<tr>
<td>Diversity</td>
<td>1 Course</td>
</tr>
</tbody>
</table>

#### Course Placements:

- Reading __English
- Math ______________

#### Notes

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate. A minimum of 63 credits of general education/core courses is required.

Important Notice:
The Associate in Science Transfer (AS-T) Degree, Option I is designed to prepare students for upper division study in the areas of Biological Sciences, Environmental/Resource Sciences, Chemistry, Geology, and Earth Science. Completing the AS-T degree will prepare students for upper division study; it does not guarantee students admission to the major.

Students completing this AS-T will receive the same priority consideration for admission to the baccalaureate institution as they would for completing the Associate in Arts DTA Degree and will be given junior status by the receiving institution. Additional general education requirements, cultural diversity requirements, and foreign language requirements, as required by the transfer institution, must be met prior to the completion of a baccalaureate degree. Students need to meet with department advisors at the baccalaureate institution to determine an appropriate educational plan.

Residence Requirements for Transfer Degrees:
• A minimum of 30 credits that apply toward the degree earned at WWCC.
• A minimum of two (2) quarters enrolled at WWCC.

Course Designators and Requirements

• NATURAL SCIENCE [NS]
  30 credits required. Sequences should not be broken up between institutions.
  • Biology or Physics Sequence  • 15 credits
    Note: Some schools require calculus based Physics for the major. Consult with receiving transfer institution.
    Choose one of the following sequences:
    BIOL& 211, Majors Cellular
    BIOL& 212, Majors Animal
    BIOL& 213, Majors Plant
    or
    PHYS& 114, College Physics I
    PHYS& 115, College Physics II
    PHYS& 116, College Physics III
    or
    PHYS& 221, Engr Physics I w/Lab
    PHYS& 222, Engr Physics II w/Lab
    PHYS& 223, Engr Physics III w/Lab
    and
  • Chemistry Sequence  • 15 credits
    CHEM& 161, General Chemistry I
    CHEM& 162, General Chemistry II
    CHEM& 163, General Chemistry III
  • 10-15 credits in Physics, Geology, Organic Chemistry, Biology, or Mathematics, consisting of courses normally taken for science majors (not for general education), preferably in a 2 or 3 quarter sequence.

• COMMUNICATIONS [C]
  Minimum of 5 credits in a college-level composition course.

• QUANTITATIVE SKILLS [Q]
  At least 15 credits in courses at or above introductory calculus level (includes Introduction to Statistics).

• HUMANITIES & SOCIAL SCIENCE [H] [HP] [SS]
  • Minimum of 15 credits required. 5 credits in Humanities, 5 credits in Social Sciences, and an additional 5 credits in either Humanities or Social Sciences.
  • No more than 5 credits allowed in 100 level Modern Languages.
  • Up to 5 credits allowed in Performance/Fine Arts.
    Note: Courses taken to meet the Humanities and Social Sciences requirements in the AS-T will be accepted toward those requirements and counted as general education requirements by the receiving institution.

• PHYSICAL ED [PE]
  Three (3) activity credits required. Waived for military service and by physician recommendation only. A maximum of three (3) Physical Education Activity credits are allowed in the degree.

• ELECTIVES
  12 credits must be approved academic electives. These may include prerequisites for major courses (e.g., Pre-Calculus), additional major coursework, or specific general education or other university requirements, as approved by the advisor. 7 credits must be fully transferable as defined by the ICRC* guidelines. All courses listed in the Master List of Transfer Courses meet this criteria. A maximum of 5 credits college-level, restricted elective courses will be accepted. Students should consult with their intended transfer institution for transferability of courses.

Note: not all classes are offered every quarter.

*Intercollegiate Relations Commission
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## My Plan

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### Natural Science [NS] • 30 Credits

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<tr>
<th>Biology/Physics Sequence</th>
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### Chemistry Sequence

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<td>CHEM&amp;163</td>
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### Additional Natural Science • 10-15 Credits

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### Quantitative Skills [Q] • 15 Credits

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### Communications [C] • 5 Credits

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### Humanities and Social Science [H] [HP] [SS] • 15 Credits

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### Physical Activities • 3 Credits

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### Electives • 12 Credits

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### Course Placements:

- Reading: ___________
- English: ___________
- Math: ___________
Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate. A minimum of 63 credits of general education/core courses is required.

**Important Notice:**

The Associate in Science Transfer (AS-T) Degree, Option II is designed to prepare students for upper division study in the areas of engineering, computer science, physics, and atmospheric science. Completing the AS-T degree does not guarantee students admission to the major.

Students completing this AS-T will receive the same priority consideration for admission to the baccalaureate institution as they would for completing the Associate in Arts DTA Degree and will be given junior status by the receiving institution. Additional general education requirements, cultural diversity requirements, and foreign language requirements, as required by the transfer institution, must be met prior to the completion of a baccalaureate degree. Students need to meet with department advisors at the baccalaureate institution to determine an appropriate educational plan.

**Residence Requirements for Transfer Degrees:**

- A minimum of 30 credits that apply toward the degree earned at WWCC.
- A minimum of two (2) quarters enrolled at WWCC.

**Course Designators and Requirements**

- **NATURAL SCIENCE [NS]**
  20 credits required:
  - Physics Sequence: 15 credits. Sequence should not be broken up between institutions.
    - PHYS&114, College Physics I
    - PHYS&115, College Physics II
    - PHYS&116, College Physics III
  - or
    - PHYS&221, Engineering Physics I
    - PHYS&222, Engineering Physics II
    - PHYS&223, Engineering Physics III
  - Chemistry or Natural Science: Minimum of five (5) credits. Select course based on major. Engineering majors are required to take CHEM& 161. All courses with ✶ are non-lab.

- **HUMANITIES & SOCIAL SCIENCE [H] [HP] [SS]**
  - Minimum of 15 credits required. 5 credits in Humanities, 5 credits in Social Sciences, and an additional 5 credits in either Humanities or Social Sciences.
  - No more than 5 credits allowed in 100 level Modern Languages.
  - Up to 5 credits allowed in Performance/Fine Arts.
  - Note: Courses taken at the Community College to meet the Humanities and Social Sciences requirements in the AS-T will be accepted toward those requirements and counted as general education requirements by the receiving institution.

- **COMMUNICATIONS [C]**
  - Minimum of 5 credits in a college-level composition course.

- **QUANTITATIVE SKILLS [Q]**
  - At least 15 credits in courses at or above introductory calculus level (includes Introduction to Statistics).

- **PHYSICAL ED [PE]**
  - Three (3) activity credits required. Waived for military service and by physician recommendation only. A maximum of three (3) Physical Education Activity credits are allowed in the degree.

- **ELECTIVES**
  - 32 credits total. Credits must be approved academic electives including college-level prerequisites for major courses, additional major coursework, or specific general education university requirements, as approved by the advisor.
  - 27 credits must be fully transferable as defined by the ICRC* guidelines. All courses listed in the Master List of Transfer Courses meet this criteria.
  - A maximum of 5 credits of college-level, restricted elective courses will be accepted.
  - Students should consult with their advisor and intended transfer institution for transferability of courses.

Note: not all classes are offered every quarter.

*Intercollegiate Relations Commission

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# My Plan

You can access your academic plan created by your advisor through MyWWCC -> Advising/Registration -> Planned Schedules. Check your degree progress via Degree Audit. Go to MyWWCC -> Academics tab -> Degree Audit.

### Communications [C] • 5 Credits

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### Humanities and Social Science [H] [HP] [SS] • 15 Credits

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### Quantitative Skills [Q] • 15 Credits

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### Physics [NS] • 15 Credits

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### Natural Science [NS] • 5 Credits

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### Physical Activities • 3 Credits

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### Electives • 32 Credits

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### Course Placements:  
- Reading: ____________  
- English: ____________  
- Math: ____________  

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate.

Important Notice:
This degree may be appropriate for students planning to major in Biology at a baccalaureate institution. Baccalaureate institutions party to this agreement include: Central Washington University, Eastern Washington University, The Evergreen State College, University of Washington-Seattle, Washington State University-Pullman, Western Washington University, Saint Martin’s University, Seattle University, and Whitworth University.

Note that admission to specific upper division Biology programs may be competitive; therefore, no particular GPA can guarantee admission to any specific program. Certain schools may have additional university-specific requirements for admission to the institution that are not prerequisites specifically identified in the DTA requirements.

Specific grade requirements vary from course to course and among transfer institutions. It is strongly recommended that students contact the baccalaureate-granting institution early in the Associate in Biology DTA/MRP program to be advised about specific course choices and procedures for admission and graduation requirements.

Residence Requirements for Transfer Degrees:
• A minimum of 30 credits that apply toward the degree earned at WWCC.
• A minimum of two (2) quarters enrolled at WWCC.

Course Designators and Requirements

• COMMUNICATIONS [C]
Minimum of 10 credits in college-level composition required.

• QUANTITATIVE SKILLS [Q]
5 credits required in MATH&151, Calculus I.

• HUMANITIES [H] [HP]
A minimum of 15 credits selected from at least two different subject areas. No more than 5 credits allowed in 100 level Modern Languages. No more than 5 credits allowed from Performance/Fine Arts. No more than 10 credits allowed from any one subject area.

• SOCIAL SCIENCE [SS]
A minimum of 15 credits selected from at least two different subject areas. No more than 10 credits allowed from any one subject area.

• NATURAL SCIENCE [NS]
30 credits required. Sequences should not be broken up between institutions:
BIOL& 211, Majors Cellular
BIOL& 212, Majors Plant
BIOL& 213, Majors Animal
CHEM& 161, General Chemistry I
CHEM& 162, General Chemistry II
CHEM& 163, General Chemistry III

• ELECTIVES
15 college-level credits. These courses should be planned in consultation with an advisor. Electives allow students to include additional courses to prepare for the biology major based on college selection. Examples include a full year sequence of Organic Chemistry; a full year sequence of Physics; or further math at the Pre-Calculus level or above or Statistics.

In order to better prepare for a successful transfer, students are encouraged to consult with the institution(s) they wish to transfer regarding the Humanities and Social Science courses that best support or may be required as prerequisites to their Biology curriculum.

Students should consult with their advisor and intended transfer institution prior to taking any further biology courses beyond the one-year sequence. Some colleges require all continuing Biology courses be taken at the 300 level.

Note: Math& 146, Introduction to Statistics (a course that includes descriptive and inferential statistics) may substitute for Calculus I at some institutions; students are encouraged to check with the transfer institution early in their decision process to confirm requirements.

Note: not all classes are offered every quarter.
## My Plan

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### Communications [C] - 10 Credits

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### Quantitative Skills [Q] - 5 Credits

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### Humanities [H] [HP] - 15 Credits

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### Social Science [SS] - 15 Credits

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### Natural Science [NS] - 30 Credits

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### Electives - 15 Credits

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### Notes

Additional notes can be added here.

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**Course Placements:**

Reading _______ English _______ Math _________
ASSOCIATE IN BUSINESS DTA/MRP

Associate in Business DTA/MRP

Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate.

Important Notices:
This degree is applicable for students planning to study various business majors at universities in Washington. Baccalaureate institutions party to this agreement are: Central Washington, Eastern Washington, University of Washington (all campuses), Washington State (all campuses), Western Washington, Gonzaga, Heritage, Pacific Lutheran, St. Martin’s, Seattle, Seattle Pacific, Walla Walla University, and Whitworth.
Meeting the minimum requirements does not guarantee Business school admission. Admission for many business schools is competitive, and higher minimum GPAs, a higher GPA in a selected subset of courses, or a specific minimum grade in one or more courses such as math or English may be required.
Certain schools may have additional university-specific requirements for admission to the institution that are not prerequisites specifically identified in the DTA requirements.
It is strongly recommended that students contact the baccalaureate-granting institution early in the Associate in Business DTA/MRP program to be advised about specific course choices and procedures for admission and graduation requirements.

Residence Requirements for Transfer Degrees:
• A minimum of 30 credits that apply toward the degree earned at WWCC.
• A minimum of two (2) quarters enrolled at WWCC.

Course Designators and Requirements
• COMMUNICATIONS [C]
  10 credits in college-level composition required.
• QUANTITATIVE SKILLS [Q]
  10 credits required. Choose one course from each area:
  Group 1
  MATH115, Finite Math; MATH&141, Precalculus I; MATH&142, Precalculus II
  Note: MATH115, Finite Math is required at WSU
  Group 2
  MATH&148, Business Calculus; MATH&151, Calculus I; MATH&152, Calculus II; MATH&153, Calculus III; MATH220, Linear Algebra; MATH238, Differential Equations; MATH254, Calculus IV
• HUMANITIES [H] [HP]
  A minimum of 15 credits from at least two different subject areas. No more than 5 credits allowed in 100 level Modern Languages. No more than 5 credits allowed in Performance/Fine Arts. No more than 10 credits allowed from any one subject area.
  Note: Students intending to major in International Business should consult their potential transfer institution regarding the level of world language required for admission to the major. University of Idaho recommends one of these courses be PHIL 131, Introduction to Ethics.
• SOCIAL SCIENCE [SS]
  15 credits required. Required courses: ECON& 201, Microeconomics and ECON& 202, Macroeconomics. Additional course must be from a subject area other than Economics.
  Note: WSU requires either PSYC& 100 or SOC& 101 for the additional Social Science credits.
• NATURAL SCIENCE [NS]
  15 credits required. One course must have a lab. Required course: MATH& 146, Introduction to Statistics.
  Note: Western Washington’s Manufacturing Management major requires specific courses for admission.
• BUSINESS SPECIFIC COURSES
  20 credits required: ACCT& 201, Principles of Accounting I; ACCT& 202, Principles of Accounting II; ACCT& 203, Principles of Accounting III; BUS& 201, Business Law
  Note: Heritage, Pacific Lutheran University, Seattle University and Walla Walla University do not require a lower division Business Law course, but will accept BUS& 201 as a lower division elective, but generally not as an equivalent to the course required at the upper division.
• GENERAL ELECTIVES
  5 credits required. Students should consult with their advisor and intended transfer institution for the appropriate elective course.
  Note: Institutions have requirements for admission to the major that go beyond those specified above. Students can meet these requirements by careful selection of the elective course(s):
  WSU: COMST 102 (graduation requirement) = CMST& 220; MIS 250 (Required for admission to business major) = CS 115 & CS 110; Political Science (graduation requirement) = POLS& 101, 102, 203, or 204
  UI: COMM 101 = CMST& 220

Note: Institutions have requirements for admission to the major that go beyond those specified above. Students can meet these requirements by careful selection of the elective course(s):
WSU: COMST 102 (graduation requirement) = CMST& 220;
MIS 250 (Required for admission to business major) = CS 115 & CS 110; Political Science (graduation requirement) = POLS& 101, 102, 203, or 204
UI: COMM 101 = CMST& 220

Note: not all classes are offered every quarter.
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## My Plan

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### Communications [C] • 10 Credits

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### Quantitative Skills [Q] • 10 Credits

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### Humanities [H] [HP] • 15 Credits

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### Social Science [SS] • 15 Credits

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### Natural Science [NS] • 15 Credits

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### Business Specific Courses • 20 Credits

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### General Electives • 5 Credits

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**Course Placements:**  Reading  English  Math
ASSOCIATE IN MATH EDUCATION DTA/MRP

Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate.

Important Notice:
This degree may be appropriate for students planning to major in Secondary Math Education at a baccalaureate institution. Baccalaureate institutions party to this agreement are: Central Washington University, Eastern Washington University, Western Washington University, Washington State University-Pullman, and City University. Meeting the minimum requirements does not guarantee admission to baccalaureate programs.

Note: When a student applies for an endorsement program at the baccalaureate school, only course work in which an individual received a grade of C (2.0) or higher or a grade of pass on a pass-fail system of grading shall be counted toward the course work required for the approved endorsement program. It is strongly recommended that students contact the baccalaureate granting education program early in their Associate in Math Education DTA program to be advised about additional requirements and procedures for admission. Students must take the WEST-B in order to apply to teacher preparation programs in Washington State.

Residence Requirements for Transfer Degrees:
- A minimum of 30 credits that apply toward the degree earned at WWCC.
- A minimum of two (2) quarters enrolled at WWCC.

Course Designators and Requirements

- COMMUNICATIONS [C]
  15 credits are required in the following courses:
  ENGL& 101, English Composition I
  ENGL& 102, English Composition II
  CMST& 220, Public Speaking

- HUMANITIES [H] [HP]
  10 credits required from at least two different subject areas.
  5 credits allowed in 100 level Modern Languages. 5 credits allowed in Performance/Fine Arts classes. No more than 10 credits allowed from any one subject area.

- SOCIAL SCIENCE [SS]
  15 credits required, including PSYC& 100, General Psychology. One course must be from a discipline other than Psychology.

- QUANTITATIVE SKILLS [Q]
  25 credits required in the following courses:
  MATH& 151, Calculus I; MATH& 152, Calculus II;
  MATH& 153, Calculus III; MATH 220, Linear Algebra;
  MATH& 254, Calculus IV

- NATURAL SCIENCE [NS]
  10 credits required from at least two different subject areas excluding Math. Must include one laboratory course.

- EDUCATION CORE
  8 credits required: EDUC& 202, Introduction to Education; EDUC 111, Teaching and Learning Lab.

- ELECTIVES
  7 credits required. All courses numbered 100 or above. Courses should include preparation for the secondary Math Education major. A maximum of 3 physical education activity credits can be counted for this degree. Students should consult with their advisor and transfer institution for appropriate courses.

- Diversity: One diversity course is required for degree completion. Courses meeting the WWCC Diversity requirement are distributed throughout the General Education categories and are double-designated with other distribution requirements. Diversity courses include: HPER268 - Diversity in Sports as a elective.

Note: not all classes are offered every quarter.
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ASSOCIATE IN MATH EDUCATION DTA/MRP

You can access your academic plan created by your advisor through MyWWCC -> Advising/Registration -> Planned Schedules. Check your degree progress via Degree Audit. Go to MyWWCC -> Academics tab -> Degree Audit.

<table>
<thead>
<tr>
<th>Communications [C] • 15 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL&amp; 101 5</td>
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<table>
<thead>
<tr>
<th>Humanities [H] [HP] • 10 Credits</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Social Science [SS] • 15 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC&amp;100 5</td>
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<table>
<thead>
<tr>
<th>Quantitative Skills [Q] • 25 Credits</th>
</tr>
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<tbody>
<tr>
<td>MATH&amp;151 5</td>
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<td>MATH&amp;220 5</td>
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<table>
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<th>Education Core • 8 Credits</th>
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<tr>
<th>Electives • 7 Credits</th>
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<table>
<thead>
<tr>
<th>Diversity • 1 Course</th>
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Notes

Course Placements:  Reading ________ English ________ Math ________
Students are required to earn a minimum of 135 college-level credits with a 2.0 grade point average to graduate.

**Important Notice:**
Completion of this degree allows a student to be eligible to take the National Council Licensure Examination-Registered Nurse (NCLEX-RN) for licensure as a Registered Nurse. Passing the NCLEX-RN exam and completion of this transfer degree provide the general education and nursing courses for direct transfer with only one additional year of study to complete the Bachelor of Science in Nursing (RN-to-BSN pathway). Baccalaureate institutions party to this agreement are: Washington State University, University of Washington, Western Washington University, Bellevue College, Olympic College, Lewis-Clark State College, St. Martin’s University, and Western Governors University.

Note that admission to an RN-to-BSN program may be competitive; therefore, no particular GPA can guarantee admission to any specific program. Certain schools may have additional university-specific requirements for admission to the institution that are not prerequisites specifically identified in the DTA requirements.

**Residence Requirements for Transfer Degrees:**
- A minimum of 30 credits that apply toward the degree earned at WWCC.
- A minimum of two (2) quarters enrolled at WWCC.

**Course Designators and Requirements**

- **COMMUNICATIONS [C]**
  10 credits required, including 5 credits of college-level composition.

- **HUMANITIES [H] [HP]**
  A minimum of 15 credits selected from two different disciplines. Required coursework: 5 credits in Ethics and Policy in Healthcare. Only 5 credits allowed in Modern Languages. Only 5 credits allowed in Performance/Fine Arts.

- **SOCIAL SCIENCE [SS]**
  A minimum of 15 credits. Required coursework: PSYC&100, General Psychology; PSYC&200, Lifespan Psychology, and 5 credits in Psychosocial Issues in Healthcare.

- **QUANTITATIVE SKILLS [Q]**
  5 credits required in Math& 146, Introduction to Statistics.

- **NATURAL SCIENCE [NS]**
  A minimum of 30 credits.
  BIOL&160, General Biology
  BIOL&251, Anatomy and Physiology I
  BIOL&252, Anatomy and Physiology II
  BIOL&260, Microbiology
  CHEM&110, Chemical Concepts with Lab
  NUTR&101, Nutrition

- **ELECTIVES**
  Additional credits for this degree are satisfied upon successful completion of courses required after acceptance to the WWCC Nursing program.

  1These courses are completed as part of the core curriculum of the nursing program.
ASSOCIATE IN NURSING DTA/MRP

My Plan

You can access your academic plan created by your advisor through MyWWCC -> Advising/Registration -> Planned Schedules. Check your degree progress via Degree Audit. Go to MyWWCC -> Academics tab -> Degree Audit.

### Communications [C] • 10 Credits

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ENGL&amp; 101</td>
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### Humanities [H] [HP] • 15 Credits

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<tr>
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<th>Credits</th>
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<tbody>
<tr>
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<tr>
<td><em>Ethics &amp; Policy In Healthcare</em> 5</td>
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### Social Science [SS] • 15 Credits

<table>
<thead>
<tr>
<th>Course</th>
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<th>Grade</th>
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</thead>
<tbody>
<tr>
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### Quantitative Skills [Q] • 5 Credits

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### Natural Science [NS] • 30 Credits

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<td>NUTR&amp; 101</td>
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### Courses Completed in Nursing Program • 60 Credits

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<tbody>
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<td>NURS 110</td>
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<td>NURS 200</td>
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<td>NURS 101</td>
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<tr>
<td>NURS 111</td>
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<td>NURS 201</td>
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<td>NURS 202</td>
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<tr>
<td>NURS 212</td>
<td>4</td>
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</table>

*Course Completed in Nursing Program

### Notes

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### Course Placements:

Reading _______  English _______  Math _______
Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate.

Important Notice:
This Associate in Science is designed to prepare students for upper division study in Electrical and Computer Science Engineering. Completing this degree will prepare students for upper division study; it does not guarantee students admission to the major. Baccalaureate institutions party to this agreement are: University of Washington Seattle, Washington State University, Eastern Washington University, Gonzaga University, Saint Martin's University, Seattle Pacific University, Seattle University, and Walla Walla University.
Additional general education requirements, cultural diversity requirements, and foreign language requirements, required by the transfer institution, must be met prior to completion of a baccalaureate degree. Students need to meet with department advisors at the baccalaureate institution to determine an appropriate educational plan.

Residence Requirements for Transfer Degrees:
• A minimum of 30 credits that apply toward the degree earned at WWCC.
• A minimum of two (2) quarters enrolled at WWCC.

Course Designators and Requirements
• NATURAL SCIENCE [NS]:
  20 credits required. Sequences should not be broken up between institutions.
  PHYS&221, Engr Physics I w/Lab
  PHYS&222, Engr Physics II, w/Lab
  PHYS&223, Engr Physics III, w/Lab
  CHEM&161, General Chemistry I

• QUANTITATIVE SKILLS [Q]:
  25 credits in the following courses:
  MATH&151, Calculus I; MATH&152, Calculus II; MATH&153, Calculus III; MATH220, Linear Algebra; MATH238, Differential Equations

• COMMUNICATIONS [C]
  5 credits in a college-level composition course required.

• HUMANITIES & SOCIAL SCIENCE [H] [HP] [S]
  A minimum of 15 credits required. 5 credits in Humanities, 5 credits in Social Sciences, and an additional 5 credits in either Humanities or Social Sciences. No more than 5 credits allowed in 100 level Modern Languages. Up to 5 credits allowed in Performance/Fine Arts.
  A course in Economics is recommended.
  Note: Courses must meet the ICRC* distribution list of Humanities and Social Science requirements to count toward those requirements and counted as GERs/GURs by the receiving institution.

• PRE-MAJOR REQUISITES
  12 credits required
  ENGR 202, Design of Logic Circuits; ENGR&204, Electrical Circuits, ENGR205, Electrical Circuits Lab

• ELECTIVES
  20-25 credits
  Select elective courses as appropriate for intended major and intended baccalaureate institution. Options include: CS&131, Computer Science I C++; CS&141, Computer Science I JAVA; ENGR&104, Intro to Design; ENGR240, Applied Numerical Methods; MATH&254, Calculus IV

Note: not all classes are offered every quarter.

* Intercollegiate Relations Commission
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# A.S. IN ELECTRICAL AND COMPUTER SCIENCE ENGINEERING, MRP

## My Plan

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### Communications [C] • 5 Credits

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
<th>GRADE</th>
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### Humanities and Social Science [H] [HP] [SS] • 15 Credits

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### Quantitative Skills [Q] • 25 Credits

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<th>GRADE</th>
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</table>

### Physics [NS] • 15 Credits

<table>
<thead>
<tr>
<th>COURSE</th>
<th>CREDITS</th>
<th>GRADE</th>
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### Chemistry [NS] • 5 Credits

<table>
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<th>COURSE</th>
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<th>GRADE</th>
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### Pre-Major Requisites • 12 Credits

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### Electives • 20-25 Credits

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<th>CREDITS</th>
<th>GRADE</th>
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</table>

### Notes

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### Course Placements:
- Reading ____________  
- English ____________  
- Math ____________  

---

**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
ASSOCIATE IN SCIENCE IN CIVIL AND MECH. ENGINEERING MRP

Associate in Science in Civil and Mechanical Engineering, MRP

Students are required to earn a minimum of 90 college-level credits with a 2.0 grade point average to graduate.

Important Notice:
This Associate in Science is designed to prepare students for upper division study in Civil and Mechanical Engineering. Completing this degree will prepare students for upper division study; it does not guarantee students admission to the major. Baccalaureate institutions party to this agreement are: University of Washington Seattle, Washington State University, Eastern Washington University, Gonzaga University, Saint Martin's University, Seattle Pacific University, Seattle University, and Walla Walla University. Additional general education requirements, cultural diversity requirements, and foreign language requirements, required by the transfer institution, must be met prior to completion of a baccalaureate degree. Students need to meet with department advisors at the baccalaureate institution to determine an appropriate educational plan.

Residence Requirements for Transfer Degrees:
• A minimum of 30 credits that apply toward the degree earned at WWCC.
• A minimum of two (2) quarters enrolled at WWCC.

Course Designators and Requirements
• NATURAL SCIENCE [NS]:
  25 credits required. Sequences should not be broken up between institutions.
  PHYS&221, Engr Physics I w/Lab
  PHYS&222, Engr Physics II, w/Lab
  PHYS&223, Engr Physics III, w/Lab
  CHEM&161, General Chemistry I
  CHEM&162, General Chemistry II
• QUANTITATIVE SKILLS [Q]:
  25 credits in the following courses:
  MATH&151, Calculus I; MATH&152, Calculus II; MATH&153, Calculus III;
  MATH220, Linear Algebra; MATH238, Differential Equations
• COMMUNICATIONS [C]
  5 credits in a college-level composition course, required.
• HUMANITIES & SOCIAL SCIENCE [H] [HP] [S]
  A minimum of 15 credits required. 5 credits in Humanities, 5 credits in Social Sciences, and an additional 5 credits in either Humanities or Social Sciences. No more than 5 credits allowed in 100 level Modern Languages. Up to 5 credits allowed in Performance/Fine Arts.
  A course in Economics is recommended.
  Note: Courses must meet the ICRC* distribution list of Humanities and Social Science requirements to count toward those requirements and counted as GERs/GURs by the receiving institution.
• PRE-MAJOR REQUISITES
  15 credits required
  ENGR&214, Statics; ENGR&215, Mechanics of Materials;
  ENGR&225, Dynamics
• ELECTIVES
  15 credits
  Select elective courses as appropriate for intended major and intended baccalaureate institution. Options include:
  CS&131, Computer Science I C++; ENGR&104, Intro to Design; ENGR240, Applied Numerical Methods; ENT122, Advanced Computer Aided Design & 3-D Modeling;
  MATH&254, Calculus IV

Note: not all classes are offered every quarter.

* Intercollegiate Relations Commission

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<thead>
<tr>
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<tbody>
<tr>
<td>COURSE</td>
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<td>MATH&amp; 152</td>
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<tr>
<td>COURSE</td>
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<th>Pre-Major Requisites • 15 Credits</th>
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<td>ENGR&amp; 225</td>
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<th>Electives • 15 Credits</th>
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<td>COURSE</td>
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<td>COURSE</td>
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## Notes

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## Course Placements:  
Reading _________  English _________  Math _________
How to use this guide

Refer to this guide when selecting courses to fulfill specific requirements for your transfer degree. For instance, when the degree requires a Humanities course, go to the “Humanities [H]” and/or the “Humanities/Performing Arts [HP]” sections for courses that qualify.

This Master List of Transfer Courses is applicable for the following degrees:

- Associate in Arts – DTA¹
- Associate in Science, Option I
- Associate in Science, Option II
- Associate in Science, Civil & Mechanical Engineering MRP²
- Associate In Science, Electrical & Computer Science Engineering MRP²
- Associates in Biology – DTA¹/MRP²
- Associates in Business – DTA¹/MRP²
- Associates in Math Education – DTA/MRP²
- Associates in Nursing – DTA¹/MRP²

The Symbols

- Diversity Course. These courses meet the WWCC Diversity Requirement and are distributed throughout the general education categories and are double-designated with other distribution requirements.

- Cross-Listed Course. This course is listed under two or more subject areas. For example: HIST& 1 16, Western Civilization can count as either a Humanities course or a Social Science course. Once a cross-listed course has been successfully completed, it may only be credited towards one subject area.

- Evening Course: These courses may also be offered in the evening for flexible learning options*.

- Online Course: These courses may also be offered online*.

- Common Course: These courses share the course number and title with other Washington State Community and Technical Colleges and transfer seamlessly between institutions.

- Non-Lab Science course. * Note: not all classes are offered every quarter.

¹ Direct Transfer Agreement • ² Major Related Pathway

Information is subject to change. See wwcc.edu/schedule for the most current courses. Document updated 6/17.

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<tr>
<td>ENGL 102</td>
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**Communication Studies**

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<td>CMST 201</td>
<td>Intercultural Communication</td>
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<td>CMST 220</td>
<td>Public Speaking</td>
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**Humanities [H] / Performance & Fine Arts [HP]**

**Art**

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<td>ART&amp; 100</td>
<td>Art Appreciation</td>
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<td>ART 124</td>
<td>Women Artists in History</td>
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<tr>
<td>ART 129</td>
<td>History of Western Art III</td>
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**Dance**

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<tbody>
<tr>
<td>Dance 105</td>
<td>Dance Appreciation</td>
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**Drama**

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<tr>
<td>DRMA&amp; 101</td>
<td>Introduction to Theatre</td>
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<td>DRMA 281</td>
<td>Beginning Playwriting</td>
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**English Literature**

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<td>ENGL&amp; 112</td>
<td>Introduction to Fiction</td>
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<td>ENGL&amp; 113</td>
<td>Introduction to Poetry</td>
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<td>ENGL 115</td>
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<td>ENGL 118</td>
<td>Baseball Lit &amp; American Culture</td>
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<td>Introduction to Film</td>
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<td>Comics as Literature</td>
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<td>ENGL 149</td>
<td>Classic Children's Literature</td>
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<td>Myths &amp; Folklore</td>
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<td>African-American Literature</td>
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**History**

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<td>HIST&amp; 126</td>
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**Humanities**

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<td>HUM 107</td>
<td>Gender Perc. in American Films</td>
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<td>HUM 109</td>
<td>World Arts &amp; Culture</td>
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<td>HUM 110</td>
<td>Four Perspectives</td>
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<td>Humanities II: Medieval World</td>
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<td>HUM&amp; 118</td>
<td>Humanities III: The Modern World</td>
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**Modern Languages**

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<tr>
<td>SPAN&amp; 121/122/123</td>
<td>Spanish I, II, III</td>
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**Music**

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<td>Music Appreciation</td>
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<tr>
<td>MUSC 110</td>
<td>History of American Music</td>
<td>5</td>
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<tr>
<td>MUSC&amp; 141/142/143</td>
<td>Music Theory I, II, III</td>
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**Performance/Fine Arts [HP]**

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<td>Design I, II</td>
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<td>ART 115</td>
<td>Drawing for Farri er Science</td>
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<tr>
<td>ART 130/131/132</td>
<td>Painting I, II, III</td>
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<td>ART 230</td>
<td>Painting IV</td>
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<td>DRMA 151/152/153</td>
<td>Beg Acting I, II, III</td>
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<td>DRMA 251/252/253</td>
<td>Int Acting I, II, III</td>
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<td>DRMA 290/291/292</td>
<td>Play Prod IV, V, VI</td>
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<td>Jazz Combo I, II, III</td>
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<td>MUSC 161/162/163</td>
<td>Vocal Ensemble I, II, III</td>
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<td>MUSC 216/217/218</td>
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**Philosophy**

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<td>Social and Political Philosophy</td>
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**Gender and Women's Studies**

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<td>Women Artists in History</td>
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### Quantitative Skills/Reasoning [Q]

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### Symbolic Reasoning

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**Optional Transferable Electives**

- BUS& 201 Business Law I .................. 5
- CS 115 Intro to Computer & Information Technology .... 5
- CS& 131 Computers Science I C++ .................. 5
- CS& 141 Computer Science I JAVA .................. 5
- EDUC 111 Teaching and Learning Lab ................ 1-3
- EDUC& 115 Child Development .................. 5
- EDUC& 203 Exceptional Child ........................ 3
- ENGR& 111 Engineering Graphics I ................ 1-4
- ENGR 202 Design of Logic Circuits ................ 6
- ENGR& 204 Electrical Circuits .................. 5
- ENGR 205 Electrical Circuits Lab .......................... 2
- ENGR& 214 Statics ................................ 5
- ENGR& 215 Dynamics ................................ 5
- ENGR& 225 Mechanics of Materials .......................... 5
- ENGR 240 Applied Numerical Methods .................. 5
- HPER 264 Stress Management C .................. 3
- HPER 267 Outdoor Recreation ........................ 5
- HPER 268 Diversity in Sports ........................ 5
- HPER 274 Personal & Community Health & Hygiene ............. 5
- HESS 101 Intro to Human Services .................. 5
Accounting Technology

CERT, AAAS

http://wwcc.edu/accounting

Francis Lyons  509.527.4234  francis.lyons@wwcc.edu
Joe Cooke  509.527.4235  joseph.cookejr@wwcc.edu
Linda Lane-Clk  509.758.1724  linda.lane@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [50% Online]

Department Overview: Accounting Technology has a broad focus that emphasizes the skills required for a successful career in accounting or bookkeeping. Students take a variety of courses in subjects such as financial accounting, payroll accounting, tax accounting, and managerial accounting. Students also become proficient with several computer accounting systems. Select courses are available through distance learning. The Accounting Technology curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Program completers will demonstrate technical competency in core ability and related instruction curriculum components.
- Student and employer satisfaction will reflect a high degree of self-esteem, self-confidence and the potential to grow within that job or business.
- Students completing the AAAS degree will become employed in a living wage job, with benefits.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Accounting Technology upon completion of a two-year program of study. A Bookkeeping Certificate is also available.

Industry Description: Accounting is an extensive subject with many components, such as financial accounting, tax accounting, cost accounting, and governmental accounting. Every organization has a need for accountants and bookkeepers to pay employees, file tax returns, and report to governmental agencies. This profession consequently has many and varied job opportunities for trained personnel. Due to recent shifts in the labor industry, a shortage of trained accountants has developed. This trend combined with changes in tax laws and increased disclosure requirements have generated an increased value placed upon people in the business world that have accounting skills.

Entrance Requirements: Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees and Certificates

Bookkeeping Certificate

This certificate prepares the student to compute, classify, record, and verify numerical data in order to develop and maintain financial records.

Certificate available at/via: [Walla Walla] [Clarkston] [50% Online]

Certificate Outcomes:

- Possess the skills needed to secure and maintain entry-level employment as accounting and payroll clerks.
- Accurately prepare payroll and related federal and state tax returns.
- Possess proficiency using the 10-key calculator.
- Understand and practice professional work habits expected in the accounting field, including confidentiality and accounting ethics.
- Be able to correctly complete the basic bookkeeping processes according to Generally Accepted Accounting Principles.
- Acquire proficiency using computer software, including MS Word, MS Excel, MS Access, and computerized accounting software.
- Demonstrate the ability to communicate orally and in writing at a level necessary for successful employment in the accounting field.
- Demonstrate critical thinking skills needed to prioritize, anticipate and analyze problems, and to evaluate and implement solutions.
- Possess an understanding and practice of human relations, diversity, and teamwork skills related to the accounting field.

YEAR ONE

Quarter One Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 125, Word Processing Applications *</td>
<td>5</td>
</tr>
<tr>
<td>BUS 136, Business Communications I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Quarter Two Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 126, Advanced Word Processing Applications *</td>
<td>5</td>
</tr>
<tr>
<td>BUS 137, Business Communications II (W)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 218, Desktop Calculator *</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>25</strong></td>
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Quarter Three Credits

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>ACCT 115, Integrated Computer Applications for Accounting</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 175, Payroll Accounting</td>
<td>5</td>
</tr>
<tr>
<td>BUS 217, Computer Software Applications</td>
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<td><strong>Grand Total</strong></td>
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</tbody>
</table>

EPC: 505A

*Or equivalent OT course

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(W) - BUS 137  (M) - BUS 112  (R) - BUS 157

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Associate in Applied Arts and Sciences Degree in Accounting Technology

This technical degree prepares the student to enter the business world in a variety of private and public accounting occupations. The program is also designed for the individual who is interested in improving their current accounting or bookkeeping skills.

Degree available at/via: [Walla Walla] [Clarkston] [50% Online]

Degree Outcomes:

- Possess the skills needed to secure and maintain entry-level employment as accounting clerks, payroll clerks, full-charge bookkeepers, income tax preparers, and general ledger accountants.
- Accurately prepare payroll and related federal and state tax returns.
- Accurately prepare basic federal income tax returns.
- Possess proficiency using the 10-key calculator.
- Understand and practice professional work habits expected in the accounting field, including confidentiality and accounting ethics.
- Be able to correctly complete accounting processes according to Generally Accepted Accounting Principles, using manual and computerized accounting software, prepare financial statements, and create various entry-level managerial reports.
- Effectively read and interpret financial statements.
- Understand the basic legal issues pertaining to the accounting field.
- Acquire proficiency using computer software, including MS Word, MS Excel, MS Access, and computerized accounting software.
- Be able to research business and accounting information using printed materials, electronic media, and the Internet.
- Demonstrate the ability to communicate orally and in writing at a level necessary for successful employment in the accounting field.
- Demonstrate critical thinking skills needed to prioritize, anticipate and analyze problems, and to evaluate and implement solutions.
- Possess an understanding and practice of human relations, diversity, and teamwork skills related to the accounting field.

Transferability: The AAAS degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101, Intro to Business</td>
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<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
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<th>Quarter Two</th>
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<tr>
<td>ACCT&amp; 202, Principles of Accounting II</td>
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</tr>
<tr>
<td>BUS 125, Word Processing Applications *</td>
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<tr>
<td>BUS 136, Business Communications I</td>
<td>5</td>
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<tr>
<td>CS 110, Introduction to Computers and Applications</td>
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YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
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</thead>
<tbody>
<tr>
<td>ACCT 204, Intermediate Accounting I</td>
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</tr>
<tr>
<td>ACCT 216, Principles of Income Tax</td>
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<td>BUS 157, Human Relations in Business (R)</td>
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<td>ACCT 209, Cost Accounting</td>
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<td>BUS 192, Business Leadership Seminar I (L)</td>
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<tbody>
<tr>
<td>ACCT 115, Integrated Computer Applications for Accounting</td>
<td>5</td>
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<tr>
<td>ACCT 175, Payroll Accounting</td>
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</tr>
<tr>
<td>BUS 292, Business Leadership Seminar II (U)</td>
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</tr>
<tr>
<td>BUS 291, Co-op Work Experience</td>
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<td><strong>Total Credits</strong></td>
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| Year Two Total       | 43-46   |
| Grand Total          | 103-106 |

Program available at/via: [Walla Walla] [Clarkston]

**Department Overview:** Adult Basic Education offers a variety of courses and programs designed to build skills in reading, writing, oral communication, critical thinking, technology, and mathematics so adults can transition to workforce training or academic transfer programs. Students are prepared to earn Adult High School 21+ Diploma or General Education Development (GED®) and/or increase English Language Skills. Adult Basic Education programs allow students with High School credentials to prepare for a successful transition to college-level courses and to develop the behaviors and values relevant to success in higher education and in the labor market.

**HS21+** is a competency-based high school diploma designed for adult learners (21 and older) who do not have a GED® or high school (HS) diploma. HS21+ encourages lifelong learning and prepares students to transition into I-BEST or other college programs to further training and education or to acquire family-wage jobs.

GED® preparation classes are designed for individuals who wish to prepare for the college entrance exam or for the four subject tests

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
I-Best students meet at least one of the following criteria:

- Students tests below college level in reading or math on the CASAS
- Students don't have their high school diploma or GED®
- Students who have their high school diploma or GED® but may have been out of school for a long period of time and test below college level on CASAS in reading or math, and would like extra support in the classroom.

**Program Level Outcomes:** Upon successful completion of program, the students:

- Demonstrate academic reading, math, and written and oral communication skills through the development of critical thinking and comprehension strategies.
- Recognize themselves as learners and citizens capable of accomplishing their academic and professional goals and contributing to the larger community.
- Engage in campus activities, utilize campus resources, and demonstrate the ability to transition to and navigate academic and professional environments.
- Demonstrate an increase in computer literacy and proficiency in using technology for academic and professional purposes.
- Use interpersonal skills and strategies in a multicultural context.

**Entrance Requirements:** Students may register any time during the quarter and there is a $25 fee per quarter.

---

**Adult Basic Education/ELA**

[http://wwcc.edu/ela](http://wwcc.edu/ela)

Sonja Sanders-Clk 509.758.1708  sonja.sanders@wwcc.edu
Courtney Kress Van Slyke 590.527.4230  courtney.kressvanslyke@wwcc.edu

**Program available at/via:** [Walla Walla] [Clarkston]

**Department Overview:** English Language Acquisition (ELA) classes are offered to limited English proficient students to develop communication skills, function effectively in jobs, pursue a higher degree, and participate as members of the community. Course pathways include Adult High School 21+ program, GED® tests, college, or current or future work. Students enrolled in IDEA (Integrated Digital English Acceleration) courses learn English and college and job skills. Classes may be taught using a team teaching model to facilitate classroom and on-line learning. Ongoing pre- and post-CASAS assessment is required.

**Program Level Outcomes:** Upon successful completion of program, the students will:

- Demonstrate academic reading, math, and written and oral communication skills through the development of critical thinking and comprehension strategies.
- Recognize themselves as learners and citizens capable of accomplishing their academic and professional goals and contributing to the larger community.
- Engage in campus activities, utilize campus resources, and demonstrate the ability to transition to and navigate academic and professional environments.
- Demonstrate an increase in computer literacy and proficiency in using technology for academic and professional purposes.
- Use interpersonal skills and strategies in a multicultural context.

**Entrance Requirements:** Students are placed by CASAS in Levels I through V. Registration takes place in room 203, Transitional Studies Reception. Students may register any time during the quarter. There is a $25 fee per quarter.

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**Agriculture - Ag-Business**

CERT, AAS-T, AAAS, AA-DTA, AA

[http://wwcc.edu/agbusiness](http://wwcc.edu/agbusiness)

Debora Frazier 509.527.4689  debbie.frazier@wwcc.edu

**Program available at/via:** [Walla Walla] [50% Online]

**Department Overview:** The Agriculture program offers several degree tracks for students which include Ag Business, Animal Science, Plant and Soil Science, and Precision Ag. Certificate, Associate in Applied Arts and Sciences degrees (AAAS) and transfer options are available.
Ag-Business combines knowledge and skills from the fields of general agriculture and business administration to prepare students for the management functions involved with the production and marketing of agricultural commodities. The Ag-Business curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Provide students with the highest level of instruction by offering the latest concepts in agriculture.
- To attract, retain, and graduate competent students into the Agriculture Science industry.
- Keep program on “cutting edge” of agriculture by involving industry in curriculum development and verification of student learning outcomes.
- Articulate the Agriculture Science program horizontally with other related WWCC programs, and vertically, with regional high schools and universities.
- Educate and graduate students who possess the knowledge and skills to participate in the agriculture industry with confidence, or continue their education at the university level with the same confidence.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Agri-Business upon completion of the two-year program of study.

The Associate in Arts Degree is a transfer degree that prepares the student for continued education at a baccalaureate institution. These students will be able to complete their general education requirements before transferring, begin studies in Agri-Business, and take electives based upon their intended degree program. Many courses in the department provide direct transfer credit to regional colleges and universities. (See AA-DTA in Degree section of the catalog.)

Industry Description: Agriculture Business experts apply a wide range of knowledge of markets, products and laws to local, regional, national and international agricultural commerce.

Producing and marketing food and fiber products is a vital and important industry in the United States. The United States is the largest producer and exporter of agricultural products in the world. The ag-business sector employs a large percentage of the U.S. labor force. These individuals assist the producer of food and fiber products in input procurement, marketing, financing, and management.

Entrance Requirements: Students may enter the program fall, winter, spring, or summer quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: The Ag-Business program is part of the Tech-Prep consortium in the state of Washington. Tech-Prep credits from specific high school studies can be awarded for selected courses. Contact your local school counselor or WWCC for more information. Students considering transferring should consult with an adviser in the agriculture department prior to taking courses for transfer credit. Program scholarships are available each year to assist students. Contact a program advisor to obtain an application or for more information.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees

Associate of Applied Science-Transfer - Agriculture Technology & Production Management

This degree provides the science and general education courses appropriate for the student who is planning a future transfer to a Bachelor of Science in Agriculture Technology and Management at Washington State University.

Degree available at/via: [Walla Walla]

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<tr>
<th>YEAR ONE</th>
<th>Credits</th>
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<tr>
<td>AGPR 113, Cultivated Plants</td>
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<td></td>
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<tr>
<td>CHEM&amp; 121 or CHEM&amp; 161</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources</td>
<td>5</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
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<tbody>
<tr>
<td>AGPR 110, Livestock Production</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 122 or CHEM&amp; 162</td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
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<tr>
<td>EST 132, Principles of Electricity AC Application</td>
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<table>
<thead>
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<tbody>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 123 or CHEM&amp; 163</td>
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<tr>
<td>ENGL&amp; 101, English Composition I</td>
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<td>ENT 151, Advanced GIS</td>
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<th>YEAR TWO</th>
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<th>Quarter One</th>
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<tbody>
<tr>
<td>AGRI 201, Basic Soil Science</td>
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<td></td>
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<tr>
<td>BIOL&amp; 211, Majors Cellular</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>WTM 241, Advanced Center Pivot Controls and Troubleshooting</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 140, Agriculture Safety and Pesticides</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 213, Majors Plant</td>
<td>5</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>3</td>
</tr>
<tr>
<td>WTM 225, Turf Irrigation Controls, Installation, and Troubleshooting</td>
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<td>Year Two Total</td>
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| Grand Total | 112 |
Associate of Applied Science - Transfer - Agri-Business

This degree is articulated with the College of Agriculture at Washington State University for students interested in obtaining a degree in Ag and Food Systems - Agricultural and Food Business Economics option.

Degree available at/via: [Walla Walla]

### YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
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<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 121, Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
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<tr>
<td>CHEM 122, Introduction to Organic Chemistry</td>
<td>5</td>
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<td>ENGL 101, English Composition</td>
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<td>MATH 115, Finite Mathematics</td>
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<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
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<tbody>
<tr>
<td>AGRI 211, Small Business Management</td>
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<tr>
<td>CHEM 123, Introduction to Biochemistry</td>
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<tr>
<td>ENGL 102, English Composition II</td>
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<tr>
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**Year One Total** | **60**

### YEAR TWO

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<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>ACCT 201, Principles of Accounting I</td>
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<tr>
<td>AGPR 110, Livestock Production</td>
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</tr>
<tr>
<td>AGRI 201, Basic Soil Science</td>
<td>5</td>
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<tr>
<td>BIOL 211, Majors Cellular</td>
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<th>Quarter Two</th>
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<tbody>
<tr>
<td>ACCT 202, Principles of Accounting II</td>
<td>5</td>
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<td>BIOL 213, Majors Plant</td>
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<td>CMST 220, Public Speaking</td>
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<tr>
<td>Choose 1: AGPR 105 or 140 or 202; WTM 241 or 112; ACCT 203</td>
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<table>
<thead>
<tr>
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<th>Credits</th>
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<tr>
<td>BIOL 212, Majors Animal</td>
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<tr>
<td>MATH 146, Introduction to Statistics</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Year Two Total** | **55**

**Grand Total** | **115**

EPC: 110T

*CHEM& 161, 162, 163 can be substituted for CHEM& 121, 122, 123 series.

** MATH& 141 can substitute for MATH 115.

Associate of Applied Science - Transfer - Ag Business/Ag Econ

This schedule lists all courses required for completion of the Associate of Applied Science - Transfer - Ag Business/Ag Econ, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

The required related instruction is noted in bold print. The letter in parenthesis indicates which category of related instruction is represented by the given course as follows:

### YEAR ONE

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
<td>Credits</td>
</tr>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>CMST 220, Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 220, Introduction to Finance</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 110, Chemical Concepts w/Lab</td>
<td>5</td>
</tr>
<tr>
<td>HIST 128, World Civilization III</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201, Business Law I</td>
<td>5</td>
</tr>
<tr>
<td>ECON 202, Macroeconomics</td>
<td>5</td>
</tr>
<tr>
<td>Fine Arts Elective</td>
<td>5</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</table>

**Year One Total Credits** | **50**

### YEAR TWO

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Quarter</td>
<td>Credits</td>
</tr>
<tr>
<td>ACCT 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>Lab Science Elective</td>
<td>5</td>
</tr>
<tr>
<td>MATH 146, Introduction to Statistics</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 202, Principles of Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>5</td>
</tr>
<tr>
<td>MATH 141, Precalculus I</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 203, Principles of Accounting III</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>5</td>
</tr>
<tr>
<td>Diversity Elective</td>
<td>5</td>
</tr>
<tr>
<td>MATH 148, Business Calculus</td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**Year Two Total Credits** | **50**

**Total Credits** | **100**

CIP01.0101

EPC: 110U

*(W)* - Written Communications *(O)* - Oral Communications

*(R)* - Human Relations *(M)* - Computation/Mathematics

*(J)* - Job Seeking Skills *(L)* - Leadership

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Agri-Business Certificate

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate knowledge of accounting basics.
- Demonstrate ability to use computer software to create and use written documents, including spreadsheets, graphical presentations and databases.
- Prepare and orally deliver a sales presentation to a prospect which includes appropriate techniques for opening, presenting product, handling objections and closing.
- List parts of a business plan and explain the benefits of creating a plan.
- Demonstrate the ability to prepare graphs to describe business relationships such as the production process, cost, revenue and profit values.
- Describe advantages and disadvantages of various forms of business organization.
- Compare and contrast characteristics of various forms of market structures.
- Describe the factors which affect consumer choice.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 102, Farm Records and Analysis</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 108, Computers in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 210, Fundamentals of Selling and Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
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</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 211, Small Business Management *</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
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<tr>
<td>Year One Total</td>
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<tr>
<td>Grand Total</td>
<td>51</td>
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</tbody>
</table>

*Either AGRI 211 or AGRI 220 will meet the requirement for certificate completion. Both courses are required for degree completion.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(J) - AGPR 100, OCSUP 103  (R) - WTM 135, any 192 course  
(W) - ENGL 097, ENGL 101  (M) - MATH & 141, OCSUP 107

Associate in Applied Arts and Sciences Degree in Agri-Business

This technical degree provides the skills necessary for employment and preparation for advancement in the agri-business industry. Graduates of this program may find employment as farm managers, salespersons, commodity brokers, store managers, or consultants.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 102, Farm Records and Analysis</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 108, Computers in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 210, Fundamentals of Selling and Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 211, Small Business Management *</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
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</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
<tr>
<td>Year One Total</td>
<td>59-63</td>
</tr>
</tbody>
</table>

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Demonstrate knowledge of accounting basics.
- Demonstrate ability to use computer software to create and use written documents, including spreadsheets, graphical presentations and databases.
- Prepare and orally deliver a sales presentation to a prospect which includes appropriate techniques for opening, presenting product, handling objections and closing.
- Identify and apply management tools used to measure business performance.
- List parts of a business plan and explain the benefits of creating a plan.
- Discuss structure and characteristics of the food product, agricultural production, food processing and retailing; and their influence on food marketing.
- Demonstrate the ability to prepare graphs to describe business relationships such as the production process, cost, revenue and profit values.
- Illustrate and describe market theory, including effects of changes in demand and supply on the market price and equilibrium quantity and the rationing function of prices.
- Describe advantages and disadvantages of various forms of market structures.
- Describe the factors which affect consumer choice.
- Explain the process and rationality for enacting government regulations impacting businesses and the effect of regulations on market decisions.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.
Program Overview:
The Agriculture Science curriculum is designed to prepare students for transfer to a four-year institution. The program emphasizes theoretical and practical knowledge in the areas of animal health and disease prevention, feed and nutrition practices, livestock and carcass evaluation, and general agriculture safety practices and management. This program is intended for students who wish to pursue an Associate in Applied Arts and Sciences Degree in Agriculture Science at Walla Walla Community College (WWCC).

Entrance Requirements:
Students may enter the program fall, winter, spring or summer quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Program Information:
WWCC offers a number of articulation agreements in Agriculture Science. These agreements facilitate transfer to baccalaureate institutions. Areas of study include General Ag, Horticulture, Rangeland, and Crop and Soil Science.

Industry Description:
Production agriculture is an applied science industry requiring trained technicians and professionals with knowledge of biological and chemical principles. Persons employed in the agricultural science field need to apply this knowledge to the production of food and fiber at the primary producer, support services, or research and development level. As the agricultural science industry advances in the use of technology, there is a continued demand for trained individuals.

Entrance Requirements:
Students may enter the program fall, winter, spring or summer quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information:
The Agriculture Science program is part of the Tech-Prep consortium in the state of Washington. Tech-Prep credits from specific high school studies can be awarded for selected courses. Contact your local school counselor or WWCC for more information. Students considering transferring should consult with an advisor in the agriculture department prior to taking courses for transfer credit. Program scholarships are available each year to assist students. Contact a program advisor to obtain an application or for more information.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

The Agriculture Center of Excellence is a flagship institution connecting education and industry to create a highly skilled and readily available workforce. The Center of Excellence addresses workforce training needs and education for the agricultural industry by supporting the community and technical college system, as well as collaborating with the K-12 system and four-year colleges/universities. Visit www.agcenterofexcellence.com for more information.

**Agriculture - Animal Science**

http://www.wwcc.edu/animalscience

**CERT, AAAS, AA-DTA**

Debora Frazier 509.527.4689 debbie.frazier@wwcc.edu
Matthew Williams 509.527.4696 matthew.williams@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview:
The Agriculture program offers several degree tracks for students which include Animal Science, Ag Business, Plant and Soil Science, and Precision Ag. Certificate, Associate in Applied Arts and Sciences degrees (AAAS) and transfer options are available.

Agriculture Science combines the fields of biology and chemistry with a practical understanding of livestock production and management. The primary objectives of the program are to offer students technical knowledge in the areas of animal health and disease prevention, feed and nutrition practices, livestock and carcass evaluation and general agriculture safety practices and management. These objectives are accomplished with lecture/discussion periods, lab exercises, and field trips to production enterprise areas. Business management is emphasized in each area of study. The Agriculture Science curriculum is reviewed by an advisory committee composed of local and regional industry members and adheres to national and state skill standards.

Program Outcomes:
- Provide students with the highest level of instruction by offering the latest concepts in agriculture.
- To attract, retain, and graduate competent students into the Agriculture Science industry.
- Keep program on “cutting edge” of agriculture by involving industry in curriculum development and verification of student learning outcomes.
- Articulate the Agriculture Science program horizontally with other related WWCC programs, and vertically, with regional high schools and universities.
- Educate and graduate students who possess the knowledge and skills to participate in the agriculture industry with confidence, or continue their education at the university level with the same confidence.

Degrees:
Students may earn an Associate in Applied Arts and Sciences Degree in Animal Science upon completion of a two-year program of study. The Animal Science option focuses on livestock production, animal nutrition and health, and carcass evaluation. An Animal Science Certificate is available upon completion of the first year of study.

For those students interested in attending a baccalaureate institution, WWCC offers a number of articulation agreements in Agriculture Science. This allows students to complete a degree at WWCC before transferring to a specific program at a baccalaureate institution. Areas of study include General Ag, Horticulture, Rangeland, and Crop and Soil Science.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 110, Livestock Production</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
</tr>
<tr>
<td>Agriculture Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 220, Introduction to Finance</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRI 103, Intro to Precision Ag for Farm Management</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 222, Agricultural and Water Policy</td>
<td>5</td>
</tr>
<tr>
<td>CMST 102, Interpersonal Communication (O)</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Year Two Total** **48.4**

**Grand Total** **.107.4-111.4**

EPC: 110

*Either AGRI 211 or AGRI 220 will meet requirement for certificate completion. Both courses are required for degree completion.*

**Approved Electives for Agri-Business Degree include: any course with a prefix of AGRI, AGPR, WTM, TURF, EV, TRK or as approved by advisor.**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- **(J)** - AGPR 100
- **(R)** - WTM 135, any 192 course
- **(W)** - ENGL 097, ENGL & 101
- **(M)** - MATH & 141, OCSUP 107
- **(L)** - AGPR 292, any 292 course

*Approved Electives for Agri-Business Degree include: any course with a prefix of AGRI, AGPR, WTM, TURF, EV, TRK or as approved by advisor.*

For more information, visit http://www.wwcc.edu/animalscience.
## Degrees and Certificates

### Animal Science Certificate
This technical certificate prepares the student for a career in the animal production industry. This program is also designed for the individual who is interested in improving their current animal science skills and knowledge.

**Certificate available at/via:** [Walla Walla]

**Certificate Outcomes:**
- Recognize and discuss the management procedures within specific production schemes for each species of farm animals (as studied in this program).
- Develop a working knowledge of animal anatomy and physiology (those animals studied in this program). Use this knowledge to help in diagnosing certain physical ailments and common health problems of farm animals.
- Develop a working knowledge of animal nutrition and health as it relates to animal feeds and ration requirements for common farm animals (cattle, sheep, hogs, horses).
- Identify the basic principles of animal development for the production of mean products for human consumption, to include food safety, nutritive value, inspection, and grading.

### Degree Outcomes:
- Develop a basic understanding of the factors involved in the marketing of farm animals for profit.

#### YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 110, Livestock Production</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 120, Agricultural Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 102, Farm Records and Analysis</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 108, Computers in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 112, Feeds and Feeding</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 115, Animal Health and Disease</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Year One Total</strong></td>
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</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>58.4</strong></td>
</tr>
</tbody>
</table>

**EPC: 107C**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (J) - AGPR 100, OCSUP 103
- (W) - ENGL 097, ENGL 101
- (R) - WTM 135, any 192 course
- (M) - MATH 141, MATH 146, OCSUP 107

### Associate in Applied Arts and Sciences - Animal Science
This technical degree prepares the student for a career in the animal production industry. This program is also designed for the individual who is interested in improving their current animal science skills and knowledge.

### Degree available at/via: [Walla Walla]

**Degree Outcomes:**
- Recognize and discuss the management procedures within specific production schemes for each species of farm animals (as studied in this program).
- Develop a working knowledge of animal anatomy and physiology (those animals studied in this program). Use this knowledge to help in diagnosing certain physical ailments and common health problems of farm animals.
- Develop a working knowledge of animal nutrition and health as it relates to animal feeds and ration requirements for common farm animals (cattle, sheep, hogs, horses).
- Identify the basic principles of animal development for the production of mean products for human consumption, to include food safety, nutritive value, inspection, and grading.

#### YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 116, Livestock Selection and Carcass Evaluation</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
</tr>
<tr>
<td>Agriculture Elective</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 274, Beef Cattle Production</td>
<td>5</td>
</tr>
<tr>
<td>Agriculture Elective</td>
<td>5</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Associate of Applied Science-Transfer - Animal Science - Pre-Veterinary

This schedule lists all courses required for completion of the Associate of Applied Science-Transfer - Animal Science - Pre-Veterinary, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

The required related instruction is noted in bold print. The letter in parenthesis indicates which category of related instruction is represented by the given course as follows:

(J) - Job Seeking Skills
(L) - Leadership
(W) - Written Communications
(O) - Oral Communications
(R) - Human Relations
(M) - Mathematical/Quantitative
(E) - Educational/General
(P) - Professional/Technical
(T) - Technical Skills
(C) - Career, Personal/Social/Global
(TE) - Technical Electives
(OCSUP) - Other, Supplemental
(OCSUP107) - Other, Supplemental - Internship
(OCSUP103) - Other, Supplemental - Internship

Associate of Applied Science-Transfer - Animal Science - Animal Management

This schedule lists all courses required for completion of the Associate of Applied Science-Transfer - Animal Science - Animal Management, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

The required related instruction is noted in bold print. The letter in parenthesis indicates which category of related instruction is represented by the given course as follows:

(J) - Job Seeking Skills
(L) - Leadership
(W) - Written Communications
(O) - Oral Communications
(R) - Human Relations
(M) - Mathematical/Quantitative
(E) - Educational/General
(P) - Professional/Technical
(T) - Technical Skills
(C) - Career, Personal/Social/Global
(TE) - Technical Electives
(OCSUP) - Other, Supplemental
(OCSUP107) - Other, Supplemental - Internship
AGRICULTURE - PLANT AND SOIL SCIENCE

Winter Quarter

BiOL 213, Majors Plant ................................. 5
CMST& 220, Public Speaking ............................... 5
HIST& 128, World Civilization III ......................... 5

Total Credits .................. 15

Spring Quarter

AGPR 224, Pasture and Range Management ............. 5
BiOL 212, Majors Animal ..................................... 5
MATH& 142, Precalculus II ............................... 5
MATH& 146, Introduction to Statistics ..................... 5

Total Credits ............... 20
Total Year Two Credits .......... 53
Total Credits ............. 108

GIP:01.0302
EPC: 107U

(W) -Written Communications (O) - Oral Communications
(R) - Human Relations (M) - Computation/Mathematics
(J) - Job Seeking Skills (L) - Leadership

Agriculture - Plant and Soil Science

CERT, AAS-T, AAAS, AA-DTA

http://wwcc.edu/agscience

Matthew Williams 509.527.4696 matthew.williams@wwcc.edu

Program available at/via: [Walla Walla] [50% Online]

Department Overview: The Agriculture program offers several degree tracks for students which include Plant and Soil Science, Ag Business, Animal Science, and Precision Ag. Certificate, Associate in Applied Arts and Sciences degrees (AAAS) and transfer options are available.

Agriculture Science combines the fields of biology and chemistry with a practical understanding of crop management. The primary objectives of the program are to offer students technical knowledge in the areas of soils and fertilizers, pests and control procedures, and crop management. These objectives are accomplished with lecture/discussion periods, lab exercises, and field trips to production enterprise areas. Many courses are available for distance learning for students. The Agriculture Science curriculum is reviewed by an advisory committee composed of local and regional industry members and adheres to national and state skill standards.

Program Level Outcomes:

• Provide students with the highest level of instruction by offering the latest concepts in agriculture.
• To attract, retain, and graduate competent students into the Agriculture Science industry.
• Keep program on “cutting edge” of agriculture by involving industry in curriculum development and verification of student learning outcomes.
• Articulate the Agriculture Science program horizontally with other related WWCC programs, and vertically, with regional high schools and universities.
• Educate and graduate students who possess the knowledge and skills to participate in the agriculture industry with confidence, or continue their education at the university level with the same confidence.

Degrees:

Students may earn a Certificate, Associate in Applied Arts and Sciences Degree in Plant and Soil Science upon completion of a two-year program of study. The Plant and Soil Science option focuses on crop production, soil fertility and management, and weed biology and identification. A Plant and Soil Science Certificate is available upon completion of the first year of study.

For those students interested in attending a baccalaureate institution, WWCC offers a number of articulation agreements in Agriculture Science. This allows students to complete a degree at WWCC before transferring to a specific program at a baccalaureate institution. Areas of study include General Ag, Horticulture, Rangeland, and Crop and Soil Science.

Industry Description: Production agriculture is an applied science industry requiring trained technicians and professionals with knowledge of biological and chemical principles. Persons employed in the agricultural science field need to apply this knowledge to the production of food and fiber at the primary producer, support services, or research and development level. As the agricultural science industry advances in the use of technology, there is a continued demand for trained individuals.

Entrance Requirements: Students may enter the program fall, winter, spring, or summer quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: The Agriculture Science program is part of the Tech-Prep consortium in the state of Washington. Tech-Prep credits from specific high school studies can be awarded for selected courses. Contact your local school counselor or WWCC for more information. Students considering transferring should consult with an advisor in the agriculture department prior to taking courses for transfer credit. Program scholarships are available each year to assist students. Contact a program advisor to obtain an application or for more information.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

The Agriculture Center of Excellence is a flagship institution connecting education and industry to create a highly skilled and readily available workforce. The Center of Excellence addresses workforce training needs and education for the agricultural industry by supporting the community and technical college system, as well as collaborating with the K-12 system and four-year colleges/universities. Visit www.agcenterofexcellence.com for more information.

Degrees

Associate of Applied Science-Transfer - Plant and Soil Science

This degree provides the science and general education courses appropriate for the student who is planning a future transfer to a Bachelor of Science in Field Crop Management at Washington State University.

Degree available at/via: [Walla Walla]
### Plant and Soil Science Certificate

**Certificate available at/via: [Walla Walla]**

**Certificate Outcomes:**
- Develop an integrated weed control program that will adequately control the weed population when given a certain crop and the weeds that are considered problems.
- Perform calculations to determine the amount of herbicide to add to the spray tank and the amount of chemical applied to the target area with 1% tolerance limits when given a sample problem.
- Recognize how the quality of crop products produced relates to the nutritional requirements of farm animals.
- Develop a comprehensive knowledge of plant anatomy, morphology and physiology. Utilize this knowledge to help diagnose plant production problems and develop management schemes to correct the problems.

---

### Associate in Applied Arts and Sciences Degree in Plant and Soil Science

This technical degree prepares the student for a career in agricultural crop production industry. This program is also designed for the individual who is interested in improving their current plant and soil science skills and knowledge.

**Degree available at/via: [Walla Walla]**

**Degree Outcomes:**
- Develop an integrated weed control program that will adequately control the weed population when given a certain crop and the weeds that are considered problems.
- Perform calculations to determine the amount of herbicide to add to the spray tank and the amount of chemical applied to the target area with 1% tolerance limits when given a sample problem.
- Recognize how the quality of crop products produced relates to the nutritional requirements of farm animals.
- Develop a comprehensive knowledge of plant anatomy, morphology and physiology. Utilize this knowledge to help diagnose plant production problems and develop management schemes to correct the problems.

**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

---

### Degree Available at/via: [Walla Walla] 

**Degree Outcomes:**
- Develop an integrated weed control program that will adequately control the weed population when given a certain crop and the weeds that are considered problems.
- Perform calculations to determine the amount of herbicide to add to the spray tank and the amount of chemical applied to the target area with 1% tolerance limits when given a sample problem.
- Recognize how the quality of crop products produced relates to the nutritional requirements of farm animals.
- Develop a comprehensive knowledge of plant anatomy, morphology and physiology. Utilize this knowledge to help diagnose plant production problems and develop management schemes to correct the problems.

**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.
This schedule lists all courses required for completion of the Associate of Applied Science-Transfer - Ag Science & Tech-Food Science, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

The required related instruction is noted in bold print. The letter in parenthesis indicates which category of related instruction is represented by the given course as follows:

- (J) - Job Seeking Skills
- (L) - Leadership
- (R) - Human Relations
- (M) - Computation/Mathematics
- (W) - Written Communications
- (O) - Oral Communications
- (EPC) - 108U

### Year One

<table>
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<tr>
<th>Quarter</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Fall</td>
<td>CHEM&amp; 161, General Chemistry I w/Lab.</td>
</tr>
<tr>
<td></td>
<td>HIST&amp; 126, World Civilization I</td>
</tr>
<tr>
<td></td>
<td>NUTR&amp; 101, Nutrition</td>
</tr>
<tr>
<td></td>
<td>PHYS&amp; 114, General Phys I w/Lab.</td>
</tr>
<tr>
<td>Winter</td>
<td>CHEM&amp; 162, General Chemistry II w/Lab</td>
</tr>
<tr>
<td></td>
<td>HIST&amp; 127, World Civilization II</td>
</tr>
<tr>
<td></td>
<td>PHYS&amp; 115, General Phys II w/Lab.</td>
</tr>
<tr>
<td>Spring</td>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
</tr>
<tr>
<td></td>
<td>ART&amp; 100, Art Appreciation</td>
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<tr>
<td></td>
<td>BIOL&amp; 213, Majors Plant</td>
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<tr>
<td></td>
<td>MATH&amp; 152, Calculus II</td>
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### Year Two

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>BIOL&amp; 211, Majors Cellular</td>
</tr>
<tr>
<td></td>
<td>CMST&amp; 220, Public Speaking</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 151, Calculus I</td>
</tr>
<tr>
<td>Winter</td>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
</tr>
<tr>
<td></td>
<td>ART&amp; 100, Art Appreciation</td>
</tr>
<tr>
<td></td>
<td>BIOL&amp; 213, Majors Plant</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 152, Calculus II</td>
</tr>
<tr>
<td>Spring</td>
<td>BIOL&amp; 212, Majors Animal</td>
</tr>
<tr>
<td></td>
<td>BIOL&amp; 260, Microbiology</td>
</tr>
<tr>
<td></td>
<td>MATH&amp; 146, Introduction to Statistics</td>
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<td>Total Credits</td>
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### Year One Total: 66.4-70.4

### Year Two Total: 55

### Total Year One Credits: 55

### Total Year Two Credits: 50

### Total Credits: 105

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**FOR THE MOST CURRENT INFORMATION SEE:** WWW.WWCC.EDU

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**AGRICULTURE - PLANT AND SOIL SCIENCE**

**Associate of Applied Science-Transfer - Ag Science & Tech-Food Science**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - AGPR 100, OCSUP 103
- (W) - ENGL 097, ENGL& 101
- (L) - AGPR 292, any 292 course
- (M) - MATH& 141, OCSUP 107
- (R) - WTM 135, any 192 course
- (O) - CMST 102, CMST& 220, OCSUP 102

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EPC: 108

EPC: 108U
### Associate of Applied Science-Transfer - Ag Science & Tech-Organic Agriculture

This schedule lists all courses required for completion of the Associate of Applied Science-Transfer - Ag Science & Tech-Organic Agriculture, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

The required related instruction is noted in bold print. The letter in parenthesis indicates which category of related instruction is represented by the given course as follows:

- **(W)** - Written Communications
- **(O)** - Oral Communications
- **(R)** - Human Relations
- **(M)** - Computation/Mathematics
- **(L)** - Leadership
- **(J)** - Job Seeking Skills
- **(E)** - Employment
- **(P)** - Personal Development
- **(C)** - Career Development
- **(F)** - Foundation Courses
- **(V)** - Verbal Communication
- **(EPC)** - Essential Personal Competencies

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>Fall Quarter</strong></td>
<td></td>
</tr>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>HIST&amp; 127, World Civilization II</td>
<td>5</td>
</tr>
<tr>
<td>ELECT CHEM5, CHEM&amp; 121, Intro to Chemistry or CHEM&amp; 161, General Chemistry I w/Lab</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tr>
<tr>
<td><strong>Winter Quarter</strong></td>
<td></td>
</tr>
<tr>
<td>AGPR 114, Plant Physiology</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
<td>5</td>
</tr>
<tr>
<td>ELECT CHEM6, CHEM&amp; 122, Introduction to Organic Chemistry or CHEM&amp; 162, General Chemistry II w/Lab</td>
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<td><strong>Total Credits</strong></td>
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</tr>
<tr>
<td><strong>Spring Quarter</strong></td>
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<tr>
<td>ENGL&amp; 101, English Composition I</td>
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<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
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<tr>
<td>CMST&amp; 220, Public Speaking</td>
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<tr>
<td>ELECT CHEM7, CHEM&amp; 123, Introduction to Biochemistry or CHEM&amp; 163, General Chemistry III w/Lab</td>
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<tr>
<td><strong>Summer Quarter</strong></td>
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<tr>
<td>ELECT AGR10, AGRI 191, Cooperative Work Experience</td>
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<td><strong>Total Year One Credits</strong></td>
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<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Year Two</th>
<th>Credit</th>
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<tbody>
<tr>
<td><strong>Fall Quarter</strong></td>
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<tr>
<td>AGPR 110, Livestock Production</td>
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<tr>
<td>MATH&amp; 146, Introduction to Statistics</td>
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<tr>
<td>AGPR 201, Basic Soil Science</td>
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<tr>
<td>BIOL&amp; 211, Majors Cellular</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Winter Quarter</strong></td>
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<tr>
<td>ART&amp; 100, Art Appreciation</td>
<td>5</td>
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<tr>
<td>AGPR 202, Soils Fertility and Management</td>
<td>5</td>
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<tr>
<td>BIOL&amp; 213, Majors Plant</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Spring Quarter</strong></td>
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<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
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<tr>
<td>AGRI 211, Small Business Management</td>
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<td>BIOL&amp; 212, Majors Animal</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Total Year Two Credits</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
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</table>

For the most current information see: [www.wwcc.edu](http://www.wwcc.edu)


**Degrees and Certificates**

**Precision Agriculture Certificate**
Certificate available after completion of identified courses.

**Certificate available at/via: [Walla Walla]**

**Certificate Outcomes:**
- Employ current technology and knowledge of agricultural system operations in the agriculture workforce.
- Operate and/or implement GPS guided equipment in an effective and safe manner to increase land productivity.
- Collect and analyze data to make management decisions using Geographic Information Systems (GIS).
- Operate, manipulate, and troubleshoot a variable rate center-pivot irrigation system.
- Summarize possible efficiencies, cost reductions, and environmental improvements using variable rate chemical and irrigation application equipment and select the best option using specified operational criteria.

**For the Most Current Information See: WW.WWCC.EDU**

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**Certified Perkins Programs:**
- AGRI 103, Intro to Precision Ag for Farm Management
- AGPR 254, Robotics and Drone Technologies
- EST 132, Principles of Electricity AC Application
- WTM 135, Issues in Agriculture and Natural Resources
- TURF 101, Turf Equipment Operations I
- AGPR 292, Leadership
- AGRI 191, Cooperative Work Experience
- AGPR 201, Basic Soil Science
- AGRI 210, Fundamentals of Selling and Customer Service
- ENGL 097, Basic Expository Writing
- OCSUP 102, Oral Communication in the Workplace
- OCSUP 107, Quantitative Problem Solving for the Trades
- IFA 022, AHA Heartsaver First Aid
- AGPR 113, Cultivated Plants
- AGPR 135, Mechanization of GIS
- EST 133, Introduction to Controls
- AGPR 140, Agriculture Safety and Pesticides
- AGRI 108, Computers in Agriculture
- AGPR 215, Field Crop Production

**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

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**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>AGRI 102, Farm Records and Analysis</td>
<td>5</td>
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<tr>
<td>AGRI 108, Computers in Agriculture</td>
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<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
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<tbody>
<tr>
<td>AGPR 135, Mechanization of GIS</td>
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<td>ENT 151, Advanced GIS</td>
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<tr>
<td>ENT 161, Elementary Surveying</td>
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<tr>
<td>EST 132, Principles of Electricity AC Application *</td>
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<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
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<tbody>
<tr>
<td>AGPR 170, Precision Equipment Installation and Troubleshooting</td>
<td>4</td>
</tr>
<tr>
<td>AGPR 254, Robotics and Drone Technologies</td>
<td>3</td>
</tr>
<tr>
<td>AGRI 103, Intro to Precision Ag for Farm Management</td>
<td>5</td>
</tr>
<tr>
<td>ENT 152, Practical Field Applications of GIS</td>
<td>3</td>
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<tr>
<td>EST 159, Hydraulics and Pneumatics **</td>
<td>3</td>
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<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<td><strong>Year One Total</strong></td>
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<td><strong>Grand Total</strong></td>
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**YEAR TWO**

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>6 - 10</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
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**Certification/Associate Degree Outcomes:**
- Employ current technology and knowledge of agricultural system operations in the agriculture workforce.
- Operate and/or implement GPS guided equipment in an effective and safe manner to increase land productivity.
- Collect and analyze data to make management decisions using Geographic Information Systems (GIS).
- Operate, manipulate, and troubleshoot a variable rate center-pivot irrigation system.
- Summarize possible efficiencies, cost reductions, and environmental improvements using variable rate chemical and irrigation application equipment and select the best option using specified operational criteria.

---

**Associate in Applied Arts and Sciences Degree in Precision Agriculture**
This technical degree prepares the student for a career in the precision agriculture industry.

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**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.
The Allied Health and Safety Education Department provides a wide variety of public and health education programs which include: First Aid, Emergency Medical Technician (EMT), CPR for Healthcare Providers, Nursing Assistant, Phlebotomy, Medical Assisting, Spanish Medical Interpreter, Fire Science, and distance learning program partnerships in Medical Laboratory Technology (Wenatchee Valley College).

The Nursing Assistant program provides training in basic nursing care under state and federal guidelines. The Phlebotomy Technician course is offered during fall and spring quarters on the Walla Walla campus and winter quarter on the Clarkston campus. The following is a list of courses offered to help students obtain necessary requirements for state certification and/or provide enrichment for increased information: Nursing Assistant Training Program, Nurse Delegation, Phlebotomy, AIDS Education, AIDS/Blood Borne Pathogens Training, OTEP Training, First Aid, First Aid Recertification, and CPR (Heartsaver and Healthcare Provider), and CPR Instructor Certification and Recertification.

The Allied Health and Safety Education Department also offer a variety of Healthcare Education opportunites for both students and providers to include: Pharmacology, Healthy Lifestyles, Basic Arrhythmias, 12 Lead ECG, Physical Assessment, Patient Navigation, and continuing education conferences. These courses are offered as needed to our community of interest and student body.

Industry Description: Because of the growing population and increased aging sector of our country, there is a demand for trained workers in a variety of healthcare related occupations. The health care industry is experiencing shortages of qualified, competent healthcare workers. Health service jobs represent the fastest growth categories in the State of Washington.

**Entrance Requirements:** Most courses require a high school diploma or GED®, and in some cases require an advanced level of certification or registration. Some areas do not require high school diploma or GED® but have basic requirements such as reading, writing, and language proficiency requirements.

**Other Information:** Funding is sometimes available through various agencies for the Nursing Assistant course.

Allied Health and Safety Education includes the following departments: Cardio Pulmonary Resuscitation (CPR), Fire Science (FCA), Health Occupations (HO), Industrial First Aid (IFA), and Medical Assisting (MEDA). Please see specific program sections for certificate information.

### Degrees and Certificates

### Spanish Medical Interpreter Certificate

The Spanish Medical Interpreter Certificate may be completed in three quarters of full time study. Depending upon placement testing and bilingual language screening results students may need to complete additional prerequisite coursework in English, Spanish or computer skills in order to obtain the minimum level of communication skills and computer proficiency in both languages.

Students must have their high school diploma or GED® before entering the program. All Spanish Medical Interpreter program applicants must complete a two-part written and oral Spanish language assessment test in addition to submitting an application for the Spanish Medical Interpreter program. Please contact the Allied Health department at 527-4589 to schedule an appointment to take this test.

### Certificate available at/via: [Walla Walla] [Clarkston]

#### Program at/via: [Walla Walla] [Clarkston]

**Department Overview:** The purpose of Allied Health and Safety Education (AHSE) is to create a learning environment to support a variety of educational, personal enrichment, and career development goals in the field of health and safety. The clientele served by AHSE comprise a wide age group at a variety of educational levels and differing learning outcomes that range from obtaining basic entry level job skills to training for new careers, and personal growth.

**Degrees:** The Allied Health and Safety Education department provides a wide variety of public and health education programs which include: First Aid, Emergency Medical Technician (EMT), CPR for Healthcare Providers, Nursing Assistant, Phlebotomy, Medical Assisting, Spanish Medical Interpreter, Fire Science, and distance learning program partnerships in Medical Laboratory Technology (Wenatchee Valley College).

The Nursing Assistant program provides training in basic nursing care under state and federal guidelines. The Phlebotomy Technician course is offered during fall and spring quarters on the Walla Walla campus and winter quarter on the Clarkston campus. The following is a list of courses offered to help students obtain necessary requirements for state certification and/or provide enrichment for increased information: Nursing Assistant Training Program, Nurse Delegation, Phlebotomy, AIDS Education, AIDS/Blood Borne Pathogens Training, OTEP Training, First Aid, First Aid Recertification, and CPR (Heartsaver and Healthcare Provider), and CPR Instructor Certification and Recertification.

The Allied Health and Safety Education Department also offer a variety of Healthcare Education opportunites for both students and providers to include: Pharmacology, Healthy Lifestyles, Basic Arrhythmias, 12 Lead ECG, Physical Assessment, Patient Navigation, and continuing education conferences. These courses are offered as needed to our community of interest and student body.

### Industry Description: Because of the growing population and increased aging sector of our country, there is a demand for trained workers in a variety...
Endorsements are provided in selected Professional-Technical Programs consisting of less than 20 credit hours and are designed to provide basic entry-level skills. The Nursing Assistant program provides training in basic nursing care under state and federal guidelines. Students who successfully complete the program will be eligible to take the Washington State Test.

Certificate available at/via: [Walla Walla] [Clarkston]

Transferability: For those students that elect to continue a program of study, the completed course credits may also be applied toward certificates or degrees in related program areas.

**Nursing Assistant (NA)**

Endorsements are provided in selected Professional-Technical Programs consisting of less than 20 credit hours and are designed to provide basic entry-level skills. The Nursing Assistant program provides training in basic nursing care under state and federal guidelines. Students who successfully complete the program will be eligible to take the Washington State Test.

Certificate available at/via: [Walla Walla] [Clarkston] [50% Online]

Transferability: For those students that elect to continue a program of study, the completed course credits may also be applied toward certificates or degrees in related program areas.

**Patient Navigation**

This curriculum examines the inter-relationships and intricacies of the very complex health and community services system and identifies the role of the Patient Care Navigator in assisting the patient to effectively maneuver within the system. For ease of access and cost, this curriculum is offered fully online and the student can enroll in one class at a time or all seven of the classes which will lead to a short-term certificate in Patient Navigation.

Certificate available at/via: [100% Online]

Certificate Outcomes:

- Define the role and function of patient care navigation and how it fits into the care team.
- Describe the need for patient advocacy and care coordination in today's complex health care system.
- Identify skills needed for effective patient care navigation.

**Phlebotomy**

Endorsements are provided in selected Professional-Technical Programs consisting of less than 20 credit hours and are designed to provide basic entry-level skills. This endorsement is designed to prepare the student to collect, handle, and process blood specimen for analysis in clinical settings. The student is eligible to take a national certification exam at the conclusion of the instruction.

Certificate available at/via: [Walla Walla] [Clarkston]

Transferability: For those students that elect to continue a program of study, the completed course credits may also be applied toward certificates or degrees in related program areas.

**Emergency Medical Technician (EMT)**

Endorsements are provided in selected Professional-Technical Programs consisting of less than 20 credit hours and are designed to provide basic entry-level skills. This endorsement provides the student with the basic knowledge necessary to improve the quality of emergency care in a pre-hospital setting to victims of accidents or illness. Students who successfully complete the program will be eligible to take the national registry exam.

Certificate available at/via: [Walla Walla] [Clarkston]

Transferability: For those students that elect to continue a program of study, the completed course credits may also be applied toward certificates or degrees in related program areas.
Anthropology

Program available at/via: [Walla Walla]

Department Overview: Anthropology examines the origin as well as the physical, social and cultural development of humans. Anthropologists study the way of life, archaeological remains, language, or physical characteristics of people in various parts of the world. Cultural anthropologists compare the customs, values and social practices of people in different cultures.

Program Level Outcomes:

- The ability to analyze past and present society, diverse cultures and histories to better understand individual and group behavior and enhance self-awareness.
- An understanding and working knowledge of the theories, concepts, ideas, terminology, and factual evidence in selected fields within the social sciences.
- Sensitivity in understanding diverse views and perspectives.
- An understanding of the historically and socially constructed nature of human differences.

Degrees: Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog)

Preparation for Success: Art students begin with foundation courses in design, drawing, and art appreciation. Students expecting to work toward a BFA or BA with emphasis in art should work closely with their advisor and give careful attention to the requirements of the selected baccalaureate institution and should be working on a quality portfolio to present for evaluation after transferring. Studies in computer graphics will contribute to the success of a professional career in art and design.

Other Information: Postsecondary training is recommended for all artist specialties. Although formal training is not strictly required, it is very difficult to become skilled enough to make a living in the arts without it. Many colleges and universities offer programs leading to the bachelor’s or master’s degree in fine arts. Formal educational programs in art also provide training in computer techniques. Computers are used widely in the visual arts, and knowledge and training in computer graphics and other visual display software are critical elements of many jobs in these fields.

Astronomy

Program available at/via: [Walla Walla]

Department Overview: Astronomy is the science dedicated to the study of the organization, behavior and evolution of matter and energy in the universe. Specific areas of study include the nature and formation of planets, stars and galaxies, as well as the significance of the grand scale structure of the entire universe.

Astronomy courses are intended for any student with an interest in the subject. All are taught with an emphasis on conceptual understanding, although laboratory exercises do involve some use of basic algebra.

Program Level Outcomes:

- An understanding of discipline specific terminology and methods.
- An ability to correctly use discipline specific tools and/or techniques.
- Critical thinking skills necessary in science including appropriate study techniques, problem solving skills and the use of data to assess the validity of claims.
- The ability to research, interpret and communicate concepts obtained from scientific literature.
- An understanding of the relationships between course concepts and society, including the impact of course specific technology.

Degrees: Astronomy degrees at the bachelor’s level are generally offered by physics departments. Students interested in pursuing astronomy as a major after transfer to a baccalaureate institution should obtain an Associate in Science (AS) Degree - Option II, following the course sequence specified for physics majors. (See AS Option II in the Degrees section of the catalog.)

Preparation for Success: Students interested in a major in Astronomy should take additional courses in physics, geology and mathematics.

Art

Program available at/via: [Walla Walla] [Clarkston]

Department Overview: The Art Department inspires students to unlock their creative potential. The department offers a wide variety of classes designed to introduce non-artists to lifelong learning opportunities and modes of expression, and help serious artists develop their hands-on as well as critical thinking skills. The program is designed to prepare students to enter a four-year degree program.

Program Level Outcomes:

- Analyze culturally diverse works in the visual arts.
- Apply terminology commonly used in the visual arts.
- Produce works that demonstrate the appropriate level of creativity, discipline and techniques in the visual arts.

Degrees: Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog)
Automotive Repair Technology

CERT, AAAS, AA

http://wwcc.edu/automechanics

Michael Adams 509.527.4676 michael.adams@wwcc.edu
James Haun 509.527.4693 james.haun@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Automotive Repair Technology provides intensive career preparation through a combination of classroom instruction and hands-on application. The program is accredited and certified by the National Automotive Technicians Education Foundation (NATEF), and is led by Automotive Service Excellence (ASE) master certified instructors. Instructors provide students the fundamental knowledge and experience needed to become entry level technicians in the automotive industry. The Automotive Repair Technology curriculum is reviewed by an advisory board composed of local and regional industry members annually.

Program Level Outcomes:

- Maintain ASE/NATEF standards through full implementation of related curriculum and student outcome measures.
- Improve marketability of students to employers as a result of successful completion of the total ASE/NATEF program of instruction.
- Maintain and enhance high school and university articulation agreements.
- Keep curriculum up-to-date with input from industry through the Automotive Repair Technology advisory committee.
- Secure automotive industry support for provision of equipment and training materials.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Automotive Repair Technology upon completion of the two-year program of study. An Automotive Repair Technology Certificate is available upon completion of the first year of study in the program.

Students who earn their AAAS in Automotive Repair Technology may also earn a dual degree in Diesel Technology or Auto Body Repair Technology. Please speak with your instructor about the required and specific classes needed.

Students wishing to transfer to Montana State University Northern (MSUN) located in Havre, MT to obtain a bachelor of science degree in automotive technology must successfully complete the Automotive Repair Technology AAAS degree prior to transferring to MSUN. Successful completion of specific support classes at WWCC is necessary for transfer to MSUN. See WWCC Automotive Repair Technology program director for more information.

Industry Description: The ability to diagnose the source of a problem quickly and accurately requires good reasoning ability and a thorough knowledge of automobiles. Automotive service technicians inspect, maintain, and repair automobiles and light trucks that have gasoline engines. There is a tremendous demand for well-trained Automotive Service Excellence (ASE) certified automotive technicians. The increasing sophistication of automotive technology such as alternative fuel vehicles now requires workers who can use computerized shop equipment and work with electronic components while maintaining their skills with traditional hand tools. Service technicians use a variety of tools in their work: electronic diagnostic scan tools to diagnose and repair on-board computer systems; power tools such as pneumatic wrenches to remove bolts quickly; machine tools like lathes to service brakes; grinding machines to rebuild cylinder heads; welding and flame-cutting equipment to remove and repair exhaust systems; and jacks and hoists to lift cars and engines.

Entrance Requirements: It is recommended that the student contact the program director/lead instructor regarding appropriate program placement. Students may enter the program fall or winter, however, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information. For more information, please contact Jim Haun 509.527.4693, james.haun@wwcc.edu

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Automotive Repair Technology Certificate

The certificate is equivalent to the first year of the AAAS Degree in Automotive Repair Technology.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate principles, operation, diagnosis and service of gasoline engines.
- Demonstrate principles, operation, diagnosis and service of automatic transaxles and transmissions.
- Demonstrate principles, operation, diagnosis and service of manual drivetrain systems.
- Demonstrate principles, operation, diagnosis and service of suspension and steering systems.
- Demonstrate principles, operation, diagnosis and service of brake systems.
- Demonstrate principles, operation, diagnosis and service of electrical and electronic systems.
- Demonstrate principles, operation, diagnosis and service of heating and air conditioning systems.
- Demonstrate principles, operation, diagnosis and service of engine performance systems.
- Demonstrate shop procedures and repair procedures with the correct tools and equipment in a safe environmentally friendly manner.
- Provide training to develop mathematical, oral and written communication skills to problem solve effectively in an automotive repair shop.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>AMM 145, Auto Related Industry</td>
<td>6</td>
</tr>
<tr>
<td>AMM 149, Hybrid and Alternative Fuel Vehicles</td>
<td>2</td>
</tr>
<tr>
<td>AMM 245, Brakes</td>
<td>13</td>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>26</td>
</tr>
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</table>

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Associate in Applied Arts and Sciences Degree in Automotive Repair Technology

To be eligible to receive the Associate Degree in Applied Arts and Sciences in Automotive Repair Technology, the student must successfully complete 1750 hours of training and the appropriate 18 credits of related instruction courses. This schedule is a typical sequence of instruction for students starting Fall Quarter.

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Demonstrate principles, operation, diagnosis and service of gasoline engines.
- Demonstrate principles, operation, diagnosis and service of automatic transaxles and transmissions.
- Demonstrate principles, operation, diagnosis and service of manual drivetrain systems.
- Demonstrate principles, operation, diagnosis and service of suspension and steering systems.
- Demonstrate principles, operation, diagnosis and service of brake systems.
- Demonstrate principles, operation, diagnosis and service of electrical and electronic systems.
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YEAR ONE

Quarter One

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AMM 149, Hybrid and Alternative Fuel Vehicles ...................... 2
AMM 245, Brakes .................................................................. 13
OCSUP 105, Introduction to Quantitative
  Problem Solving for the Trades (M) .................................. 5
Total Credits ................................................................. 26

Quarter Two

AMM 150, Automotive High Voltage Systems ...................... 2
AMM 161, Electrical and Electronics ...................................... 19
WRITE 100, Written Communication in the Workplace (W) ....... 3
Total Credits ................................................................. 24

Quarter Three

AMM 151, Engine Performance .............................................. 11
AMM 153, High Voltage Battery Reconditioning and Rebuild ... 2
AMM 171, Air Conditioning and Heating ............................... 4
AMM 181, Suspension and Alignment .................................... 4
OCSUP 101, Human Relations (R) ....................................... 3
WELD 141, Welding Basics * ............................................. 4
Total Credits ................................................................. 28

Year One Total ............................................................... 78
Grand Total ................................................................. 78

YEAR TWO

Quarter One

AMM 210, Engine Rebuild .................................................... 21
OCSUP 102, Oral Communication in the Workplace (O) ....... 3
Total Credits ................................................................. 24

Quarter Two

AMM 224, Automatic Transmission/Transaxles .................... 13
AMM 225, Manual Drive Train and Axles ............................ 8
OCSUP 103, Job Seeking Skills (J) ...................................... 3
Total Credits ................................................................. 24

Quarter Three

AMM 152, Engine Performance II ....................................... 9
AMM 232, Air Conditioning and Heating II ......................... 4
AMM 242, Suspension and Alignment II ............................... 4
AMM 254, Compressed Natural Gas Vehicle Service and Repair . 2
AMM 255, CNG Conversion/Installation ............................. 2
AMM 299, Leadership (L) ................................................ 1
Total Credits ................................................................. 22

Year Two Total ............................................................... 70
Grand Total ................................................................. 148

*Any welding course WELD 141, Welding Basics (4 credits) or above, or WLDT 120, will satisfy the welding requirement.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

J) - OCSUP 103, PSYC 140  (M) - BUS 112, OCSUP 105, OCSUP 106
(W) - BUS 137, ENGL 101, WRITE 100  (O) - CMST 102, CMST& 220, OCSUP 102
(L) - AMM 299  (R) - BUS 102, BUS 157, OCSUP 101, PSYC& 100

EPC: 712C
BIOLOGICAL SCIENCES

Biological Sciences

AS
http://wwcc.edu/biology

Jeanine Kay-Shoemake 509.524.4799 jeanine.kay-shoemake@wwcc.edu
Michael Mahan 509.527.4692 michael.mahan@wwcc.edu
Stephen Shoemake 509.527.4643 stephen.shoemake@wwcc.edu
Matthew Stacey 509.527.4468 matthew.stacey@wwcc.edu
Pete Van Dyke 509.527.4347 peter.vandyke@wwcc.edu
Lori Loseth - Clk 509.758.1710 lori.loseth@wwcc.edu
Cynthia Robinett - Clk 509.758.1727 cynthia.robinett@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston]
Department Overview: Biological Sciences is the study of all living things-how they reproduce, grow, and evolve and how they relate to each other and to their environment. Students develop an understanding of scientific facts and principles relating to life and life processes from molecules to ecosystems.

Program Level Outcomes:

- An understanding of discipline specific terminology and methods.
- An ability to correctly use discipline specific tools and/or techniques.
- Critical thinking skills necessary in science including appropriate study techniques, problem solving skills and the use of data to assess the validity of claims.
- The ability to research, interpret and communicate concepts obtained from scientific literature.
- An understanding of the relationships between course concepts and society, including the impact of course specific technology.

Degrees: Students may earn an Associate in Science Degree - Option I (90 credits), or an Associate in Biology-DTA/MRP (90 credits). These degrees are applicable to students planning to prepare for upper division bachelor’s degree majors in Biology. Please consult with an advisor at WWCC and your intended transfer institution for the most appropriate degree program. (See AS Option I and AA DTA in Degrees section of catalog.)

Preparation for Success: In addition to required chemistry and biology courses, students interested in a major in Biological Science should take courses in mathematics, physics and computer science. Computer courses are essential, as employers prefer job applicants who are able to apply computer skills to modeling and simulation tasks and to operate computerized laboratory equipment. Those interested in studying the environment also should take courses in environmental studies and become familiar with current legislation and regulations.

Business Administration

CERT, AAAS, AA-DTA
http://wwcc.edu/business

Linda Lane - Clk 509.758.1724 linda.lane@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [50% Online]
Department Overview: The Business Administration curriculum is designed for students who wish to gain the technology and skills necessary for employment and advancement in the business management environment. Students will be prepared to own their own business, work in a leadership role for others or transfer to a four-year institution. Business Administration curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Program completers will demonstrate technical competency in core ability and related instruction curriculum components.
- Students who have declared a program major will complete that program of study.
- Student and employer satisfaction will reflect a high degree of self-esteem, self-confidence, and the potential to grow within that job or business.
- Students completing the AAAS degree will become employed in a living wage job.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Business and Management upon completion of the two-year program of study. A Business and Management one-year certificate is available upon completion of the first year of study in the AAAS Degree program.

There is also an Associate in Business - DTA Degree for students wishing to pursue a business degree at a Washington public baccalaureate institution. (See AA-DTA in Degrees section of catalog.)

Industry Description: The nation’s businesses are a part of an economic system that contributes to our society’s standard of living and quality of life. Businesses provide the necessities of life such as food, clothing, housing, and medical care. Excelling in the day-to-day business processes that drive organizational success is integral for business managers. Business and management skills are critical to the survival of companies. Managers in today’s highly competitive industries must have knowledge and skills in accounting, marketing, resource allocation, technology, retailing, and many more elements that are vital to a company’s success.

Entrance Requirements: Students may begin their study in these programs in fall, winter or spring quarters. However, due to course sequencing and course prerequisites, it is preferable to begin in the fall quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: Students transferring into the Business Administration department from another institution should have their transcripts evaluated by an advisor at WWCC to determine which courses apply toward the business degree(s). Before entering the program all students need to secure an advisor within the Business Administration Department and become familiar with the degree requirements.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov/.
## Degrees and Certificates

### Business and Management Certificate

**Certificate available at/via:** [Walla Walla] [Clarkston] [50% Online]

**Certificate Outcomes:**

- Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- Develop and implement appropriate marketing strategies.
- Apply concepts, methods, processes and functions of management to business operations.
- Demonstrate the ability to communicate clearly and concisely in personal and business communication.
- Understand buying and promotion techniques necessary for proper retail management.
- Establish and maintain effective working relationships in multicultural settings.
- Problem Solving - recognizes problems and devises and implements plan of action.
- Participates as a member of a team and contributes to group effort.

### YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 102, Customer Service</td>
<td>5</td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101, Intro to Business</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
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<tr>
<th>Quarter Two</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I*</td>
<td>5</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 192, Business Leadership Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BUS 137, Business Communications II (W)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 217, Computer Software Applications</td>
<td>5</td>
</tr>
<tr>
<td>BUS 291, Co-op Work Experience</td>
<td>2-5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15-18</strong></td>
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**Year One Total** | **53-56**

**Grand Total** | **53-56**

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### YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>BUS 173, Event Planning and Management</td>
<td>5</td>
</tr>
<tr>
<td>BUS 189, Principles of Management</td>
<td>5</td>
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<td>BUS 292, Business Leadership Seminar II (L)</td>
<td>3</td>
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<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
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<tr>
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<tr>
<td>BUS 210, Principles of Marketing</td>
<td>5</td>
</tr>
<tr>
<td>BUS 270, Hospitality Operations</td>
<td>5</td>
</tr>
<tr>
<td>CA 133, Food and Wine/Beverage</td>
<td>4</td>
</tr>
<tr>
<td>GEOG&amp; 207, Economic Geography</td>
<td>5</td>
</tr>
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<td><strong>Total Credits</strong></td>
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<tr>
<td>BUS 215, eMarketing</td>
<td>5</td>
</tr>
<tr>
<td>BUS 273, Legal Issues in Hospitality</td>
<td>5</td>
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<tr>
<td>CA 243, Food and Beverage Management</td>
<td>3</td>
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<td>BUS 291, Co-op Work Experience</td>
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<tr>
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<td><strong>15-18</strong></td>
</tr>
</tbody>
</table>

**Year Two Total** | **52-55**

**Grand Total** | **105-108**

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### EPC: S02C

*Students may elect to take BUS 136, Business Communications I or ENGL& 101, English Composition I.*

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (W) - BUS 137, BUS 140, ENGL& 102
- (M) - BUS 112, BUS 113, MATH 115, MATH& 146
- (R) - BUS 157

---

### Associate in Applied Arts and Sciences in Hospitality & Tourism Management

Hospitality and Tourism Management is a multidisciplinary field of study preparing students for a career in hospitality and tourism management positions across many industries. It draws upon a wide range of basic disciplines to provide the fundamental knowledge and skills that are required to fulfill the diverse demands placed upon individuals in management positions within the hospitality industry. Course work includes: hotels, motels, restaurants, tourism, gaming, trade shows, conventions, recreation, food service, and the culinary arts.

**Degree available at/via:** [Walla Walla] [50% Online]

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<td>BUS 136, Business Communications I*</td>
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<tr>
<td>BUS 170, Introduction to Hospitality &amp; Tourism</td>
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</table>

**EPC: S02B**

*BUS 136 is the pre-requisite to BUS 137.*

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - BUS 192
- (W) - BUS 137
- (L) - BUS 292
- (M) - BUS 112
- (O) - CMST& 220
- (R) - BUS 157

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FOR THE MOST CURRENT INFORMATION SEE: [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Associate in Applied Arts and Sciences Degree in Business Administration

The Business Administration curriculum is designed for students who wish to gain the technology and skills necessary for employment and advancement in the business management environment in a variety of industries including: health, legal, computer support and information technology. Students will be prepared to own their own business or work in a leadership role within an existing company.

Degree available at/via: [Walla Walla] [50% Online]

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101, Intro to Business</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 102, Customer Service</td>
<td>5</td>
</tr>
<tr>
<td>Business Elective *</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 192, Business Leadership Seminar I (J)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 217, Computer Software Applications</td>
<td>5</td>
</tr>
<tr>
<td>Business Elective *</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Year One Total** | **48**

YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 292, Business Leadership Seminar II (L)</td>
<td>3</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
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<tr>
<td>Business Elective *</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 137, Business Communications II (W)</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 201, Business Law I</td>
<td>5</td>
</tr>
<tr>
<td>Business Elective *</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Business Elective *</td>
<td>5</td>
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<tr>
<td>Business Elective *</td>
<td>5</td>
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<tr>
<td>Business Elective (Optional) **</td>
<td>0-5</td>
</tr>
<tr>
<td>BUS 291, Co-op Work Experience</td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tr>
</tbody>
</table>

**Year Two Total** | **45-53**

**Grand Total** | **93-101**

EPC: 502A

*Electives to be approved by department advisor. Any combination of courses totaling 30-35 credits can constitute an emphasis.

Example - General Business emphasis:
BUS 125, BUS 126, BUS 151, BUS 222, BUS 224, BUS 226, BUS 287

Example - Legal Information Tech emphasis:
BUS 125, BUS 126, BUS 151, BUS 222, BUS 224, BUS 226, BUS 228

Example - Health Information Technology Management emphasis:
BUS 115, BUS 125, BUS 222, BUS 231, BUS 232, BUS 234, BUS 280

Associate in Applied Arts and Sciences Degree in Business and Management

This technical degree provides the skills necessary for employment and preparation for advancement in the business management environment.

Degree available at/via: [Walla Walla] [Clarkston] [50% Online]

**Degree Outcomes:**

- Demonstrate analytical and critical-thinking skills with direct application to business environments.
- Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- Develop and implement appropriate marketing strategies.
- Apply concepts, methods, processes and functions of management to business operations.
- Demonstrate the ability to communicate clearly and concisely in personal and business communication.
- Demonstrate sound management decisions based upon planning and examination of appropriate alternatives.
- Demonstrate an understanding of budgeting and inventory control systems.
- Apply retail concepts as they relate to apparel and non-apparel merchandise.
- Understand buying and promotion techniques necessary for proper retail management.
- Establish and maintain effective working relationships in multicultural settings.
- Applies Technology to task and understands overall intent and proper procedures for setup and operation.
- Problem Solving - recognizes problems and devises and implements plan of action.
- Creative Thinking - generates new ideas.
- Participates as a member of a team and contributes to group effort.
- Serves Clients/Customers and works to satisfy customers' expectations

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>BUS 194, Entrepreneurship Development</td>
<td>5</td>
</tr>
<tr>
<td>BUS&amp; 101, Intro to Business</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 102, Customer Service</td>
<td>5</td>
</tr>
<tr>
<td>BUS 210, Principles of Marketing</td>
<td>5</td>
</tr>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136, Business Communications I *</td>
<td>5</td>
</tr>
<tr>
<td>BUS 151, Microsoft Excel</td>
<td>5</td>
</tr>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
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<table>
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<tr>
<th>Year Two Total</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>48-51</strong></td>
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<table>
<thead>
<tr>
<th>Grand Total</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>98-101</strong></td>
<td></td>
</tr>
</tbody>
</table>

Program available at/via: [Walla Walla]

Department Overview: Each year the Carpentry program builds a residential home in partnership with Blue Mountain Action Council. This hands-on training allows students to participate in the “foundation-to-finish” experiences necessary to build a new home while completing the required carpentry coursework and related instruction for the AAAS Degree. Students will graduate from the Carpentry program with the knowledge and experience necessary to begin employment in the construction industry. Carpentry curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Provide students with marketable technical and interpersonal skills in the trade, resulting in career placement.
- Provide training in environmental and workplace safety that meets appropriate industry standards.
- Educate and graduate students who possess the knowledge and skills necessary to be successful in the construction industry.
- Continue to keep the Carpentry curriculum current with industry practices and standards based on input from the advisory committee.
- Provide students with the opportunity to complete a state-of-the-art home with all the latest Green Building standards and International Building Codes met.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Carpentry upon completion of the two-year program of study. This degree will prepare students to take the journeyman carpenter examination. A Carpentry Certificate is available upon completion of the first year of study in the program.

Industry Description: Carpenters are involved in many different kinds of construction activity, from the building of highways and bridges, to the installation of kitchen cabinets. Carpenters construct, erect, install, and repair structures and fixtures made from wood and other materials. Depending on the type of work and the employer, carpenters may specialize in one or two activities or may be required to know how to perform many different tasks. Small home builders and remodeling companies may require carpenters to learn about all aspects of building a house-framing walls and partitions, putting in doors and windows, building stairs, installing cabinets and molding, and many other tasks. Large construction contractors or specialty contractors, however, may require their carpenters to perform only a few regular tasks, such as framing walls, constructing wooden forms for pouring concrete, or erecting scaffolding.

Entrance Requirements: It is recommended that students in the Carpentry program contact the lead instructor regarding appropriate program placement. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.
Carpentry Certificate

Certificate available at/via: [Walla Walla]
Certificate Outcomes:

- Demonstrate a safe work environment.
- Operate hand and power tools/equipment used in carpentry.
- Follow plans, specifications and codes used in carpentry.
- Demonstrate wall and ceiling framing.
- Apply exterior finishes and windows.
- Install interior trim.
- Layout and install floor systems.
- Perform tile prep work.
- Set trusses and construct roofing system.
- Insert insulation and hang drywall.
- Develop concrete form and layout.
- Apply paint to both the interior and exterior.
- Demonstrate green building practices.
- Install Sheetrock.
- Install doors.
- Demonstrate concrete pouring and stem walls.
- Communicate effectively using construction language.
- Demonstrate the ability to problem solve.

### YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 181, Introduction to Carpentry</td>
<td>18 - 20</td>
</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
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<td>Total Credits</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 182, On-Site Work: Exterior</td>
<td>18 - 20</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>21.4-23.4</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 183, On-Site Work: Interior Finish</td>
<td>18 - 20</td>
</tr>
<tr>
<td>OCSUP 101, Human Relations (R)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>21-23</td>
</tr>
</tbody>
</table>

**Year One Total** 65.4-71.4

**Grand Total** 65.4-71.4

### YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 184, Advanced Work in Layout *</td>
<td>18 - 20</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>21-23</td>
</tr>
</tbody>
</table>

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### Transferability:
The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

### Degree Outcomes:

- Demonstrate a safe work environment.
- Operate hand and power tools/equipment used in carpentry.
- Follow plans, specifications and codes used in carpentry.
- Demonstrate wall and ceiling framing.
- Apply exterior finishes and windows.
- Install interior trim.
- Layout and install floor systems.
- Perform tile prep work.
- Set trusses and construct roofing system.
- Insert insulation and hang drywall.
- Develop concrete form and layout.
- Apply paint to both the interior and exterior.
- Demonstrate green building practices.
- Perform wall and ceiling layout and estimates.
- Install doors.
- Layout and install tile.
- Demonstrate concrete pouring and stem walls.
- Communicate effectively using construction language.
- Demonstrate the ability to problem solve.

### Associate in Applied Arts and Sciences Degree in Carpentry

This technical degree prepares the student for an entry-level position in the carpentry industry. Completion of this two-year program will enhance the student's ability to pass the Journeyman Carpenter Examination.

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Demonstrate a safe work environment.
- Operate hand and power tools/equipment used in carpentry.
- Follow plans, specifications and codes used in carpentry.
- Demonstrate wall and ceiling framing.
- Apply exterior finishes and windows.
- Install interior trim.
- Layout and install floor systems.
- Perform tile prep work.
- Set trusses and construct roofing system.
- Insert insulation and hang drywall.
- Develop concrete form and layout.
- Apply paint to both the interior and exterior.
- Demonstrate green building practices.
- Perform wall and ceiling layout and estimates.
- Install doors.
- Layout and install tile.
- Demonstrate concrete pouring and stem walls.
- Communicate effectively using construction language.
- Demonstrate the ability to problem solve.

---

### Other Information:
All construction work expected of carpenters is completed by students. Electricians, plumbers, and heating/air conditioning technicians and concrete flat work subcontractors are hired to assist in meeting strict building codes.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

---

### Degrees and Certificates

**Carpentry Certificate**

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate a safe work environment.
- Operate hand and power tools/equipment used in carpentry.
- Follow plans, specifications and codes used in carpentry.
- Demonstrate wall and ceiling framing.
- Apply exterior finishes and windows.
- Install interior trim.
- Layout and install floor systems.
- Perform tile prep work.
- Set trusses and construct roofing system.
- Insert insulation and hang drywall.
- Develop concrete form and layout.
- Apply paint to both the interior and exterior.
- Demonstrate green building practices.
- Install Sheetrock.
- Install doors.
- Demonstrate concrete pouring and stem walls.
- Communicate effectively using construction language.
- Demonstrate the ability to problem solve.

---

### EPC: 745C

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (W) - ENGLB 101, WRITE 100
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (R) - OCSUP 101, PSYCA 100

---

### FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

100
Quarter Two | Credits  
---|---  
CARP 285, Advanced Blueprint Reading II * | 18  
OCSUP 103, Job Seeking Skills (J) | 3  
Total Credits | 21  

Quarter Three | Credits  
---|---  
CARP 299, Leadership (L) | 1  
CARP 286, Advanced On-Site Work * | 18  
Total Credits | 19  
Year Two Total | 61-63  
Grand Total | 126.4-134.4  

EPC: 745  
*CARP 191, Cooperative Work Experience may be substituted for CARP 284, 285 or 286 with instructor permission.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):  
(J) - OCSUP 103  
(W) - ENGL& 101, WRITE 100  
(L) - CARS 299, OCSUP 299  
(M) - BUS 112, OCSUP 105, OCSUP 106  
(O) - CMST 102, CMST& 220, OCSUP 102  
(R) - OCSUP 101, PSYC& 100

**Chemistry**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Department Overview:</th>
<th>Program Level Outcomes:</th>
<th>Degrees:</th>
<th>College Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Darlene Snider 509.527.4265 <a href="mailto:darlene.snider@wwcc.edu">darlene.snider@wwcc.edu</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Program available at/via: [Walla Walla] [Clarkston]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Department Overview: Provides students with valuable information and strategies that will help them make the adjustment to college. It aids students in exploring their personal values and reasons for seeking a college education. Further, they develop skills in stress management, reduction of test anxiety, effective note-taking and test-taking techniques, career planning, decision-making, educational goal setting, personal responsibility and leadership.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Program Level Outcomes: Update Collision Repair Technology program curriculum in accordance with current industry skill standards and I-CAR standards.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prepare graduates to enter the collision repair industry with the knowledge and skills necessary to be successful.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Articulate the Collision Repair Technology program horizontally with other WWCC programs and vertically with regional high schools and tech centers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Collision Repair Technology, upon completion of a two-year program of study. A Collision Repair Certificate is available upon completion of the first year of study in the program.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Students who earn their AAAS in Collision Repair Technology may also earn a dual degree in Automotive Repair Technology after one additional year of instruction. Please speak with your instructor about the required and specific classes needed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Industry Description: There is a high demand for skilled collision repair technicians. Automotive manufacturers have made revolutionary changes in automobile designs. These changes have brought new concepts to the field of collision repair, requiring proper training to restore damaged vehicles to their factory specifications in both body repair and painting. The technology of the automobile has changed faster in the past five years than it had in the previous two decades, ensuring that the future looks great for skilled people in the collision repair field. Auto manufacturers constantly refine and change their products in response to customers' demands and governmental regulations. This means all new designs, new products/materials,</td>
</tr>
</tbody>
</table>
advanced manufacturing processes, hi-tech systems, and safety features are being incorporated into each new automobile. Skilled technicians will be required to repair modern vehicles.

**Entrance Requirements:** It is recommended that the student contact the lead instructor regarding appropriate program placement. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement process, and mechanical reasoning test must be completed through the Testing Center. Visit [wwcc.edu/placement](http://www.wwcc.edu/placement) for more information.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).

---

### Degrees and Certificates

**Collision Repair Technology Certificate**

The schedule of courses lists all courses required for completion of the Collision Repair Technology Certificate, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

**Certificate available at/via:** [Walla Walla]

**Certificate Outcomes:**

- Use body shop hand tools, common hand tools, and power tools.
- Establish corrosion protection.
- Operate paint spray equipment.
- Mix and apply automotive finishes incorporating waterborne paint products.
- Perform welding procedures and use equipment, GMAW & RSTSW to NATEF standards.
- Demonstrate safe practices in the auto body lab.

<table>
<thead>
<tr>
<th><strong>YEAR ONE</strong></th>
<th><strong>YEAR ONE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quarter One</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>ABT 161, Auto Body Repair</td>
<td>21</td>
</tr>
<tr>
<td>OCSUP 101, Human Relations (R)</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tr>
<tr>
<td><strong>Quarter Two</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>ABT 162, Auto Body Repair II</td>
<td>21</td>
</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td>26</td>
</tr>
<tr>
<td><strong>Quarter Three</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>ABT 163, Auto Body Refinishing</td>
<td>21</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>74</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

**EPC: 709C**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (W) - BUS 137, ENGL & 101, WRITE 100
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (R) - BUS 157, OCSUP 101, PSYC 111, PSYC& 100

### Associate in Applied Arts and Sciences in Collision Repair Technology

This technical degree prepares the student with the knowledge necessary to enter the auto body industry.

**Degree available at/via:** [Walla Walla]

**Degree Outcomes:**

- Use body shop hand tools, common hand tools, and power tools.
- Explain vehicle structure and construction.
- Perform a collision damage analysis.
- Perform structural and non-structural repairs.
- Establish corrosion protection.
- Remove and install movable and stationary glass.
- Measure structural damage and how to use various types of pulling equipment to repair the damage.
- Operate paint spray equipment.
- Mix and apply automotive finishes incorporating waterborne paint products.
- Perform wheel alignment using electronic alignment equipment.
- Perform welding procedures and use equipment, GMAW & RSTSW to NATEF standards.
- Demonstrate plastic repairs using modern adhesives.
- Demonstrate skills in estimating vehicle damage.
- Demonstrate safe practices in the auto body lab.
- Demonstrate proficiency with the NATEF competencies in each of the four areas: electrical, structural, non-structural, and refinishing.

**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

<table>
<thead>
<tr>
<th><strong>YEAR TWO</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Quarter One</strong></td>
<td><strong>Credits</strong></td>
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<td>ABT 264, Unibody Rebuilding</td>
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<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
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<td>ABT 265, Electrical Mechanical</td>
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<td>OCSUP 103, Job Seeking Skills (J)</td>
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For the most current information see: [www.wwcc.edu](http://www.wwcc.edu)
Commercial Truck Driving

CERT

http://wwcc.edu/truckdriving

Steven Harvey 509.527.3681 steven.harvey@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Commercial Truck Driving offers short-term courses that provide students the potential for immediate employment in a living wage job upon successful completion. The Federal Motor Carrier Safety Administration (FMCSA) requires specialized training in the areas of driver qualification, hours of service, driver wellness, and whistleblower protection for entry-level drivers who are subject to the commercial driver’s license requirements (49 CFR Part 380). The Commercial Truck Driving program provides the mandatory training for the Washington State Commercial Truck Driving License requirements for both new and renewing drivers. Students learn to maneuver large vehicles on crowded streets and in highway traffic, as well as learn to inspect trucks and freight for compliance with regulations. The Commercial Truck Driving curriculum is reviewed by an advisory board composed of local and regional industry members. Students must provide proof of lawful permanent residency or U.S. Citizenship when applying for this certification. One of the following six approved, government-issued documents will need to be presented to the Department of Licensing: Valid U.S. passport, Certificate of Naturalization, government-issued birth certificate, Certificate of Citizenship, permanent resident card “Green Card”, or Consular Report of Birth Abroad. Photocopies are not accepted.

Program Level Outcomes:

• Implement competency-based education, skill standards, and program certification.
• Create and maintain a marketing plan related to student recruitment.
• Update facilities with consideration for function and appearance.
• Maintain up-to-date curriculum that meets or exceeds the Washington State requirement for a Class A driver’s license.

Degrees: WWCC offers a Truck Driver Training Certificate and an Advanced Truck Driver Training Certificate.

In addition to receiving a certificate, Flagger training is also offered, which aids in receiving a Hazmat endorsement. If planning to work in a city, county, state department of transportation, or federal job, most of them require flagger and first aid training.

The Commercial Truck Driving program also offers a passenger and school bus endorsement.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

Industry Description: Truck drivers are a constant presence on the nation’s highways and interstates, delivering three out of every four tons of goods shipped in the country. Firms of all kinds rely on trucks for pickup and delivery of goods because no other form of transportation can deliver goods door to door. Even if goods travel in part by ship, train, or airplane, trucks carry nearly all goods at some point in their journey from producer to consumer. This trend, combined with increased pay and benefit packages provided by motor carrier employers has led to the strong demand for commercial truck drivers.

Entrance Requirements: The prospective student must have a valid state license with NO current driving privilege suspension in any state; demonstrated physical qualifications by passing a D.O.T. physical examination and drug screening as required by FMCSR part 391; meet current hiring standards as set by the trucking industry; be 18 years of age or older; and have instructor permission. Students may enter the program in fall, winter, or spring quarter.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees and Certificates

Truck Driver Training Certificate

This certificate will prepare the student to take the Washington State Commercial Driver’s License test. It is designed for immediate employment or may be utilized by individual who is interested in improving current skills and knowledge.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

• Pass the required Commercial Driver’s license knowledge, combination, and air brake tests at the DMV.
• Pass pre-trip inspection, skills test, driving test and obtain Commercial Driver’s license.
• Perform a vehicle inspection in an accurate systematic sequence to ensure safety of operation.
• Demonstrate ability to plan trips and routes including managing loads and weight distribution to ensure safety of operation.
• Communicate effectively with peers, customers and supervisors.
• Complete appropriate paper-work correctly.
• Problem-solve road and traffic conditions to ensure safety of operation.

YEAR ONE

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<td>TRK 110, Truck Driver Training</td>
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EPC: 715C
Advanced Truck Driver Training Certificate

This certificate will prepare the student to take the Washington State Commercial Driver’s License test. It is designed for immediate employment or may be utilized by individual who is interested in improving current skills and knowledge.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Pass the required Commercial Driver’s license knowledge, combination, and air brake tests at the DMV.
- Pass pre-trip inspection, skills test, driving test and obtain Commercial Driver’s License.
- Perform a vehicle inspection in an accurate systematic sequence to ensure safety of operation.
- Demonstrate ability to plan trips and routes including managing loads and weight distribution to ensure safety of operation.
- Communicate effectively with peers, customers and supervisors.
- Complete appropriate paperwork correctly.

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<tbody>
<tr>
<td>TRK 191, Cooperative Work Experience</td>
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<td>TRK 192, Cooperative Seminar</td>
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</tbody>
</table>

EPC: 715

Communication Studies

http://wwcc.edu/speech

Connie Loomer 509.524.5153 connie.loomer@wwcc.edu
Bart Preess 509.325.4725 barton.preess@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [50% Online]

Program Level Outcomes:

- Develop and employ verbal and nonverbal skills essential to communicate oral presentations and effectively build relationships with others.
- Utilize appropriate listening techniques.
- Formulate and demonstrate the process of designing a successful oral presentation from outline to delivery.
- Identify and describe the ethics of public speaking.
- Identify, define, and demonstrate effective interpersonal skills.
- Compare and contrast similarities and differences in the communication behaviors of different cultures.

Degrees: Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

Preparation for Success: Communication Studies classes will prepare students to be effective participants in a wide variety of settings and fields. Students wishing to major in communications at four-year institutions should work closely with advisors to take a well-rounded liberal arts program as well as meet specific requirements at transfer institutions.

Other Information: The Communication Studies department supports students’ efforts to fulfill degree requirements by offering a required course in public speaking. Other courses appealing to multiple levels of interest, skill, and experience are under development. Course offerings provide the basis for transfer, occupations, and life-long learning.

Computer Science

CERT, AAAS

http://wwcc.edu/computer

Robin Greene 509.527.4699 robin.greene@wwcc.edu
Gerald Sampson 509.527.4636 gerald.sampson@wwcc.edu
Linda Lane- Clk 509.758.1724 linda.lane@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [50% Online]

Department Overview: Computer Science endeavors to create an understanding of computer operating systems, programming, digital design for the web, and computer applications and hardware allowing the student to solve computer-related problems. Courses are taught in lecture, lab, and cooperative (on-the-job) training formats. Courses are developed by the Computer Science Program Advisory Board, which consists of experts working in local and regional computer-related businesses and senior faculty.

Program Level Outcomes:

- Graduates successfully completing the program are employable in their degree area, at a living wage job with benefits.
- Program completers are encouraged to pursue bachelor level programs in computer science.
- Program maintains advanced certificate, degree and endorsements that are current with latest industry standards.

Degrees:

Students may earn an Associate in Applied Arts and Sciences Degree in each of three key areas of Computer Science: Digital Design, Software Design, or Networking.

Students may also earn an Associate in Science Degree-Option II (90 credits) which is designed to prepare students for upper division study in computer science. Please consult with an advisor at WWCC and your intended transfer institution to determine an appropriate education plan.

Industry Description: Computer Science is the application of computing equipment and methods to the solution of human and business problems. Occupations related to Computer Science have represented the nation’s fastest growing areas of job opportunity in the past ten years and are projected to continue for the next ten years.

Entrance Requirements: Students may enter the program fall, winter or spring quarter, however, due to course sequencing, it is recommended students begin in the fall. In order to start this program,
### Networking Certificate

This certificate provides students with a working knowledge of computer networks, including network hardware and popular network operating systems.

**Certificate available at/via:** [Walla Walla] [Clarkston] [50% Online]

**Certificate Outcomes:**

- Demonstrate the ability to critically and logically think and organize to solve computer science related problems and processes as they relate to networking in industry.
- Demonstrate the ability to communicate effectively in oral and written form.
- Demonstrate the ability to work effectively in a team setting.
- Demonstrate knowledge of software and hardware related to networking requirements and certifications in industry.
- Demonstrate knowledge and application of ethical and privacy issues relating to the computer science field.
- Demonstrate knowledge and application of customer service skills.

### Year One

<table>
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<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
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<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
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<td>CS 115, Introduction to Computer &amp; Information Technology</td>
<td>5</td>
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<td>CS 120, Networking Using Internet Technologies</td>
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<tr>
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<tr>
<td>CS 121, Problem Solving with Programming *</td>
<td>5</td>
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<td>CS 125, Operating Systems</td>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<td>CS 130, PC Support and Maintenance I</td>
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<td>ENGL&amp; 101, English Composition I (W)</td>
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<td>PSYC&amp; 100, General Psychology (R)</td>
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<td><strong>Year One Total</strong></td>
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**EPC: 527C**

*Students may elect to substitute CS& 131, CS 140, CS 142 or CS 230. Please note the course for substitution may only be used once in the degree sequence.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - CS 192, (M) - BUS 112, OCSUP 105, OCSUP 106
- (W) - BUS 137, ENGL & 101
- (O) - CMST 102, CMST& 220
- (L) - CS 292, (R) - BUS 102, PSYC& 100

### Year Two

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<td>CS 260, Unix/Linux Operating Systems</td>
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<td>CS 265, CCNA 1</td>
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<tr>
<td>CS 275, Windows Client</td>
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<tr>
<td>CS 267, CCNA 3</td>
<td>5</td>
</tr>
<tr>
<td>CS 276, Windows Server</td>
<td>5</td>
</tr>
<tr>
<td>CS 277, Fund of Network Security</td>
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</table>
Digital Design Certificate

This certificate provides the basic knowledge in the fields of digital publishing for the web.

Certificate available at/via: [Walla Walla] [50% Online]  

Certificate Outcomes:

- Demonstrate the ability to critically and logically think and organize to solve computer science related problems and processes as they relate to entry-level digital design in industry.
- Demonstrate the ability to communicate effectively in oral and written form.
- Demonstrate the ability to work effectively in a team setting.
- Demonstrate knowledge of software and hardware related to entry-level digital design applications.
- Demonstrate knowledge and application of ethical and privacy issues relating to the computer science field.
- Demonstrate knowledge and application of customer service skills.

Associate in Applied Arts and Sciences  
Degree in Digital Design

This technical degree prepares the student for entry-level employment in the fields of digital design for the web.

Degree available at/via: [Walla Walla] [50% Online]  

Degree Outcomes:

- Demonstrate the ability to critically and logically think and organize to solve computer science related problems and processes as they relate to digital design in industry.
- Demonstrate the ability to communicate effectively in oral and written form.
- Demonstrate the ability to work effectively in a team setting.
- Demonstrate knowledge of software and hardware related to digital design applications.
- Demonstrate knowledge and application of ethical and privacy issues relating to the computer science field.
- Demonstrate knowledge and application of customer service skills.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

YEAR ONE

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<th>Quarter One</th>
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<tr>
<td>CS 223, Photoshop **</td>
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<td>CS 226, Web Design Specialist I</td>
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<td>CS 227, Web Design Specialist II</td>
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<td>ENGL 101, English Composition I (W)</td>
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<tr>
<td>CS 228, Website Design Specialist III</td>
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<td>CS 250, Site Development Associate HTML V ***</td>
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<td>PSYC 100, General Psychology (R)</td>
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YEAR TWO

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<tr>
<td>CS 223, Photoshop</td>
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<td>CS 226, Web Design Specialist I</td>
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<td>CS Elective ***</td>
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FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
### Computer Science

#### For the Most Current Information See: www wwcc edu

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<td>CS 110, Introduction to Computers and Applications</td>
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<td>CS 121, Problem Solving with Programming</td>
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**Associate in Applied Arts and Sciences in Software Design**

This technical degree provides students with a fundamental understanding of computer systems, programming, databases, and application software, as well as an opportunity to apply their knowledge in practical settings. The following courses meet the related instruction requirements of this certificate/degree:

- **W** - BUS 137, ENGL& 101
- **R** - BUS 102, PSYC& 100
- **M** - BUS 112, OCSUP 105, OCSUP 106

**Degree available at/via: [Walla Walla] [50% Online]**

**Degree Outcomes:**

- Demonstrate the ability to critically think and organize to solve computer science related problems and processes as they relate to software design.
- Demonstrate the ability to communicate effectively in oral and written form.
- Demonstrate the ability to work effectively in a team setting.
- Demonstrate knowledge of software and hardware related to software design requirements and certifications.
- Demonstrate knowledge and application of ethical and privacy issues relating to the computer science field.
- Demonstrate knowledge and application of customer service skills.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
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<td>CMST&amp; 220, Public Speaking</td>
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<td>CS 110, Introduction to Computers and Applications</td>
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<td>CS 115, Introduction to Computer &amp; Information Technology</td>
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<td>CS 120, Networking Using Internet Technologies</td>
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<tr>
<td>Quarter Two</td>
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<tr>
<td>CS 121, Problem Solving with Programming</td>
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<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades</td>
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<tr>
<td>Quarter Three</td>
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<tr>
<td>CS 130, PC Support and Maintenance</td>
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<tr>
<td>CS 220, Digital Imaging Foundations</td>
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Cosmetology

Program available at/via: [Walla Walla]

Department Overview: The Cosmetology program provides the theory and practical application necessary to obtain a Washington State Cosmetologist License or a Washington State Cosmetology Instructor License. The primary objective of the program is to prepare students for employment in all areas of beauty culture. Instruction and practice in the cosmetology course include training for shampooing, scalp and hair analysis, haircutting and trimming, trimming and removal of facial hair, thermal styling, wet and dry styling, skin care, temporary removal of superfluous hair, first aid, permanent waving, chemical relaxing, hair coloring, bleaching, rinsing, manicuring, pedicuring, and the styling of artificial hair. The Cosmetology curriculum is guided by the Washington State Cosmetology license requirements and reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- To market, recruit, and retain students in the Cosmetology program.
- Involve cosmetology professionals in curriculum development and learning outcomes.
- Provide instruction with current skills (techniques and styles) used in the cosmetology profession in order to prepare students for employment.
- Certify the program using industry skill standards.
- Graduate students who demonstrate the knowledge and skills to obtain a cosmetology license and succeed in the industry.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Cosmetology upon completion of the two-year program of study. This degree prepares students to take the Washington State Board of Cosmetology Licensing Test. Individuals that have a current Washington State Cosmetology License and at least one-year of current work experience in a salon may enter the Instructor-Trainee program.

Industry Description: Cosmetologists, also called hairstylists, provide beauty services, such as shampooing, cutting, coloring, and styling hair. They may advise clients on how to care for their hair, straighten hair or give it a permanent wave, or lighten or darken hair color.

Cosmetology is an exciting people-oriented profession. It is a time-honored yet changing career with excellent career possibilities. The future for cosmetologists includes specialization, travel, teaching, employment as a workshop technician, sales of cosmetic supplies and materials, and management opportunities. Cosmetology can be a rewarding profession for the individual who is hardworking, creative and who enjoys working with people.

Entrance Requirements:

- Students must have a high school diploma or GED® before entering the Cosmetology program. Exception: Running Start students may enroll in Cosmetology as long as all other requirements are met.
- Completion of the placement tests offered by WWCC’s Student Development Center.
- Mathematics competence: eligible to enter BUS 112.
- Reading skills: college level reading.
- Writing: eligible for WRITE 100.
- Students shall contact one of the Cosmetology instructors regarding appropriate program placement.
- Students may enter the program fall, winter, or spring quarter, depending on space availability.
- Physical Requirements:
  - Normal visual acuity (with or without correction).
  - Physical dexterity, i.e. to grasp small objects and perform hand, finger manipulations.
  - Must be able to work for extended periods of time with arms at shoulder level.
  - Must be able to work for extended periods of time standing.
- Students are advised to consult their physicians as to possible health problems (i.e., allergies, asthma, dermatitis, etc.) before enrolling.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Quarter One

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<th>Course</th>
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<td>CS 230, Visual Basic Programming</td>
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<td>CS 235, Introduction to Database Design and Theory</td>
<td>5</td>
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<tr>
<td>CS 240, Application Integration using VBA</td>
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Quarter Two

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<th>Course</th>
<th>Credits</th>
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<td>CS 141, Computer Science I JAVA</td>
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<tr>
<td>CS 231, Application Development</td>
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<td>CS 245, Advanced Database Development</td>
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Quarter Three

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 229, Dynamic Website Design with PHP MySQL</td>
<td>5</td>
</tr>
<tr>
<td>CS 241, Programming II (JAVA/C++)</td>
<td>5</td>
</tr>
<tr>
<td>CS 242, Advanced Software Development</td>
<td>5</td>
</tr>
<tr>
<td>CS 291, Cooperative Work Experience II</td>
<td>2</td>
</tr>
<tr>
<td>CS 292, Cooperative Seminar II (L)</td>
<td>1</td>
</tr>
<tr>
<td>Total Credits</td>
<td>20</td>
</tr>
</tbody>
</table>

Year Two Total                                  50

Grand Total                                    100

AAAS, CERT

http://wwcc.edu/cosmetology

Ashley Lawyer 509.527.4228 ashley.lawyer@wwcc.edu
Michelle Mckibben 509.527.4220 michelle.mckibben@wwcc.edu

EPC: 501

* Students may elect to substitute CS 140, CS 142 or CS 230 for CS 121. Please note the course for substitution may only be used once in the degree sequence.

** Students may take CS& 131, CS 140, CS 142 or CS 230 for the elective course. Please note this elective course cannot be a course previously used as a substitution for another requirement.

*** Students may substitute CS 275, Windows Client for CS 130, PC Support and Maintenance.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(J) - CS 192  (M) - BUS 112, OCSUP 105, OCSUP 106
(W) - BUS 137, ENGL & 101  (O) - CMST 102, CMST & 220
(L) - CS 292  (R) - BUS 102, PSYC & 100
Degrees

Associate in Applied Arts and Sciences Degree in Cosmetology

This technical degree prepares the student for employment in all areas of the cosmetology industry.

Degree available at/ via: [Walla Walla]

Degree Outcomes:

- Apply cosmetology theory and technical skills at entry level standards in a professional manner.
- Demonstrate trouble-shooting and problem solving in various cosmetology work-related situations.
- Apply effective listening and speaking skills to educate cosmetology clients on individual beauty requirements.
- Show professionalism and sensitivity towards others.
- Practice safe and sanitary procedures in compliance with state regulations.
- Demonstrate efficient time management skills when working in cosmetology salons.
- Demonstrate marketing strategies to cosmetology customers.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Other Information: COSM 281, Cadet Instructor Training is available quarterly. Contact the Cosmetology faculty for additional details.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSM 111, Principles and Procedures of Cosmetology I*</td>
<td>11</td>
</tr>
<tr>
<td>COSM 112, Practical Application I*</td>
<td>11</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>25</strong></td>
</tr>
<tr>
<td>Quarter Two</td>
<td>Credits</td>
</tr>
<tr>
<td>COSM 121, Principles and Procedures of Cosmetology II*</td>
<td>11</td>
</tr>
<tr>
<td>COSM 122, Practical Application II*</td>
<td>11</td>
</tr>
<tr>
<td>HO 110, HIV/AIDS Education</td>
<td>7</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26.1</strong></td>
</tr>
<tr>
<td>Quarter Three</td>
<td>Credits</td>
</tr>
<tr>
<td>COSM 131, Intermediate Principles and Procedures I*</td>
<td>11</td>
</tr>
<tr>
<td>COSM 132, Practical Application III*</td>
<td>11</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>25</strong></td>
</tr>
<tr>
<td>Quarter Four</td>
<td>Credits</td>
</tr>
<tr>
<td>COSM 299, Leadership (L)</td>
<td>4</td>
</tr>
<tr>
<td>COSM 270, Practical Application VI</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
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YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>COSM 241, Intermediate Principles and Procedures II</td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16.1 - 26.1</strong></td>
</tr>
</tbody>
</table>

Barbering Certificate

This schedule lists all courses required for completion of the Barbering Certificate, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

The required related instruction is noted in bold print. The letter in parenthesis indicates which category of related instruction is represented by the given course as follows:

YEAR ONE

<table>
<thead>
<tr>
<th>Fall Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARB 111, Principals and Procedures of Barbering I</td>
<td>11</td>
</tr>
<tr>
<td>BARB 112, Practical Application I</td>
<td>11</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 101, Human Relations (R)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Winter Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARB 121, Principals and Procedures of Barbering II</td>
<td>11</td>
</tr>
<tr>
<td>BARB 122, Practical Application II</td>
<td>11</td>
</tr>
<tr>
<td>HO 110, HIV/AIDS Education</td>
<td>7</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>26.1 - 31</strong></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Spring Quarter</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARB 131, Principals and Procedures of Barbering III</td>
<td>11</td>
</tr>
<tr>
<td>BARB 132, Practical Application III</td>
<td>11</td>
</tr>
<tr>
<td>COSM 299, Leadership and Job Seeking Skills (L)</td>
<td>4</td>
</tr>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>31</strong></td>
</tr>
<tr>
<td><strong>Total Year One Credits</strong></td>
<td><strong>75.1 - 85.1</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>75.1 - 85.1</strong></td>
</tr>
</tbody>
</table>

For the most current information see: www.wwcc.edu
Criminal Justice

http://wwcc.edu/criminaljustice

Tim Toon 509.527.4307 tim.toon@wwcc.edu

Program available at/via: [Walla Walla] [50% Online]

Department Overview: The Criminal Justice department provides the theoretical and methodological roots of contemporary criminology inquiry as well as applied course work in Criminal Justice. This department is designed to provide an academic foundation in particular specializations for career advancement and/or transfer to baccalaureate institutions.

Program Level Outcomes:

- The ability to analyze past and present society, diverse cultures and histories to better understand individual and group behavior and enhance self-awareness.
- An understanding and working knowledge of the theories, concepts, ideas, terminology, and factual evidence in selected fields within the social sciences.
- Sensitivity in understanding diverse views and perspectives.
- An understanding of the historically and socially constructed nature of human differences.

Degrees: Students may earn an Associate in Arts (AA) Degree, which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should plan their programs at WWCC in accordance with the requirements of the institution to which they plan to transfer.

To earn the Associate in Arts (AA) Degree, a student must complete at least 90 credit hours in college transfer courses numbered 100 or above with a minimum college-level GPA of 2.0, and include a minimum of 63 credit hours in general education courses. Courses cross-listed in two subject areas can be counted for credit in only one area. (See AA-DTA in the Degrees section of the catalog.)

Industry Description: Criminal Justice is the study of the causes, effects and command of crime. Similar to other developing fields, criminal justice is a broad field, drawing from many disciplines, including psychology, corrections, sociology, and chemistry.

Entrance Requirements: Students may begin their study in these programs in fall, winter, or spring quarters. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Culinary Arts

AAAS

http://wwcc.edu/culinaryarts

Jay Entrikin 509.524.5164 jay.entrikin@wwcc.edu
Gregory Schnorr 509.524.5150 gregory.schnorr@wwcc.edu
Dan Thiessen 509.524.4800 dan.thiessen@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: The Culinary Arts program is designed to prepare students for success in the food service and hospitality industry. It provides opportunities to learn the basic skills in product knowledge, food production, service and management while incorporating extensive hands-on instruction and internship opportunities.

The Wine Country Culinary Institute at WWCC is accredited by the American Culinary Federation and operates in a state of the art facility on our main campus, as well as a satellite commercial kitchen at the Center for Enology and Viticulture. Our commitment to Culinary Arts teaching and learning is evident in both our facilities and curriculum. We are a student centered program with an active Culinary Arts Club and opportunities to participate in structured labs, classroom and hands-on learning environments.

Program Level Outcomes:

- Prepare students to enter the workforce with the skills and knowledge to make a valuable contribution to their employer in a short amount of time.
- Encourage, support and provide opportunities for professional life-long learning in the hospitality industry.
- Provide in-service and skill upgrade opportunities for program graduates and industry personnel to maintain current knowledge of trends in changing industry requirements and technology.
- Collaborate with industry partners in an ongoing basis. These partners include: farmers, production personnel, distribution personnel, hotels, restaurants, clubs, wineries and service personnel.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Culinary Arts upon completion of the two-year program of study.

Industry Description: The food service and hospitality industry provide the largest segment of private employers in the country and offers varied career opportunities for those with a passion for cooking. The culinary arts segment of the industry provides opportunities for careers as a cook, chef, restaurant manager, food and beverage director, baker, pastry chef or caterer.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.
Degrees

Associate in Applied Arts and Sciences Degree in Culinary Arts

This technical degree prepares the student for success in the food service and hospitality industries. It can be utilized by individuals planning to enter their chosen career upon graduation or for the individual who is interested in improving current skills and knowledge.

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Perform the essential principles of a professional work ethic in the field of Culinary Arts.
- Maintain a useful and positive attitude while working as part of a team.
- Demonstrate knowledge of advanced cooking methods and their applications.
- Articulate an understanding of food ingredients, supplies and cost considerations within a commercial food service operation.
- Operate and maintain kitchen equipment.
- Demonstrate proficiency in the use of hand tools and knives.
- Articulate an understanding of both nutritional value and sustainability in food selection.
- Demonstrate a professional level of safety, sanitation and organization in the workplace.
- Communicate effectively.
- Think logically and critically.
- Evaluate and process quantitative and symbolic data.
- Accept the time sensitive nature of all things culinary.
- Articulate the role of food in its relationship to personal identity and the understanding of others in a multicultural world.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

YEAR ONE Credits

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 112, Business Mathematics (M)</td>
<td>5</td>
</tr>
<tr>
<td>CA 110, ServSafe</td>
<td>3</td>
</tr>
<tr>
<td>CA 111, Storeroom Operations</td>
<td>3</td>
</tr>
<tr>
<td>CA 112, Introduction to the Culinary Arts</td>
<td>10</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 120, Culinary Arts Methods</td>
<td>9</td>
</tr>
<tr>
<td>CA 121, American Regional Cuisine</td>
<td>4</td>
</tr>
<tr>
<td>CA 122, Food, Farmers, and Culture</td>
<td>4</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
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</thead>
<tbody>
<tr>
<td>CA 130, Introduction to Baking</td>
<td>6</td>
</tr>
<tr>
<td>CA 131, Advanced Baking and Pastry</td>
<td>5</td>
</tr>
<tr>
<td>CA 132, Plated Desserts</td>
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</table>

Total Credits . . . . . . . . 45

Year One Total . . . . . . . . 64.4

YEAR TWO Credits

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>CA 240, French and Mediterranean Cooking</td>
<td>4</td>
</tr>
<tr>
<td>CA 241, Asian Cooking</td>
<td>4</td>
</tr>
<tr>
<td>CA 242, Nutritional Cooking</td>
<td>4</td>
</tr>
<tr>
<td>CA 243, Food and Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>CA 250, Garde Manger</td>
<td>9</td>
</tr>
<tr>
<td>CA 251, Latin American Cooking</td>
<td>2</td>
</tr>
<tr>
<td>CA 252, Culinary Trends and Concepts</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 260, Menu Development</td>
<td>3</td>
</tr>
<tr>
<td>CA 261, A la Carte Cooking</td>
<td>8</td>
</tr>
<tr>
<td>CA 262, Service Management</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 192, Cooperative Seminar I (R)</td>
<td>2</td>
</tr>
<tr>
<td>CA 292, Cooperative Seminar II (L)</td>
<td>2</td>
</tr>
<tr>
<td>CA 191, Cooperative Work Experience I *</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tr>
</tbody>
</table>

Year Two Total . . . . . . . . 62

Grand Total . . . . . . . . . 126.4

EPC 850

*Students are required to complete 15 credits/450 hours of cooperative work experience. Can be acquired while employed within the industry, or accrued hours of event support for on-premise events. Students may take more credits if approved by the instructor.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(C) - BUS 112, OCSUP 105, OCSUP 106
(M) - BUS 112, OCSUP 105, OCSUP 106
(O) - CMST 102, CMSTB 220, OCSUP 102
(R) - BUS 157, CA 192, OCSUP 101, PSYC & 100

For the most current information see: www.wwcc.edu

DANCE

Program available at/via: [Walla Walla]

Department Overview: The Dance department includes a wide range of activity courses that emphasize dance techniques and styles for students at beginning through experienced levels. In addition, the program provides a progression of studies in dance that includes choreography and dance for production.

Program Level Outcomes:

- Demonstrate proficiency in dance technique and movement.
- Memorize and perform choreography and movement combinations.
- Demonstrate improvement in coordination, stamina, and rhythmic ability.
- Critique dance in terms of technique, styles, choreography, performance, and theatrical elements.
- Assess fitness level as it relates to the demands of Dance.

Dance

http://wwcc.edu/dance
Degrees:
Students may earn an Associate in Arts (AA) Degree, which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should plan their programs at Walla Walla Community College in accordance with the requirements of the institution to which they plan to transfer.

To earn the Associate in Arts (AA) Degree, a student must complete at least 90 credit hours in college transfer courses numbered 100 or above with a minimum college-level grade point average of 2.0, and include a minimum of 63 credit hours in general education courses. Courses cross-listed in two subject areas can be counted for credit in only one area. (See AA-DTA in the Degrees section of the catalog.)

Preparation for Success: Because of the strenuous and time-consuming training required, some dancers view formal education as secondary. However, a broad, general education including music, literature, history, and the visual arts is helpful in the interpretation of dramatic episodes, ideas, and feelings. Dancers sometimes conduct research to learn more about the part they are playing.

Diesel Technology
CERT, AAAS
http://wwcc.edu/dieselequipment
David Bailey 509.529.2600 david.bailey@wwcc.edu

Program available at/via: [Walla Walla]
Department Overview: Diesel Technology provides a hands-on, work-based training experience and the classroom curriculum required for careers in diagnosing and repairing heavy-duty trucks, heavy equipment, medium-duty vehicles, agricultural equipment, logging equipment, forklifts, and mining equipment. Diesel Technology integrates the many components necessary to prepare students with the technical knowledge and mechanical skills required to service, repair, and test various types of machinery. An extensive curriculum prepares students to apply knowledge and skills to a wide range of diesel powered equipment applications. Diesel Technology curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Understand the construction, function, and general service of all major equipment components.
- Diagnose mechanical malfunctions and performance problems.
- Make decisions as to disposition of worn parts (i.e. usable as is; should be reconditioned or replaced).
- Operate precision diagnostic and repair equipment.
- Read and interpret repair manuals.
- Understand the importance of good public relations with customers, employer, and fellow employees.
- Understand basic shop operation.
- Be cognizant of overhead and labor cost in relationship to profit.
- Understand apprenticeship and how it functions.
- Be informed on methods of seeking employment.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Diesel Technology upon completion of a two-year program of study. A Diesel Technology Certificate is available upon completion of the first year of study in the program.

Industry Description: Diesel service technicians and mechanics, also known as bus and truck mechanics and diesel engine specialists, repair and maintain the diesel engines that power transportation equipment such as heavy trucks, buses, bulldozers, cranes, road graders, farm tractors, and combines. Diesel maintenance is becoming increasingly complex, as more electronic components are used to control the operation of an engine. Technicians who work for organizations that maintain their own vehicles spend most of their time doing preventive maintenance to ensure that equipment will operate safely.

Entrance Requirements: It is recommended that the student contact the lead instructor regarding appropriate program placement. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement test process and mechanical reasoning, must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: Students under the age of 18 and/or without a high school diploma or GED® require instructor permission to enroll in Diesel Technology courses. A high school diploma or GED® is required to receive a degree in Diesel Technology.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees and Certificates

Diesel Technology Certificate

Certificate available at/via: [Walla Walla]

Certification Outcomes:
- Demonstrate basic shop fundamentals and safety.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>DT 181, Engines I</td>
<td>14</td>
</tr>
<tr>
<td>DT 151, Shop Fundamentals/Forklift Training</td>
<td>9</td>
</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>28</td>
</tr>
<tr>
<td>Quarter Two</td>
<td></td>
</tr>
<tr>
<td>DT 162, Machinery Repair I</td>
<td>10</td>
</tr>
<tr>
<td>DT 180, Suspension and Alignment</td>
<td>5</td>
</tr>
<tr>
<td>DT 185, Drive Trains</td>
<td>5</td>
</tr>
<tr>
<td>WELD 141, Welding Basics</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>27</td>
</tr>
<tr>
<td>Quarter Three</td>
<td></td>
</tr>
<tr>
<td>DT 163, Machinery Repair II</td>
<td>8</td>
</tr>
<tr>
<td>DT 187, Heating and Air Conditioning</td>
<td>5</td>
</tr>
<tr>
<td>DT 192, Cooperative Seminar (R)</td>
<td>2</td>
</tr>
</tbody>
</table>

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

112
**Associate in Applied Arts and Sciences Degree in Diesel Technology**

This technical degree prepares the student with the wide range of knowledge and skills applicable to diesel powered equipment applications and will be ready to join the diesel mechanics industry. This program is also designed to aid the individual who is interested in improving their diesel mechanics skills.

**Degree available at/via: [Walla Walla]**

**Degree Outcomes:**

- Perform each of the following on diesel engines, drive trains, brakes, suspension and steering, electrical/electronic systems, heating, ventilation, air conditioning, preventative maintenance inspection, and hydraulics: troubleshooting skills; specific repair skills; diagnostic skills; knowledge of systems and components.

**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Articulation agreements are in place for Montana State University-Northern and Centralia College for diesel technology baccalaureate degrees.

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 183, Electronics I</td>
<td>5</td>
</tr>
<tr>
<td>DT 189, Preventive Maintenance</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>25</strong></td>
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<tr>
<td><strong>Year One Total</strong></td>
<td><strong>80</strong></td>
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**YEAR TWO**

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<tbody>
<tr>
<td>DT 266, Advanced Equipment Repair I</td>
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<tr>
<td>DT 284, Hydraulics</td>
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<tr>
<td>DT 280, Brakes and Air Systems</td>
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<td>DT 283, Electronics II</td>
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<tr>
<td>DT 281, Engines Advanced</td>
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<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
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<td>DT 191, Cooperative Work Experience **</td>
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<td>DT 292, Leadership Seminar</td>
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**DRAMA**

**Year One**

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<tbody>
<tr>
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<td>14</td>
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<tr>
<td>DT 151, Shop Fundamentals/Forklift Training</td>
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<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<tr>
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<td>DT 180, Suspension and Alignment</td>
<td>5</td>
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<tr>
<td>DT 185, Drive Trains</td>
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<tr>
<td>WELD 141, Welding Basics</td>
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<td>WRITE 100, Written Communication in the Workplace</td>
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<tr>
<td>DT 187, Heating and Air Conditioning</td>
<td>5</td>
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<tr>
<td>DT 192, Cooperative Seminar (R)</td>
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<tr>
<td>DT 183, Electronics I</td>
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<td>DT 189, Preventive Maintenance</td>
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**Program available at/via: [Walla Walla]**

**Department Overview:** The Theatre Arts department offers a wide range of theatre courses and production opportunities. Through the study of the theatrical arts (acting, directing, stagecraft, design, and playwriting) students experience the power and value of theatre as a form of cultural development, societal reflection, and communication. Theatrical experience helps students gain a deeper understanding of themselves and human behavior by developing creative and critical thinking skills in a teamwork environment.

**Program Level Outcomes:**

- An aesthetic and intellectual comprehension of culturally and linguistically diverse works in literature, philosophy, visual and performing arts, including film and music.
- An understanding and working knowledge of terminology commonly used in the humanities.
- An appropriate level of creativity, discipline, and technique in the production of assigned work in the humanities.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor.
at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**Preparation for Success:** Most people studying for a bachelor's degree in Theatre Arts take courses in radio and television broadcasting, communications, film, theater, and dramatic literature. Many continue their academic training and earn a Master of Fine Arts (MFA) degree. Students planning to major in Theatre Arts at a four-year college or university should take as many Theatre Arts courses as possible, especially Intro to Theatre, Acting, and courses in dramatic literature.

**Other Information:** Students are encouraged to take supporting course work in music, dance, history, literature, speech, and composition.

The Theatre Arts department cooperates with the other Performing and Fine Arts departments and the WWCC Foundation on a wide range of performance opportunities. These are both co- and extra-curricular programs, including the WWCC gallery shows, the China Pavilion drama season, touring theater, children's drama workshop, musical recitals and concerts, and music performances in downtown Walla Walla.

The Theatre Arts Department also supports students' efforts to fulfill degree requirements by offering a wide array of courses appealing to multiple levels of interest, skill, and experience. Course offerings provide the basis for transfer, occupations, and life-long learning.

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**Early Childhood Education**

**CERT, AAS-T, AAAS**

http://wwcc.edu/earlychildhood

Samantha Bowen  
509.524.5142  
samantha.bowen@wwcc.edu

**Program available at/via:** [Walla Walla]  
[50% Online]

**Department Overview:** Early Childhood Education prepares students to enter the childcare and early learning field as highly skilled caregivers or early learning professionals who can immediately contribute to the development and growth of a child. The Early Childhood Education curriculum promotes high quality learning and play in early care and educational settings. Opportunities for the ongoing professional development of caregivers is also included. Students have the opportunity to apply newly acquired skills and knowledge through participation in cooperative work experiences. Certified teachers may apply specific courses towards continuing education credits. In an effort to accommodate currently employed students, Early Childhood Education courses are generally offered in late afternoon or evenings. Program curriculum is reviewed by an advisory board composed of local and regional early learning professionals.

**Program Level Outcomes:**

- Provide students with the highest level of instruction in the knowledge and skills required in the field of early childhood education.
- Attract, retain and graduate competent students into the early childhood education profession.
- Keep programs current with industry standards by involving community stakeholders in curriculum development and verification of student outcomes.
- Articulate the Early Childhood Education program with regional high schools and universities.
- Educate and graduate students who possess the knowledge and skills required to succeed in early childhood careers or studies at the university level.

**Degrees:** Students may earn an Associate in Applied Arts and Sciences Degree in Early Childhood Education upon completion of the two-year program of study. This degree allows graduates to enter the workforce. A certificate in Early Childhood Education is available upon completion of one year of the program.

An Associate in Applied Science-Transfer (AAS-T) degree in Early Childhood Education is also offered for students planning to transfer to a four-year college or university.

Students may earn an Associate of Arts in Elementary Education (DTA) upon completion of a two-year program. This degree transfers to four-year university programs in Elementary Education. This degree also allows students to work as education paraprofessionals in the K-12 school system.

**Industry Description:** As the number of parents working outside the home increases, the need for quality childcare continues to grow both locally and nationally. Education and training has been identified as one of the key factors to decrease the current rate of staff turnover in childcare settings. Early childhood educators work with children from birth to age eight in childcare and early learning settings.

Paraprofessionals are assistants in classroom settings who provide instructional support for pre-K-12 classroom teachers. By providing students with individualized instruction, teacher assistants tutor and assist children in learning course materials. Teacher assistants also supervise students in the cafeteria and playground. They record grades, set up equipment, and help prepare materials for instruction. Teacher assistants are also called teacher aides, instructional aides, paraeducators or paraprofessionals. The federal legislation No Child Left Behind requires newly hired paraprofessionals to complete two years of college, obtain an Associate Degree, or to pass a rigorous test.

Certified teachers in the K-12 school system are required to hold a bachelor's degree, complete a state-approved teacher preparation program at a regionally accredited college/university, and pass a basic skills test and a test for each endorsement. A teacher is responsible for implementing required curriculum in the classroom, assessing student progress, managing classroom discipline, communicating with parents, working cooperatively with other professionals and adhering to all school district policies.

**Entrance Requirements:** Students may begin their study in the ECE programs in any quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

WSW criminal background check is required to enroll in the program. READ 088 is the minimum level recommended to enroll in ECE courses above 100 level and is required at degree completion. Some courses require permission of the faculty advisor to enroll.

**Other Information:** Early Childhood Education coursework is typically offered in late afternoon and evenings and on weekends to accommodate students who are working. WAOL courses are available every quarter.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

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FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Degrees and Certificates

State Early Childhood Education Certificate

This one-year certificate is part of an Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate competency in assisting the teacher in caring for children in early learning settings to include supporting cognitive, physical and social-emotional development of the child.
- Demonstrate appropriate professional and ethical behavior in early childhood settings.
- Demonstrate ability to communicate effectively with adults and children.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
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</tr>
<tr>
<td>ECED&amp; 107, Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
<td>2</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
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<tbody>
<tr>
<td>ECED&amp; 132, Infants/Toddlers Care</td>
<td>3</td>
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<tr>
<td>EDUC&amp; 115, Child Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 130, Guiding Behavior</td>
<td>3</td>
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<tr>
<td>MATH&amp; 107, Math in Society (M)</td>
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<tr>
<td>ECED&amp; 160, Curriculum Development</td>
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</tr>
<tr>
<td>ECED&amp; 180, Lang/ Literacy Develop</td>
<td>3</td>
</tr>
<tr>
<td>ECED&amp; 190, Observation/Assessment</td>
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<td>EDUC&amp; 150, Child/Family/Community</td>
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State Short Early Childhood Education Certificate of Specialization-Administration

This short certificate of specialization is part of an Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

Certificate available at/via: [Walla Walla]

YEAR ONE

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<tr>
<td>ECED&amp; 107, Health/Safety/Nutrition</td>
<td>5</td>
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<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
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State Short Early Childhood Education Certificate of Specialization-Family Child Care

This short certificate of specialization is part of an Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

Certificate available at/via: [Walla Walla]

YEAR ONE

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<td>ECED&amp; 107, Health/Safety/Nutrition</td>
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State Short Early Childhood Education Certificate of Specialization-School Age Care

This short certificate of specialization is part of an Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

Certificate available at/via: [Walla Walla]

YEAR ONE

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FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
State Short Early Childhood Education Certificate of Specialization-Infants and Toddlers

This short certificate of specialization is part of an Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

Certificate available at/via: [Walla Walla]

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<td>ECED&amp; 105, Intro Early Child Ed</td>
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<tr>
<td>Quarter Two</td>
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<tr>
<td>ECED&amp; 132, Infants/Toddlers Care</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 115, Child Development</td>
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EPC: 42E

State Short Early Childhood Education Certificate of Specialization-General

This short certificate of specialization is part of an Early Childhood Education statewide credential career lattice for Early Care and Education professionals.

Certificate available at/via: [Walla Walla]

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<tr>
<td>Quarter Two</td>
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<td>EDUC&amp; 115, Child Development</td>
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<td>EDUC&amp; 130, Guiding Behavior</td>
<td>3</td>
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EPC: 41E

State Initial Early Childhood Education Certificate

The Early Childhood Education Initial Certificate is a state wide credential for early care and education professionals.

Certificate available at/via: [Walla Walla]

<table>
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<td>ECED&amp; 105, Intro Early Child Ed</td>
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<td>ECED&amp; 107, Health/Safety/Nutrition</td>
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EPC: 40E

Degree available at/via: [Walla Walla]

Transferability: This degree transfers to Evergreen State College, University of Phoenix (BSM), Seattle Pacific University (Professional Studies Degree), and Washington State University (Human Development).

Associate in Applied Science-Transfer Early Childhood Education (AAS-T)

This is a dual-purpose degree that is intended to prepare students for employment in Early Childhood Education programs such as Head Start, Early Childhood Education and Assistance Program (ECEAP), child care or preschool settings.

The degree will transfer to specific baccalaureate degree programs, including:

- Eastern Washington University (Children's Studies)
- Evergreen State College (Upside Down Degree)
- Seattle Pacific University (Professional Studies Degree)
- Washington State University (Human Development)

It is strongly recommended that students contact the baccalaureate granting institution early in their Associate in Applied Science-T in Early Childhood Education about additional requirements and procedures for admission. Students must earn a 2.0 or above in all courses required for this degree. Please note that higher GPAs and course grades are often required.

REQUIRED GENERAL EDUCATION COURSES 40 credits

Communication Skills 15 credits

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<td>ENGL&amp; 102, English Composition II</td>
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<td>CMST&amp; 220, Public Speaking</td>
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Quantitative Skills (Choose One) 5 credits

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<td>MATH&amp; 107, Math in Society</td>
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<td>MATH&amp; 132, Mathematics for Elementary School Teachers II</td>
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<tr>
<td>MATH&amp; 141, Precalculus I</td>
<td>5</td>
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<tr>
<td>MATH&amp; 148, Business Calculus</td>
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<tr>
<td>MATH&amp; 151, Calculus I</td>
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<td>MATH&amp; 146, Intro to Statistics</td>
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Humanities (Choose One) 5 credits

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<td>ENGL&amp; 111, Intor to Literature</td>
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<td>ENGL 149, Classic Children's Literature</td>
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<td>MUSC&amp; 105, Music Appreciation</td>
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Social Sciences 10 credits

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<td>PSYC&amp; 100, General Psychology</td>
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<tr>
<td>or SOC&amp; 101, Introduction to Sociology</td>
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Natural Sciences 5 credits

Course selection must be a lab science from the Natural Science distribution requirements for the AA degree.
EARLY CHILDHOOD EDUCATION COURSES

Required ECE Courses 31 credits
ECED& 105, Intro Early Child Ed ........................................ 5
ECED& 107, Health/Safety/Nutrition ................................... 5
ECED& 120, Practicum-Nurturing Rel. ............................... 2
ECED& 160, Curriculum Development ............................... 5
EDUC& 115, Child Development ...................................... 5
EDUC& 130, Guiding Behavior ........................................ 3
EDUC& 203, Exceptional Child * ....................................... 3
ECE 239, Teaching Young Children – Capstone **........... 3

Elective ECE Courses (Choose from the following courses) 20 credits
ECE 150, Math & Science for Early Childhood .................. 5
ECE 232, Curriculum Development II ............................... 5
ECE 255, Children at Risk ............................................. 3
ECED& 132, Infants/Toddlers Care .................................. 3
ECED& 139, Admin Early Lrng Prog * ............................... 3
ECED& 170, Environments-Young Child ........................... 3
ECED& 180, Lang/Literacy Develop ................................ 3
ECED& 190, Observation/Assessment .............................. 3
EDUC& 136, School Age Care * ...................................... 3
or ECED& 134 Family Child Care *

EDUC& 150, Child/Family/Community .............................. 3

Total credits .......................... 91

*Indicates courses only available online, not available on campus at WWCC.
* ECE 239 Teaching Young Children – Capstone course is required for the degree.
Please check with your advisor prior to substituting any coursework.

Associate in Applied Arts and Sciences Degree in Early Childhood Education

This technical degree prepares the student for immediate careers as early childhood educators, paraeducators, preschool teachers, and child care professionals. It can be utilized by individuals planning to enter their chosen career upon graduation or for the individual who is interested in improving current skills and knowledge.

Degree available at/via: [Walla Walla] [Clarkston]

Degree Outcomes:

• Demonstrate competency in assisting the teacher in caring for children in early learning settings to include supporting cognitive, physical and social-emotional development of the child.
• Plan and implement developmentally appropriate curriculum in the early learning setting.
• Demonstrate appropriate professional and ethical behavior in early childhood settings.
• Demonstrate knowledge of strategies to promote, facilitate and extend learning for all children.
• Explain and apply child development principles.
• Demonstrate ability to communicate effectively with adults and children.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

YEAR ONE
Quarter One Credits
ECE&D 105, Intro Early Child Ed .................................. 5
ECE&D 107, Health/Safety/Nutrition .............................. 5
ECE&D 120, Practicum-Nurturing Rel. .......................... 2
ENGL 101, English Composition I (W) ......................... 5
Total Credits .................................. 17

Quarter Two Credits
ECE&D 132, Infants/Toddlers Care ................................. 3
EDUC& 115, Child Development .................................. 5
EDUC& 130, Guiding Behavior .................................... 3
MATH 107, Math in Society (M) ................................. 5
Total Credits .................................. 16

Quarter Three Credits
ECE&D 160, Curriculum Development ........................... 5
ECE&D 180, Lang/ Literacy Develop ............................... 3
ECE&D 190, Observation/Assessment ........................... 3
EDUC& 150, Child/Family/Community ........................... 3
OCSUP 101, Human Relations (R) ............................... 3
Total Credits .................................. 17
Year One Total .................................. 50

YEAR TWO
Quarter One Credits
CMST 102, Interpersonal Communication (O) ............... 3
ECE 150, Math and Science for Early Childhood ............... 5
ECE&D 170, Environments-Young Child ......................... 3
ECE 191, Cooperative Work Experience ........................ 3
Total Credits .................................. 14

Quarter Two Credits
ECE 255, Children at Risk ......................................... 1-3
ECE&D 139, Admin Early Lrng Prog (L) .......................... 3
EDUC& 136, School Age Care ..................................... 3
ECE 291, Cooperative Work Experience II ..................... 3
Total Credits .................................. 10-12

Quarter Three Credits
ECE 232, Curriculum Development II ............................ 5
ECE 239, Teaching Young Children - Capstone ............... 3
EDUC& 203, Exceptional Child ..................................... 3
OCSUP 103, Job Seeking Skills (J) ............................... 3
Total Credits .................................. 14
Year Two Total .................................. 38-40
Grand Total .................................. 88-90

EPC: 402
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
(J) - OCSUP 103, PSTC 140  (W) - ENGL 101
(L) - ECE&D 139  (M) - MATH 107
(O) - CMST 102, CMST& 220, OCSUP 102  (R) - OCSUP 101

For the most current information see: WWCC.EDU
Early Childhood Parenting Education

http://www wwcc edu/parenteducation
Samantha Bowen 509.524.5142 samantha.bowen@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Parenting Education courses are offered to promote the development of knowledge and skills for strong and healthy families. Courses are offered for parents and their toddlers or preschool age children. Courses include topics based on participant interest and need and are offered both on campus and at off-campus locations. Curriculum is research based and is developed and maintained with input from the Early Childhood Education advisory board composed of local and regional educators and parents.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Earth Science

AAS-T

http://www wwcc edu/earths sciences
Melissa Holecek 509.524.5208 melissa.holecek@wwcc.edu
Mike Stokdale 509.524.5193 mike.stokdale@wwcc.edu

Program available at/via: [Walla Walla]


In addition the program offers certificate, Associate in Applied Arts & Sciences degrees (AAAS) and transfer options in Watershed Ecology, Natural Resources Technology and Management, and Irrigation Technology.

Program Level Outcomes:

• Provide the natural resource and irrigation industries with highly trained, fully employable, skilled technicians.
• Develop relationships and/or partnerships with existing natural resource and irrigation organizations and agencies to provide industry opportunities for industry practitioners.
• Provide industry work experience during the educational process, giving students exposure to the actual application of natural resource protection and recovery methods and irrigation principles and practices.
• Provide campus labs, classrooms, equipment and general facilities utilizing cutting edge technologies and practices.
• Provide highly trained instructors who have significant field experiences as successful practitioners in this industry.

Degrees: Students will earn a two year degree that matriculates into a Bachelor of Science in Earth and Environmental Sciences degree in Earth Sciences in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

Industry Description: Earth science is geology and more; it provides foundational knowledge of how our planet works and applies knowledge of the natural process of global change to understanding our current environmental conditions. Practitioners engage with some of our most challenging problems, such as responsible exploration for and extraction and use of our natural resources, understanding consequences of global climate change, and reducing human suffering and property loss from natural hazards.

Entrance Requirements: Students may begin their study in fall, winter, spring, or summer quarter. A placement test offered by the Advising and Counseling Center must be completed prior to starting the program.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees

Associate of Applied Science - Transfer - Watershed Ecology - Earth Sciences

Students will earn a two year degree that matriculates into a Bachelor of Science in Earth and Environmental Sciences degree in Earth Sciences in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

Degree available at/via: [Walla Walla]

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<thead>
<tr>
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<tbody>
<tr>
<td>Quarter One</td>
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<tr>
<td>CHEM&amp; 121, Intro to Chemistry or CHEM&amp; 161, General Chemistry I w/Lab</td>
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<tr>
<td>GEOL&amp; 101, Intro to Physical Geology</td>
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<tr>
<td>WTM 139, Watershed Management</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<th>Quarter Two</th>
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<tr>
<td>CHEM&amp; 122, Introduction to Organic Chemistry or CHEM&amp; 162, General Chemistry II w/Lab</td>
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<tr>
<td>HUM&amp; 116, The Road to Babylon, or HIST&amp; 127 World Civilization II</td>
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<tr>
<td>MATH&amp; 141, Precalculus I</td>
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<th>Quarter Three</th>
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<td>CHEM&amp; 123, Introduction to Biochemistry or CHEM&amp; 163, General Chemistry III w/Lab</td>
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<td>ENGL&amp; 101, English Composition I</td>
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<td>MATH&amp; 142, Precalculus II</td>
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<tr>
<td>Quarter One</td>
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<tr>
<td>CMST&amp; 220, Public Speaking</td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
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<tr>
<td>GEOL&amp; 103, Historical Geology</td>
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<tr>
<td>MATH&amp; 151, Calculus I</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
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<tbody>
<tr>
<td>BIOL&amp; 213, Majors Plant</td>
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<tr>
<td>ENT 151, Advanced GIS</td>
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<tr>
<td>HIST&amp; 128, World Civilization III</td>
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<tr>
<td>MATH&amp; 152, Calculus II</td>
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<td><strong>Total Credits</strong></td>
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ECONOMICS

Quarter Three

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<th>Course</th>
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<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
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<tr>
<td>AGRI 222, Agricultural and Water Policy</td>
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</tr>
<tr>
<td>ART&amp; 100, Art Appreciation</td>
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</tr>
<tr>
<td>BIOL&amp; 212, Majors Animal</td>
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</tr>
<tr>
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<td>Year Two Total</td>
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<tr>
<td>Grand Total</td>
<td>101</td>
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</tbody>
</table>

EPC: 165U

Economics

http://www.wwcc.edu/economics

Debora Frazier 509.527.4689 debbie.frazier@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [50% Online]

Department Overview: Economics is the study of how people and society make choices and exchange with others based on these choices. The study of economics provides insights into practical problems and solutions such as, unemployment, business cycles, inflation, business decisions and consumer choice. Economics looks at the consumer behavior, business behavior and the workings of markets. The study of economics is required for many undergraduate degrees.

Program Level Outcomes:

- The ability to analyze past and present society, diverse cultures and histories to better understand individual and group behavior and enhance self-awareness.
- An understanding and working knowledge of the theories, concepts, ideas, terminology, and factual evidence in selected fields within the social sciences.
- Sensitivity in understanding diverse views and perspectives.
- An understanding of the historically and socially constructed nature of human differences.

Degrees: Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

Preparation for Success: A major in Economics is strengthened by studies in mathematics and computer programming. The ability to utilize computers for research purposes is mandatory in most disciplines.

Energy - Electrical

CERT, AAAS

http://www.wwcc.edu/electrical

Brian Evensen 509.527.4492 brian.evensen@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: The electrical courses provide students with an understanding of electrical safety, basic DC/AC electrical theory, electronic theory, generator and motor theory, motor controls, programmable logic controllers, and national electrical code associated with the residential, commercial and industrial industries. These courses are offered in a lecture with demonstration and lab application formats.

Program Level Outcomes:

- Ensure a safe work environment and meet safety standards.
- Demonstrate a strong foundation in Electrical Machinry.
- Install, Troubleshoot and Repair Electrical Systems.
- Maintain tools, equipment, and inventory.
- Interact and communicate with coworkers, suppliers, customers, and contractors.
- Adhere to policies and standards.
- Conduct training and participate in continuous learning.

Degrees: The Associate in Applied Arts and Sciences Degree in Electrical Technology is awarded for successful completion of a two-year program of study. Students may also earn a one-year certificate by successfully completing course requirements.

Industry Description: The use of electricity and electronics in our community and throughout the world is an ever-increasing technology that affects every aspect of our lives. From the homeowner who needs to replace a receptacle, to the journeyman electrician working on an industrial power-supply require a foundation understanding of electrical principles. Today’s electrical and electronic industry demands a high degree of technology to install, operate, maintain and upgrade equipment and systems.

Entrance Requirements: Students contemplating entering an electrical training course should complete placement testing offered by the testing center, and meet with an advisor in the electrical training area. A high school diploma or GED® is recommended for entry into this program and is required if students pursue an AAAS degree.

Preparation for Success: By completing the following courses prior to entering the Electrical Technology program, students will be well prepared for courses within the degree.

Education

AA-DTA

http://www.wwcc.edu/education

Samantha Bowen 509.524.5142 samantha.bowen@wwcc.edu

Program available at/via: [Walla Walla] [50% Online]

Department Overview: The Education department offers a variety of courses that prepare students for transfer to a baccalaureate program at a four-year university and to obtain a Washington State Teaching Certificate. A two-year associate degree in Elementary Education or Math Education will also prepare students to enter the workforce as paraprofessionals, working alongside certificated teachers. The education curriculum provides a foundation in the history of education in the United States as well as an understanding of legal, ethical and philosophical issues applied to educational settings. Opportunities for the ongoing professional development of teachers are also included. Students have the opportunity to apply newly acquired skills and knowledge through participation in a classroom setting. Certified teachers may apply specific courses towards continuing education credits. Program curriculum is reviewed by an advisory board composed of local and regional education professionals. (See AA-DTA in Degrees section of catalog.)

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

119
ENERGY - ELECTRICAL

- OCSUP 106, Quantitative Problem Solving for the Trades I.
- WRITE 100, Written Communication in the Workplace.

Other Information: Technicians for the Electrical Industry should:
- Be able to work in confined spaces.
- Be able to work in adverse weather conditions.
- Have the ability to lift 75 lbs.
- Be able to work standing for long hours.
- Have no criminal history.
- Be able to pass a drug test.
- Have a valid driver's license, travel will be involved.
- Have a clean driving record.
- Be able to follow exact instructions.
- Be able to work in and promote a safe environment.
- Be able to work under minimal supervision.
- Be able to work with people in a team-oriented environment.
- Be prepared to work with electrical hazards.
- Have an aptitude for mechanical and electrical troubleshooting.
- Be prepared for possible relocation.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees and Certificates

Energy Systems Technology - Electrical Certificate
Certificate available at/via: [Walla Walla]
Certificate Outcomes:
- Demonstrate knowledge of electrical safety, theory, vocabulary, and calculations of series, parallel, and combination circuits involving direct and alternating current.
- Demonstrate basic knowledge of capacitors, resistive-inductive-capacitive reactance circuits, single and three-phase transformers, DC generators and motors, three-phase alternators, and single and three-phase motors.
- Ability to read schematics, wire and test various types of electrical circuits.
- Demonstrate or describe proper safety procedures for working with rotating machinery, moving heavy objects, pressurized vessels and systems, chemicals, ladders and energy; electrical, heat, cold, fluid.
- Explain solid state components and devices.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>EST 108, Materials and Fasteners</td>
<td>4</td>
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<tr>
<td>EST 131, Principles of Electricity Theory</td>
<td>5</td>
</tr>
<tr>
<td>EST 144, Industrial Safety in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
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<td>WRITE 100, Written Communication in the Workplace (W)</td>
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</table>

Quarter Two

<table>
<thead>
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<tbody>
<tr>
<td>EST 109, Orientation to the Energy Industry (U)</td>
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<tr>
<td>EST 132, Principles of Electricity AC Application</td>
</tr>
<tr>
<td>EST 192, Human Relations Seminar (R)</td>
</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<tr>
<td>Total Credits</td>
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Quarter Three

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<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>EST 133, Introduction to Controls</td>
</tr>
<tr>
<td>EST 134, Electrical Raceways</td>
</tr>
<tr>
<td>EST 150, Electric Motors and Motor Maintenance</td>
</tr>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
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<tr>
<td>Total Credits</td>
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</table>

Year One Total | 47.4
Grand Total | 47.4

EPC: 780D
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
(U) - AGPR 100, EST 109, OCSUP 103
(W) - WRITE 100, ENGL 087 or higher
(M) - OCSUP 105, OCSUP 106, OCSUP 107
(R) - EST 192, OCSUP 101, any 192 course

Associate in Applied Arts and Sciences Degree in Energy Systems Technology - Electrical

This technical degree prepares the student to enter into a cooperative training experience, often resulting in long-term employment with the training entity. This degree is designed as a pre-apprenticeship preparation.

Degree available at/via: [Walla Walla]
Degree Outcomes:
- Demonstrate knowledge of electrical safety, theory, vocabulary, and calculations of series, parallel, and combination circuits involving direct and alternating current.
- Demonstrate basic knowledge of capacitors, resistive-inductive-capacitive reactance circuits, single and three-phase transformers, DC generators and motors, three-phase alternators, and single and three-phase motors.
- Ability to read schematics, wire and test various types of electrical circuits.
- Demonstrate or describe proper safety procedures for working with rotating machinery, moving heavy objects, pressurized vessels and systems, chemicals, ladders and energy; electrical, heat, cold, fluid.
- Explain solid state components and devices.
- Demonstrate understanding of programmable logic controls (PLC) and direct digital controls (DDC).

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>EST 108, Materials and Fasteners</td>
<td>4</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory</td>
<td>5</td>
</tr>
<tr>
<td>EST 144, Industrial Safety in the Workplace</td>
<td>3</td>
</tr>
</tbody>
</table>
**ENERGY - INDUSTRIAL MAINTENANCE**

IFA 022, AHA Heartsaver First Aid ............................................4
WRITE 100, Written Communication in the Workplace (W) ........3

Total Credits .................. 15.4

**Quarter Two**

EST 109, Orientation to the Energy Industry (J) ....................3
EST 132, Principles of Electricity AC Application ................5
EST 192, Human Relations Seminar (R) .............................2
OCSUP 107, Quantitative Problem Solving for the Trades (M) ..5

Total Credits .................. 15

**Quarter Three**

EST 133, Introduction to Controls .......................................5
EST 134, Electrical Raceways ........................................... 3
EST 150, Electric Motors and Motor Maintenance ................. 5
EST 165, Rigging, Equipment Operation & Material Handling .4

Total Credits .................. 17

**Quarter Four**

EST 191, Cooperative Work Experience * .............................0-10
EST 292, Leadership Seminar (L) .................................... 2

Total Credits .................. 12

**Year One Total ................. 49.4-59.4**

**Year Two**

**Quarter One**

EST 106, Plant Equipment and Controls ..............................3
EST 159, Hydraulics and Pneumatics .................................3
EST 240, Intro to Basic Electronics ..................................5
EST 252, Principles of Power Generation and Distribution ....5

Total Credits .................. 16

**Quarter Two**

CS 110, Introduction to Computers and Applications ............5
ENT 112, Blueprint Reading ........................................... 2
EST 235, Introduction to Solar PV and Applications ............3
EST 250, Introduction to PLC and DDC Control ..................5
EST 260, Introduction to the National Electrical Code .........2

Total Credits .................. 17

**Quarter Three**

EST 255, Advanced PLC’s and Integrated Architecture ..........5
EST 285, Intro to Instrumentation ....................................5
OCSUP 102, Oral Communication in the Workplace (O) .......3

Total Credits .................. 13

Year Two Total .................. 46

Grand Total ................. 95.4-105.4

EPC: 780A

*Taking one 12 credit commercial truck driving (TRK) course in summer is an option for students to substitute, by permission of the student’s EST Instructor/Advisor and the Workforce Dean, for the required 10 credit Cooperative Work Experience (EST 191). Students are still required to take the two-credit Leadership Seminar (EST 292) for related instruction in Leadership.

*EST 255 and EST 285 can be taken in place of - or in addition to - EST 191, with instructor consent.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(J) - AGPR 100, EST 109, OCSUP 103
(L) - EST 292, any 292 course
(M) - OCSUP 107, MATH & 141 or higher
(W) - WRITE 100, ENGL 087 or higher
(R) - EST 192, any 192 course
(O) - CMST & 220, OCSUP 102

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**Energy - Industrial Maintenance**

CERT

http://www.wwc.edu/industrialmaintenance

Chad Miltenberger- Clk 509.758.1711 chad.miltenberger@wwc.edu

Program available at/via: [Clarkston]

Department Overview: Industrial Maintenance Technology (IMT) trains workers that are needed in nearly every industry, from fabrication assembly plants to power generation. This program gives you an adaptable skill set that can be utilized in any industrial infrastructure setting. Certification in Industrial Maintenance Technology can prepare you for a career or provide a pathway to advanced skill degrees offered by Community College.

Degrees: The Industrial Maintenance Certificate is available upon completion of the one-year program of study.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).

---

**Degrees and Certificates**

**Industrial Maintenance Certificate**

This schedule lists all courses required for completion of the Industrial Maintenance Certificate, but the actual order and specific coursework may vary depending on student placement, start date, and quarter. Please check with your advisor prior to any substitutions.

The required related instruction is noted in bold print. The letter in parenthesis indicates which category of related instruction is represented by the given course as follows:

**YEAR ONE**

**Fall Quarter**

ENT 112, Blueprint Reading ........................................... 2
EST 144, Industrial Safety in the Workplace ....................3
EST 165, Rigging, Equipment Operation & Material Handling 4
OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M) ........................................... 5
EST 192, Human Relations Seminar *(R) ...........................2

Total Credits .................. 16

**Winter Quarter**

EST 106, Process Control Instrumentation and Troubleshooting 3
EST 131, Principles of Electricity Theory ...........................5
EST 159, Hydraulics and Pneumatics ...............................3
IFA 022, AHA Heartsaver First Aid .................................4
WELD 141, Welding Basics ........................................... 4
OCSUP 103, Job Seeking Skills (J) .................................3

Total Credits .................. 18.4

**Spring Quarter**

EST 115, Industrial Mechanics .......................................5
EST 132, Principles of Electricity AC Application ............5
EST 150, Electric Motors and Motor Maintenance ............3
WRITE 100, Written Communication in the Workplace (W) 3

Total Credits .................. 16

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For the most current information see: [http://www.wwcc.edu](http://www.wwcc.edu)
### Energy - Plant Operations

**Cert, AAS-T, AAAS**

http://www.wwcc.edu/plantoperations

Jason Selwitz  
509.527.3678  
jason.selwitz@wwcc.edu

Program available at/via: [Walla Walla]

**Department Overview:** The Plant Operations Department exists through the Agriculture Center of Excellence based at Walla Walla Community College in coordination with partners from Community and Technical Colleges, the business community, non-profits, universities, and government agencies in the Pacific Northwest.

**Program Level Outcomes:**

- Apply knowledge in the terminology and key concepts of first generation and advanced biofuel plants, municipal wastewater treatment plants, municipal wastewater treatment plants, industrial food and beverage processors, pulp and paper mills, and cogeneration facilities.
- Demonstrate knowledge of processes integral to plant operations in the Northwest.
- Demonstrate knowledge of key equipment and safe thresholds for effective operations.
- Add to fundamental understanding of the Plant Operator/Technician position with specific duties to monitor, track, document, and correct processes in real-time, with safety and total quality as the highest priorities.
- Develop knowledge to match a biomass feedstock with its most appropriate conversion process options.

**Degrees:** WWCC offers the following degree options in collaboration with Northwest Community and Technical Colleges:

- Associate in Applied Arts and Sciences (AAAS) degree in Plant Operations
- Bioproducts Certificate in Plant Operations
- Short Certificate series for those with transferrable life experience, continuing education interest/employer requirements, or for students at aligned CTCs
- Applied Associate in Science Transfer degree (AAS-T) with emphasis in Plant Operations through articulation with regional 4-year institutions

**Industry Description:** Safe, skilled, professional, and motivated technicians and operators are in demand for first generation and advanced biofuel plants, municipal wastewater treatment plants, industrial food and beverage processors, pulp and paper mills, and cogeneration facilities. At these plants, operators and technicians manage the conversion of particular types of biomass (dairy manure, sewage, food waste, oilseed crops, hybrid poplar, grasses, algae, forest slash, wheat straw, corn stover, animal fats, and other feedstocks) into electricity, heat, transportation fuels, clean water, and/or high value chemicals and products.

**Other Information:** Plant Operations courses are offered on campus and simultaneously online - both with 1-2 weekends per course requirements for hands-on lab intensives. Supporting courses include: Chemistry, Biology, Math, English, Energy Systems Technology, Agriculture, Water Management, Engineering Technology, and Speech Communications. For additional information regarding regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).

### Associate in Applied Science - Transfer Plant Operations

**Degree available at/via: [Walla Walla]**

**YEAR ONE**

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<td>ENGL&amp; 101, English Composition I</td>
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<tr>
<td>MATH&amp; 141 Precalculus or MATH&amp; 151, Calculus</td>
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</tr>
<tr>
<td>BIOL&amp; 211, Majors Cellular or SOC&amp; 101, Intro. to Soc.</td>
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</tr>
<tr>
<td>EST 201, Plant Operations *</td>
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<tr>
<td>Bioproducts Certificate in Plant Operations</td>
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</tr>
<tr>
<td>EST 202, Bio-Chemical Conversion *</td>
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</tr>
<tr>
<td>CHEM&amp; 161 General Chemistry I w/Lab *</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 114 General Physics I w/Lab or CHEM&amp; 162, General Chemistry II w/Lab</td>
<td>5</td>
</tr>
<tr>
<td>Optional: MATH&amp; 238 Differential Equations</td>
<td>5</td>
</tr>
<tr>
<td>Optional: BIOL&amp; 213, Majors Animals.</td>
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<tr>
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</table>

**YEAR TWO**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>EST 105, Process Support Systems *</td>
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</tr>
<tr>
<td>CMST&amp; 200 Public Speaking or WRITE 100, Written Communication in the Workplace</td>
<td>5</td>
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<tr>
<td>PHIL 131, Introduction to Ethics or ANTH&amp; 206, Cultural Anthropology</td>
<td>5</td>
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<tr>
<td>Optional: MATH&amp; 152, Calculus II</td>
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<tr>
<td>Optional: BIOL&amp; 212, Majors Plants</td>
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**YEAR THREE**

<table>
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<tbody>
<tr>
<td>EST 106, Plant Equipment and Controls *</td>
<td>3</td>
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<tr>
<td>ECON 201, Microeconomics</td>
<td>5</td>
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<tr>
<td>MATH&amp; 148 Business Calculus or MATH&amp; 153, Calculus III</td>
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<tr>
<td>HUM 110, Four Perspectives or HUM&amp; 116, Humanities I</td>
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<tr>
<td>Optional: BIOL&amp; 213, Majors Animals.</td>
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**YEAR FOUR**

<table>
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<tbody>
<tr>
<td>EST 201, Plant Operations *</td>
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</tr>
<tr>
<td>CHEM&amp; 161 General Chemistry I w/Lab *</td>
<td>5</td>
</tr>
<tr>
<td>PHYS&amp; 114 General Physics I w/Lab or CHEM&amp; 162, General Chemistry II w/Lab</td>
<td>5</td>
</tr>
<tr>
<td>Optional: MATH&amp; 238 Differential Equations</td>
<td>5</td>
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<tr>
<td>Optional: ENGR&amp; 214 Statics</td>
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<td>Total Credits</td>
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</table>

### FOR THE MOST CURRENT INFORMATION SEE: [WWW.WWCC.EDU](http://www.wwcc.edu)
ENERGY - PLANT OPERATIONS

Optional: MATH 220 Linear Algebra .......................... 5  
Total Credits .......................... 15-20

Quarter Three Credits
EST 203, Thermo-Chemical Conversion * .................. 5  
CHEM& 163, General Chemistry III w/Lab * ............... 5  
PHYS& 116, General Physics III w/Lab or  
PHYS& 223, Engineering Physics III  
Optional: GEOL& 110, Environmental Geology ............ 5  
Total Credits .................. 15-20  
Year Two Total ................. 44-64  
Grand Total .................. 97-132

EPC: 609D  
*May substitute equivalent course from Plant Operations, Ag, Wastewater, Mechatronics, Chemistry, or Process Technology.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):  
(L) - EST 292

Bioproducts Short Certificate

Students are required to complete a minimum of 15 credits through WWCC towards this Short Certificate. This program is geared towards incumbent workers who are interested in taking Plant Operations courses part-time for continuing education credits and/or students at collaborating institutions such as Bellingham Technical College. (NOTE: It is ok for students from collaborating institutions to complete five (5) credits, towards the 20 minimum required, at their home community or technical college).

Certificate available at/via: [Walla Walla]

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
</table>
| Quarter One | EST 104, Introduction to Bioenergy .................. 2  
Total Credits .................. 2 |
| Quarter Two | EST 105, Process Support Systems * .................. 3  
Total Credits .................. 3 |
| Quarter Three | AGPR 121, Biomass Feedstock Management ............... 3  
Total Credits .................. 3 |
| Quarter Four | EST 292, Leadership Seminar (L) * .................... 2  
Total Credits .................. 2  
Year One Total ................. 10 |

<table>
<thead>
<tr>
<th>YEAR TWO</th>
<th>Credits</th>
</tr>
</thead>
</table>
| Quarter One | WTM 215, Basic Fluid Dynamics of Piping Systems * ........ 3  
Total Credits .................. 3 |
| Quarter Two | EST 202, Bio-Chemical Conversion .................. 5  
WTM 205, Wastewater Treatment Plant Operations * .......... 3  
Total Credits .................. 8 |
| Quarter Three | EST 203, Thermo-Chemical Conversion .................. 5  
Total Credits .................. 5 |

Year Two Total .................. 16  
Grand Total .................. 26

Plant Operations Certificate

The Plant Operations Certificate is the first 49 credits of core and supporting courses for the AAAS in Plant Operations. It does not include the Cooperative Work Experience or Seminar. This pathway is meant for those getting an AS or AAAS in another subject who want an introduction and added understanding concerning the Bioenergy/Chemical Processing industries.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Apply knowledge in the terminology and key concepts of Electricity, Water Management, Agriculture, and Bioenergy.
- Demonstrate knowledge of processes integral to Biorefinery Operations in the Pacific Northwest.
- Demonstrate knowledge of key Biorefinery equipment and safe thresholds for effective operations.
- Apply knowledge in the terminology and key concepts of Biorefinery Equipment and the principles of process controls.
- Add to fundamental understanding of role of Biorefinery Operator with specific duties to monitor, track, record, document, and correct processes in real-time, with safety as the highest priority.
- Enhance fundamental knowledge of the critical role of nutrients.
- Develop knowledge on optimization of temperature, pH, pressure, and other chemical variables to control, manage, and balance reactions and resulting yields.
- Demonstrate knowledge of the role of catalysts and how they function.
- Apply knowledge in physical and chemical separation technologies.
- Identify, diagram, and explain features of thermo-chemical processes.
- Apply knowledge to identify common maintenance variables and ranges.
- Develop knowledge to match feedstocks with most appropriate conversion processes.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
</table>
| Quarter One | EST 100, Refrigeration Basics I .................. 4  
EST 104, Introduction to Bioenergy .................. 2  
EST 165, Rigging, Equipment Operation & Material Handling ........ 4  
WTM 135, Issues in Agriculture and Natural Resources (R) ........ 5  
AGPR 121, Biomass Feedstock Management ............... 3  
Total Credits .................. 18 |
| Quarter Two | EST 105, Process Support Systems .................. 3  
EST 109, Orientation to the Energy Industry (U) ........... 3  
EST 131, Principles of Electricity Theory .................. 5  
EST 144, Industrial Safety in the Workplace ............ 3 |
ENERGY - PLANT OPERATIONS

ISTA 022, AHA Heartsaver First Aid ........................................... 4
OCSUP 105, Into to Quantitative Problem Solving for the Trades II (M) ........................................... 5

Total Credits ............ 19.4

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EST 106, Plant Equipment and Controls ...........</td>
<td>3</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td>WTM 190, Water Quality and Environmental Chemistry</td>
<td>5</td>
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</table>

Total Credits ............ 16

Year One Total ............ 53.4

Grand Total ............ 53.4

EPC: 609C

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(J) - AGPR 100, EST 109, OCSUP 103 (R) - WTM 135, any 192 course
(M) - OCSUP 105, OCSUP 106, OCSUP 107 (W) - ENGL 087, WRITE 100

Associate in Applied Arts and Sciences Degree in Plant Operations

This technical degree prepares students for careers in a variety of fields, including: Utilities, Pulp and Paper, Industrial Maintenance, Wastewater and Drinking Water Treatment, Agriculture and Forestry, Food Processors, Bioproducts, Solid Waste Management/Waste to Energy, Engineering Contractors, and Public Works.

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Apply knowledge in the terminology and key concepts of Electricity, Water Management, Agriculture, and Bioenergy.
- Demonstrate knowledge of processes integral to Biorefinery Operations in the Pacific Northwest.
- Demonstrate knowledge of key Biorefinery equipment and safe thresholds for effective operations.
- Apply knowledge in the terminology and key concepts of Biorefinery equipment and the principles of process controls.
- Add to fundamental understanding of role of Biorefinery Operator with specific duties to monitor, track, record, document, and correct processes in real-time, with safety as the highest priority.
- Enhance fundamental knowledge of the critical role of nutrients.
- Develop knowledge on optimization of temperature, pH, pressure, and other chemical variables to control, manage, and balance reactions and resulting yields.
- Demonstrate knowledge of the role of catalysts and how they function.
- Apply knowledge in physical and chemical separation technologies.
- Identify, diagram, and explain features of thermo-chemical processes.
- Apply knowledge to identify common maintenance variables and ranges.
- Develop knowledge to match feedstocks with most appropriate conversion processes.

YEAR ONE

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EST 100, Refrigeration Basics I ..................</td>
<td>4</td>
</tr>
<tr>
<td>EST 104, Introduction to Bioenergy ................</td>
<td>2</td>
</tr>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
</tr>
<tr>
<td>WTM 133, Issues in Agriculture and Natural Resources (R)</td>
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<tr>
<td>AGPR 121, Biomass Feedstock Management ...........</td>
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Total Credits ............ 18

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>EST 105, Process Support Systems ...............</td>
<td>3</td>
</tr>
<tr>
<td>EST 109, Orientation to the Energy Industry (J)</td>
<td>3</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory ......</td>
<td>5</td>
</tr>
<tr>
<td>EST 144, Industrial Safety in the Workplace ....</td>
<td>3</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid ..............</td>
<td>4</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
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Total Credits ............ 19.4

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EST 106, Plant Equipment and Controls ...........</td>
<td>3</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td>WTM 190, Water Quality and Environmental Chemistry</td>
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Total Credits ............ 16

Quarter Four

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>EST 191, Cooperative Work Experience ** ........</td>
<td>0-10</td>
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<tr>
<td>EST 292, Leadership Seminar (L) ...................</td>
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Total Credits ............ 2-12

Year One Total ............ 55.4-65.4

YEAR TWO

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>EST 133, Introduction to Controls ............</td>
<td>5</td>
</tr>
<tr>
<td>EST 150, Electric Motors and Motor Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>EST 201, Plant Operations ......................</td>
<td>3</td>
</tr>
<tr>
<td>WTM 215, Basic Fluid Dynamics of Piping Systems</td>
<td>5</td>
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Total Credits ............ 16

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CMST 102, Interpersonal Communication (O) ....</td>
<td>3</td>
</tr>
<tr>
<td>EST 202, Bio-Chemical Conversion ..............</td>
<td>5</td>
</tr>
<tr>
<td>EST 250, Introduction to PLC and DDC Control</td>
<td>5</td>
</tr>
<tr>
<td>WTM 205, Wastewater Treatment Plant Operations</td>
<td>3</td>
</tr>
<tr>
<td>WTM 221, Pump Applications ....................</td>
<td>3</td>
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</table>

Total Credits ............ 19

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EST 203, Thermo-Chemical Conversion ............</td>
<td>5</td>
</tr>
<tr>
<td>EST 204, Solid Waste Management ...............</td>
<td>3</td>
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<tr>
<td>EST 255, Advanced PLC’s and Integrated Architecture *</td>
<td>5</td>
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<tr>
<td>EST 285, Intro to Instrumentation * ...........</td>
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Total Credits ............ 18

Year Two Total ............ 53

Grand Total ............ 108.4-118.4

EPC: 609

*Taking one 12 credit commercial truck driving (TRK) course in summer is an option for students to substitute, by permission of the student's EST instructor/advisor and the Workforce Dean, for the required 10 credit Cooperative Work Experience (EST 191). Students are still required to take the two-credit Leadership Seminar (EST 292) for related instruction in Leadership.

* EST 235 and EST 285 can be taken in place of - or in addition to - EST 191 with Instructor and Dean's approval.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(J) - AGPR 100, EST 109, OCSUP 103 (L) - EST 292, any 192 course
(W) - ENGL 087, WRITE 100 (O) - CMST 102, CMST& 220
(R) - WTM 135, any 192 course (M) - MATH& 141, OCSUP 107

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Energy - Plant Operations - Mechanic

AAAS

http://www.wwcc.edu/mechanics

Program available at/via: [Clarkston]

Department Overview: Plant Operations - Mechanic prepares students to become safe and effective Operators, Technicians, or Maintenance Mechanics for facilities that convert raw materials into high value products, such as: power plants, biofuels/biochemical refineries, pulp and paper mills, wastewater and drinking water treatment plants, solid waste management facilities, food/ag./forestry processors, or municipal city works departments.

Other Information: Plant Operations courses are offered on campus and simultaneously online - both with 1-2 weekends per course requirements for hands-on lab intensives. Supporting courses include: Chemistry, Biology, Math, English, Energy Systems Technology, Agriculture, Water Management, Engineering Technology, and Speech Communications. For additional information regarding regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees

Associate in Applied Arts and Sciences Degree in Plant Operations - Mechanic

Degree available at/via: [Walla Walla] [Clarkston]

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>ENT 112, Blueprint Reading</td>
<td>2</td>
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<tr>
<td>EST 144, Industrial Safety in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
</tr>
<tr>
<td>EST 192, Human Relations Seminar (R)</td>
<td>2</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
<td>5</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EST 106, Plant Equipment and Controls</td>
<td>3</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory</td>
<td>5</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
<td>3</td>
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<tr>
<td>WELD 141, Welding Basics</td>
<td>4</td>
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<tr>
<td>Total Credits</td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
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<tbody>
<tr>
<td>EST 115, Industrial Mechanics</td>
<td>5</td>
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<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>EST 150, Electric Motors and Motor Maintenance</td>
<td>5</td>
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<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
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<table>
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<tr>
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<tbody>
<tr>
<td>EST 191, Cooperative Work Experience</td>
<td>6 - 10</td>
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Year One Total . . . 60.4-64.4

YEAR TWO

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<tr>
<td>CS 110, Introduction to Computers and Applications</td>
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<td>EST 104, Introduction to Bioenergy</td>
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<tr>
<td>EST 133, Introduction to Controls</td>
<td>5</td>
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<td>WTM 215, Basic Fluid Dynamics of Piping Systems</td>
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<table>
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<th>Credits</th>
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<tbody>
<tr>
<td>EST 105, Process Support Systems</td>
<td>3</td>
</tr>
<tr>
<td>EST 202, Bio-Chemical Conversion</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>WTM 205, Wastewater Treatment Plant Operations</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 203, Thermo-Chemical Conversion</td>
<td>5</td>
</tr>
<tr>
<td>EST 250, Introduction to PLC and DDC Control</td>
<td>5</td>
</tr>
<tr>
<td>WTM 190, Water Quality and Environmental Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
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</table>

Year Two Total . . . 47

Grand Total . . . 107.4-111.4

Program Level Outcomes:

- Ensure a safe work environment and meet safety standards.
- Demonstrate a strong foundation in electrical, mechanical, and hydraulic systems.
Admission/Progression Committee.
The below criteria. The evaluation of each student will be made by the
Students are admitted into the program based on the completion of

Other Information:

Preparation for Success:
prepared for courses within the degree.

to entering the Wind Energy Technology program, student will be well

Degrees:

Industry Description:
Wind Energy is one of the fastest growing
 industries in the world. The sharp rise in energy consumption along
with the concern about dependency on foreign oil, the high price
of gasoline and the increasing interest in sustainable resources have
fueled the renewable energy industry, of which wind generation is
a growing entity. As the wind energy industry continues to grow the
need for employees to service the wind turbines will increase. In recent
years wind farms are cropping up all over southeastern Washington
with plans for more.

Entrance Requirements:
Students are admitted into the program based on the completion of
the below criteria. The evaluation of each student will be made by the
Admission/Progression Committee.

- Prior academic success.
- Application, resume, and essay.
- Completion of placement tests offered by WWCC’s Testing Center.
- English: eligible to enter ENGL 087 or WRITE 100.
- Math: eligible to enter OCSUP 106.
- Successful completion of EST 103, CS 110, WRITE 100, and OCSUP
  106/MATH 075 or appropriate placement into OCSUP 107.
- Successfully demonstrating the ability to climb a 300 foot ladder.
- Successfully passing the mechanical aptitude test.
- Successfully passing driving background check.

Preparation for Success: By completing the following courses prior
to entering the Wind Energy Technology program, student will be well
prepared for courses within the degree.

- OCSUP 106, Problem Solving for the Trades I
- WRITE 100, Written Communication in the Workplace
- CS 110, Introduction to Computers and Applications

Other Information: Technicians for the Wind Energy Industry should:

- Be able to pass basic mechanical aptitude test.
- Be able to climb 280 foot ladders and work at this elevation.
- Be able to work in confined spaces.
- Be able to work in adverse weather conditions.
- Have the ability to lift 75 lbs.
- Be able to work standing for long hours.
- Have no criminal history.
- Be able to pass a drug test.
- Have a valid driver’s license, travel will be involved.
- Have a clean driving record.

Wind Energy Technology Certificate

The Wind Energy Technology Certificate is equivalent to the first three
quarters of the AAAS degree.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:
- Ensure a safe work environment and meet safety standards.
- Troubleshoot and repair wind turbines.
- Maintain wind turbines (reliability and optimization).
- Maintain tools, equipment, and inventory.
- Interact and communicate with coworkers, suppliers, customers,
  and contractors.
- Adhere to policies and standards.
- Conduct training and participate in continuous learning.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
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<tr>
<td>EST 103, Introduction to Wind Energy</td>
<td>3</td>
</tr>
<tr>
<td>EST 109, Orientation to the Energy Industry (J)</td>
<td>3</td>
</tr>
<tr>
<td>EST 192, Human Relations Seminar (R)</td>
<td>2</td>
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<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>16</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EST 115, Industrial Mechanics</td>
<td>5</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory</td>
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</tr>
<tr>
<td>EST 144, Industrial Safety in the Workplace</td>
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<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
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<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
<td>5</td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
</tr>
<tr>
<td>EST 175, Tower Rescue and Climbing Competency</td>
<td>1.2</td>
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<tr>
<td>EST 240, Intro to Basic Electronics</td>
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</table>

EPC: 780C

The following courses meet the related instruction requirements of this certificate/degree

For the most current information see: www.wwcc.edu
## Associate in Applied Arts and Sciences in Wind Energy Technology

Two year technical training emphasizes power generation, distribution, electrical theory and control mechanisms, safety and general education components.

**Degree available at/via:** [Walla Walla]

**Degree Outcomes:**
- Ensure a safe work environment and meet safety standards.
- Troubleshoot and repair wind turbines.
- Maintain wind turbines (reliability and optimization).
- Maintain tools, equipment, and inventory.
- Interact and communicate with coworkers, suppliers, customers, and contractors.
- Adhere to policies and standards.
- Conduct training and participate in continuous learning.

### YEAR ONE

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<thead>
<tr>
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<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
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<tr>
<td>EST 103, Introduction to Wind Energy</td>
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<tr>
<td>EST 109, Orientation to the Energy Industry (J)</td>
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<tr>
<td>EST 192, Human Relations Seminar (R)</td>
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<td>WRITE 100, Written Communication in the Workplace (W)</td>
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<td>EST 115, Industrial Mechanics</td>
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<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
<td>5</td>
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<td><strong>Total Credits</strong></td>
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<tbody>
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<tr>
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<tr>
<th>Quarter Four</th>
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<tr>
<td>EST 191, Cooperative Work Experience **</td>
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<td>EST 292, Leadership Seminar (L)</td>
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### YEAR TWO

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<tr>
<td>ENT 112, Blueprint Reading</td>
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<tr>
<td>EST 133, Introduction to Controls</td>
<td>5</td>
</tr>
<tr>
<td>EST 150, Electric Motors and Motor Maintenance</td>
<td>5</td>
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<td>EST 252, Principles of Power Generation and Distribution</td>
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For the most current information see: [WWW.WWCC.EDU](http://www.wwcc.edu/engineeringtech)

### Engineering Technology CERT

**http://www.wwcc.edu/engineeringtech**

<table>
<thead>
<tr>
<th>Quarter Two</th>
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<tbody>
<tr>
<td>EST 250, Introduction to PLC and DDC Control</td>
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<tr>
<td>EST 270, Wind Power Plant Operations and Advanced Mechanical Systems</td>
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<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
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<table>
<thead>
<tr>
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<tr>
<td>EST 255, Advanced PLC’s and Integrated Architecture *</td>
<td>5</td>
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<td>EST 285, Intro to Instrumentation *</td>
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EPC: 780

*Taking one 12 credit commercial truck driving (TRK) course in summer is an option for students to substitute, by permission of the student’s EST instructor/advisor and the Workforce Dean, for the required 10 credit Cooperative Work Experience (EST 191). Students are still required to take the two-credit Leadership Seminar (EST 292) for related instruction in Leadership.

* EST 255 and EST 285 can be taken in place of - or in addition to - EST 191 with instructor and dean permission.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - AGPR 100, EST 109, OCSUP 103
- (W) - WRITE 100, ENGL 087 or higher
- (L) - EST 292, any 292 course
- (M) - OCSUP 107, MATH& 141 or higher
- (O) - CMST& 220, OCSUP 102
- (R) - EST 192, OCSUP 101, any 192 course

### Program available at/via: [Walla Walla]

**Department Overview:** The Engineering Technology Program provides entry-level training for technicians to support engineers in the development and construction oversight of infrastructure such as roadway, utility, and related systems that affect every aspect of daily life. Current coursework is focused on a one year certificate that provides hands-on training in computer-aided drafting and design, engineering graphics, and surveying, and students will be able to enter the workforce upon completion. The curriculum is kept current through an advisory board composed of local and regional industry members.

**Program Level Outcomes:**
- Provide the skills necessary to enter the workforce as a GIS or CADD Technician or Surveyor.
- Remain technically current and responsive to the changing needs of society.

**Degrees:** Students may earn a one-year certificate in GIS, CADD & Surveying, which allows students to pursue careers after one year of training. Students may also earn a short certificates in GIS, CADD, and Surveying.

**Industry Description:** Engineers change the world by developing creative practical solutions and creating things that matter. Demand for engineers and engineering technicians continues to grow globally. Engineering Technicians assist engineers with surveying and computer aided drafting and design. WWCC offers a one year certificate that provides the most in-demand skills in Geographic Information Systems.
(GIS), Computer-Aided Drafting and Design (CADD), and Surveying.

**Entrance Requirements:** Students may begin their study in fall, winter, or spring quarters. However, not all courses are offered all quarters and certain sequences begin only in fall. In order to start this program, the placement process must be completed through the Testing Center. Visit wwwwwcc.edu/placement for more information. Also, several courses are offered on a continuation education basis without the need to be admitted to the program. Review prerequisites and consult with engineering faculty to confirm which courses may qualify.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

### Degrees and Certificates

#### GIS, CAD, and Surveying Certificate

<table>
<thead>
<tr>
<th>Year One</th>
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<tbody>
<tr>
<td>Quarter One</td>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
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<tr>
<td>Quarter One</td>
<td>ENT 112, Blueprint Reading</td>
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<td>Quarter One</td>
<td>ENT 150, Introduction to GIS</td>
</tr>
<tr>
<td>Quarter One</td>
<td>ENT 161, Elementary Surveying</td>
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<td>Quarter One</td>
<td>OCSUP 106, Quantitative Problem Solving for the Trades I *</td>
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<td>ENT 121, Computer Aided Drafting and Design</td>
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<tr>
<td>Quarter Two</td>
<td>ENT 151, Advanced GIS</td>
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<tr>
<td>Quarter Two</td>
<td>ENT 162, Intermediate Surveying</td>
</tr>
<tr>
<td>Quarter Two</td>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M) *</td>
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<tr>
<td>Quarter Two</td>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
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<td>Quarter Three</td>
<td>ENT 122, Advanced Computer Aided Design &amp; 3-D Modeling</td>
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<td>Quarter Three</td>
<td>ENT 152, Practical Field Applications of GIS</td>
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<td>Quarter Three</td>
<td>ENT 163, Advanced Surveying</td>
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<tr>
<td>Quarter Three</td>
<td>ENT 192, Cooperative Seminar (R)</td>
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<td><strong>Grand Total</strong></td>
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EPC 624C

*Based on placement test results, students may need OCSUP 106 (prerequisite course) before enrolling in the Math (M) course OCSUP 107.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(W) - WRITE 100
(M) - OCSUP 107
(R) - ENT 192

#### GIS Short Certificate

<table>
<thead>
<tr>
<th>Year One</th>
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<tr>
<td>Quarter Two</td>
<td>ENT 151, Advanced GIS</td>
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EPC 624S

#### CADD Short Certificate

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<tr>
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<tr>
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<td><strong>Total Credits</strong></td>
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<tr>
<td>Quarter Two</td>
<td>ENT 122, Advanced Computer Aided Design &amp; 3-D Modeling</td>
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<tr>
<td>Quarter Three</td>
<td>ENT 161, Elementary Surveying</td>
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EPC 624R

#### Surveying Short Certificate

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<tr>
<td>Quarter Two</td>
<td>ENT 162, Intermediate Surveying</td>
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<td>Quarter Three</td>
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EPC 624Q

**Engineering Transfer**

AS

http://wwwwwcc.edu/engineering

Michelle Schmode 509.524.5237  michelle.schmode@wwcc.edu
Dave Stockdale 509.524.5193  dave.stockdale@wwcc.edu

**Program available at via:** [Walla Walla] [100% Online]

**Department Overview:** The Engineering Transfer Program provides students with a foundation in engineering education and prepares them to transfer to and complete a baccalaureate degree at an Accreditation Board for Engineering and Technology (ABET) -accredited institution. Students gain a sound education in chemistry, physics, mathematics, engineering mechanics and fundamentals, writing composition, humanities, and social sciences among other subjects through an Associates in Science degree required to advance to upper-level courses. The curriculum is based upon the State of Washington-approved Major Ready Program (MRP) for engineering transfer students. The engineering program is reviewed by an advisory board composed of local and regional industry members.

**Program Level Outcomes:**

- Provide a sound engineering education in preparation to transfer to
Students may begin their study in fall.

**Entrance Requirements:**

**Degrees:** Students may earn an Associate in Science Transfer (AS-T) Degree in one of two ways which prepares them to continue their education at an ABET-accredited baccalaureate institution. Please consult with an adviser at WWCC and intended transfer institution to determine an appropriate education plan.

- Option II (Engineering): A 90 college-level credit state-standard program. A recommended list of courses in included under degrees.
- Track 2: Associate in Science - Transfer.

Students completing the AS-Track 2/MRP in Engineering will, if admitted to the university, be admitted as juniors with all or most prerequisites for the specific engineering major completed (depending on choices made among engineering electives). In addition, these students will have lower division general education courses partially completed in a manner similar to the partial completion by freshman-entry engineering students. Baccalaureate institutions party to this agreement are: University of Washington Seattle, Washington State University, Eastern Washington University, Gonzaga University, Saint Martin’s University, Seattle Pacific University, Seattle University, and Walla Walla University. Engineering is a broad discipline and one pathway will not fit the requirements for all sub-disciplines contained within engineering. Therefore, these pathways within the AS-T Track 2/MRP degree are designed for the following areas: Computer and Electrical, and Mechanical/Civil/Aeronautical/Industrial/Materials Science. (See MRP in degrees section of catalog.)

**Industry Description:**

Engineers change the world by developing creative practical solutions and creating things that matter. Demand for engineers and engineering technicians continues to grow globally. Engineering Technicians assist engineers with surveying and computer aided drafting and design. WWCC offers a one year certificate that provides the most in-demand skills in Geographic Information Systems (GIS), Computer-Aided Drafting and Design (CADD), and Surveying.

Engineering is that industry that plans, develops, and monitors construction of facilities such as roadway, water supply, and communication systems; or manufacturing of items such as equipment or electronics. It encompasses many specialties such as structural, water resource, environmental, transportation, mechanical, and electrical engineering. Engineers complete investigations, perform computations, manage projects, develop plans, and inspect construction or fabrication. The ability to visualize components spatially, perform computations, be organized, account for cost, and use computers effectively is essential to a successful engineer.

**Entrance Requirements:** Students may begin their study in fall, winter, or spring quarters. However, not all courses are offered all quarters and certain sequences begin only in fall. In order to start this program, the placement process must be completed through the Testing Center. Visit [wwcc.edu/placement](http://www.wwcc.edu/placement) for more information. Also, several courses are offered on a continuation education basis without the need to be admitted to the program. Review prerequisites and consult with engineering faculty to confirm which courses may qualify.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).

**English**

[wwcc.edu/english](http://wwcc.edu/english)

 Jeremiah Burt  
 509.524.5154  
 jeremiah.burt@wwcc.edu

 Brad La Fran  
 509.527.3682  
 russell.lafran@wwcc.edu

 Denise Ortiz  
 509.527.4333  
 denise.ortiz@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston] [50% Online]

**Department Overview:** English courses at WWCC prepare students for success in both their collegiate and professional lives. Writing courses assist students in presenting their thoughts in an organized manner and improving their decision making, problem solving, and critical thinking. Literature courses help students interpret complex works to derive meaning and insight into the human need to create.

**Program Level Outcomes:**

- Examine culturally and linguistically diverse works in literature and film and demonstrate an aesthetic and intellectual comprehension.
- Demonstrate skills appropriate to evaluation of information, critical thinking, and creation of organized, coherent writing.
- Articulate complex ideas and employ evidence in the production of assigned work.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog.)

**Entrance Requirements:** Students must take a placement test to determine enrollment level.

**Preparation for Success:** Students are encouraged to read widely, to begin to develop the habit of self-education which will serve them in college and in their professional lives. Reading widely will enable students to more easily evaluate information, formulate positions on various topics, assess arguments, and employ critical thinking.

**Other Information:** All new and re-entering students complete an English writing assessment at Walla Walla Community College. The writing assessment may include a writing sample. As a result of this assessment, students will be enrolled in the most appropriate English course.

The Center for Academic Success is a great place for students to work one-on-one with a tutor to review their writing in any course at the College.

**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Enology and Viticulture

CERT, AAS-T, AAAS
http://wwcc.edu/wine

Danielle Swan-Froese 509.524.5170 danielle.swan-froese@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: The Institute for Enology and Viticulture provides students with hands-on experience in wine making, viticulture practices, and wine sales. To this end, the Institute has developed several acres of teaching vineyards where students actively participate in vineyard management and the growing of quality wine grapes used to support the teaching winery. In addition to the teaching vineyard, the Institute has created a state-of-the-art commercial teaching winery at College Cellars where students are responsible for wine making and wine-related chemistry.

Courses in wine marketing are available and students have opportunities to promote College Cellars of Walla Walla wine at various wine industry events. Many courses are tailored to meet the specific needs of the wine industry in the Pacific Northwest. The Enology and Viticulture curriculum is reviewed by an advisory board composed of local and regional industry members.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Enology and Viticulture upon completion of the two-year program of study. A Viticulture Certificate, which is dedicated to the science of wine grape farming, and a Fermentation Certificate, which is dedicated to the science of wine making, are available as individual certificates or in conjunction with the completion of the degree program. An Associates in Applied Sciences-Transfer is available for students who plan to pursue a baccalaureate degree.

Students may also choose to earn an Associate in Applied Arts and Sciences Degree in Wine Business.

Industry Description: Wine production in the state of Washington has rapidly grown to become an $8.6 billion industry, with more than 40,000 acres of vineyards, 900+ bonded wineries, and a new licensed and bonded winery emerging every month. In the Walla Walla Valley alone, there are nearly 1500 acres planted in vineyards, while the number of bonded wineries in the area has grown from 8 to 170+ in only seventeen years. The Walla Walla Institute for Enology and Viticulture was established to: 1) facilitate alliances with vintners and viticulturists in the Walla Walla Valley and throughout Washington State, 2) promote the economic development of the wine industry, and 3) provide education and training for those with an interest in the industry.

Entrance Requirements:
The Enology & Viticulture Program requires an additional admissions process.

Students must be at least 18 years of age and have a high school diploma or GED® to enroll in the Enology and Viticulture program.

Due to course sequencing, students must begin the program in the fall. A placement test offered by the Student Development Center must be completed prior to admittance to the program. Prospective students must submit a resume and essay to the Institute for Enology and Viticulture, and may also be required to interview with one of the Institute’s instructors.

Students must be physically able to safely perform the tasks required in the vineyard and winery, which will include pruning, lifting, climbing, bending, stretching, twisting, crawling and moving, lifting, carrying, pushing and pulling items weighing up to 50 lbs. Ability to taste, smell, and check for optical clarity of wine. Ability to visually inspect and sort wine grapes - checking for diseases and insects - during the growing season through harvest.

Other Information: The Institute also offers short courses in sensory evaluation, barrel making, wine yeasts, wine appreciation, wine consumer education, health and wine awareness, and hospitality training.

For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees

Associate in Applied Arts and Sciences Degree in Wine Business

This technical degree is designed to serve the needs of the student who is new to the wine marketing industry or for persons who wish to focus their current marketing skills toward a career in the wine industry.

Degree available at/via: [Walla Walla] [50% Online]

Degree Outcomes:

- Demonstrate knowledge of accounting basics.
- Demonstrate ability to use computer software to create and use written documents, including spreadsheets, graphical presentations and databases.
- Prepare and orally deliver a sales presentation to a prospect which includes appropriate techniques for opening, presenting product, handling objections and closing.
- Identify and apply management tools used to measure business performance.
- List parts of a business plan and explain the benefits of creating a plan.
- Discuss structure and characteristics of the food/beverage product, agricultural production, food/beverage processing and retailing; and their influence on food/beverage marketing.
- Explain process and influences on making laws in the U.S.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Quarter One</td>
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<tr>
<td>BUS 102, Customer Service</td>
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<tr>
<td>BUS 112, Business Mathematics (M)</td>
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<tr>
<td>BUS&amp; 101, Intro to Business</td>
<td>5</td>
</tr>
<tr>
<td>EV 106, Intro to Viticulture &amp; Enology for Wine Marketing Students **</td>
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<thead>
<tr>
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<tbody>
<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 210, Principles of Marketing</td>
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Certification Outcomes:
- Written Communications
- Oral Communications
- Job Seeking Skills
- Human Relations

This degree is dedicated to the science of wine making. Students must complete related instruction requirements in the following categories to receive this certificate: Written Communications, Oral Communications, Job Seeking Skills, and Human Relations. Students must complete the Viticulture Science Certificate before completing the Fermentation Science Certificate.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:
- Perform basic wine sensory evaluations.
- Clean winery and wine equipment.
- Monitor red and white wine fermentation.
• Chemically analyze wine.
• Perform post-fermentation cellar operations.
• Blend and age wines.
• Bottle and label wines.

**Certification:**
Certificate Outcomes:

- Complete related instruction requirements in the following categories to receive a certificate: Oral Communications, Computation/Mathematics, and Leadership. Students must complete related instruction requirements in the following categories to receive a certificate: Oral Communications, Computation/Mathematics, and Leadership. Students can complete the Viticulture Science Certificate before completing the Fermentation Science Certificate.

**Viticulture Science Certificate**
This technical degree prepares the student for a variety of careers in vineyards (vineyard workers, crew leaders, managers, viticulturists) to wineries (winemakers, cellar workers, lab technicians, retail sales representatives).

**Degree Outcomes:**

- Plan and equip a new vineyard, propagate grape vines, and provide post-planting care.
- Maintain the vineyard from the point of dormancy through the harvest.
- Recognize symptoms of vine disease and insect infestation as well as identify potential remedies.
- Produce an assortment of wine styles.
- Clean winery and wine equipment.

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>3 - 5</td>
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<tr>
<td>ENGL&amp; 101, English Composition (W)</td>
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<tr>
<td>EV 203, Science of Winemaking</td>
<td>3</td>
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<tr>
<td>EV 286, Winemaking Practicum I</td>
<td>3 - 12</td>
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</thead>
<tbody>
<tr>
<td>EV 287, Winemaking Practicum II</td>
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</tr>
<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
<td>3 - 5</td>
</tr>
<tr>
<td>EV 108, Wine Industry Marketplace (J)</td>
<td>3</td>
</tr>
<tr>
<td>EV 141, Introduction to Wine Marketing</td>
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<tbody>
<tr>
<td>EV 131, Essentials of Winery Compliance</td>
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<tr>
<td>EV 142, Applied Wine Marketing</td>
<td>3</td>
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<tr>
<td>EV 189, Sensory Analysis of Wine</td>
<td>3</td>
</tr>
<tr>
<td>EV 193, Winery Operations Management</td>
<td>3</td>
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<tr>
<td>EV 205, Science of Winemaking III</td>
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**Grand Total** | 46-59 |

**YEAR TWO**

<table>
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<tr>
<td>AGPR 120, Agricultural Chemistry</td>
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<td>AGPR 201, Basic Soil Science</td>
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**YEAR THREE**

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<thead>
<tr>
<th>Quarter Two</th>
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<tbody>
<tr>
<td>AGPR 202, Soils Fertility and Management</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 230, Plant Diseases and Insects</td>
<td>5</td>
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<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
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<tr>
<td>EV 102, Maintaining a Vinifera Vineyard</td>
<td>5</td>
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<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
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<td>EV 198, Viticulture Practicum III</td>
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</table>

**Year One Total** | 61-65 |

**Grand Total** | 61-65 |

* Students may take either AGPR 120, Agricultural Chemistry or CHEM& 110, Chemical Concepts with Lab.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - EV 108
- (O) - CMST 102, OCSUP 102
- (W) - ENGL& 101
- (M) - BUS 112, OCSUP 105, OCSUP 106

**Associate in Applied Arts and Sciences**

**Degree in Enology & Viticulture**

This technical degree prepares the student for a variety of careers in vineyards (vineyard workers, crew leaders, managers, viticulturists) to wineries (winemakers, cellar workers, lab technicians, retail sales representatives).

**Degree Outcomes:**

- Plan and equip a new vineyard, propagate grape vines, and provide post-planting care.
- Maintain the vineyard from the point of dormancy through the harvest.
- Recognize symptoms of vine disease and insect infestation as well as identify potential remedies.
- Produce an assortment of wine styles.
- Perform basic wine sensory evaluations.
- Clean winery and wine equipment.
- Monitor red and white wine fermentation.
- Chemically analyze wine.
- Perform post-fermentation cellar operations.
- Blend and age wines.
- Bottle and label wines.
Transferability: The AAAS Degree is designed primarily for students planning to enter their chosen career upon graduation. Only selected credits are considered transferable to public or private baccalaureate institutions in Washington State. However, students interested in studying Enology and Viticulture and continuing to a four-year institution may be able to adjust their coursework to facilitate this transfer.

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>AGPR 201, Basic Soil Science</td>
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<tr>
<td>CHEM&amp; 110, Chemical Concepts w/Lab</td>
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</tr>
<tr>
<td>EV 107, Introduction to Viticulture and Enology</td>
<td>5</td>
</tr>
<tr>
<td>EV 196, Viticulture Practicum I</td>
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<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<thead>
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<tr>
<td>AGPR 113, Cultivated Plants</td>
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<td>EV Elective Offering(s)</td>
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<td>EV 101, Establishing a Vinifera Vineyard</td>
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<td>EV 108, Wine Industry Marketplace (J)</td>
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<tr>
<td>EV 197, Viticulture Practicum II</td>
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<td>WTM 112, Irrigation Principles</td>
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<tbody>
<tr>
<td>AGPR 202, Soils Fertility and Management</td>
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<tr>
<td>EV Elective Offering(s)</td>
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<tr>
<td>EV 102, Maintaining a Vinifera Vineyard</td>
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<td>WTM 220, Drip Irrigation</td>
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<td>EV 198, Viticulture Practicum III</td>
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<td>EV 299, Professional Wine Leadership (L)</td>
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<td>EV Elective Offering(s)</td>
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<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
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</tr>
<tr>
<td>EV 131, Essentials of Winery Compliance</td>
<td>2</td>
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<td>EV 203, Science of Winemaking I</td>
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| Year One Total | **75** |

**YEAR TWO**

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<td>EV 286, Winemaking Practicum I</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
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</thead>
<tbody>
<tr>
<td>EV Elective Offering(s)</td>
<td>3</td>
</tr>
<tr>
<td>EV 141, Introduction to Wine Marketing</td>
<td>3</td>
</tr>
<tr>
<td>EV 189, Sensory Analysis of Wine</td>
<td>3</td>
</tr>
<tr>
<td>EV 204, Science of Winemaking II</td>
<td>5</td>
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<tr>
<td>EV 287, Winemaking Practicum II</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV 142, Applied Wine Marketing</td>
<td>3</td>
</tr>
<tr>
<td>EV 193, Winery Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>EV 205, Science of Winemaking III</td>
<td>5</td>
</tr>
<tr>
<td>EV 288, Winemaking Practicum III</td>
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</tr>
</tbody>
</table>

| **Total Credits** | **17** |

**Environmental & Ecosystem Science**

**AAS-T**

http://www.wwcc.edu/wtmee

Melissa Holecek 509.524.5208 melissa.holecek@wwcc.edu
Dave Stockdale 509524.5193 dave.stockdale@wwcc.edu

Program available at/via: [Walla Walla]


The Water Technologies and Management program offers certificates, Associate in Applied Arts & Sciences degrees (AAAS) and transfer options in Watershed Ecology, Natural Resources Technology and Management, and Irrigation Technology.

Program Level Outcomes:

- An understanding of discipline-specific terminology and methods.
- An ability to use discipline-specific tools and/or techniques correctly.
- Critical thinking skills necessary in water and natural resources, including problem solving skills and the use of data.
- The ability to research, interpret, and communicate concepts.
- An understanding of the relationships between course concepts and society, including the impact of course-specific technology.

Degrees: Students will earn a two year degree that matriculates into a Bachelor of Science in Earth and Environmental Sciences degree in Environmental & Ecosystem Sciences in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

Industry Description: Environmental and ecosystem sciences focus on the interactions of physical, chemical, and biological conditions of natural and human modified environments, with the goal of solving growing environmental challenges. Practitioners work to apply science and find solutions to environmental, resource conservation, and sustainability issues, and to manage and preserve natural areas and ecosystems. Students in this program will complete the basic science and related courses needed to transfer to WSU to pursue discipline-specific upper level courses.

Entrance Requirements: Students may begin their study in fall, winter, spring, or summer quarter. A placement test offered by the Advising and
Degrees

Associate of Applied Science -Transfer - Watershed Ecology - Environmental and Ecosystem Sciences

Students will earn a two year degree that matriculates into a Bachelor of Science in Earth and Environmental Sciences degree in Environmental & Ecosystem Sciences in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

Degree available at/via:[Walla Walla]

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
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<tr>
<td>CMST&amp; 220, Public Speaking</td>
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<td>5</td>
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<tr>
<td>CHEM 121, Intro to Chemistry or CHEM 161, General Chemistry I w/Lab</td>
<td>.</td>
<td>5</td>
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<tr>
<td>GEOL 101, Intro to Physical Geology</td>
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<table>
<thead>
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<tbody>
<tr>
<td>CHEM 122, Introduction to Organic Chemistry or CHEM 162, General Chemistry II w/Lab</td>
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<td>ENGL 101, English Composition I</td>
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<tr>
<td>HIST 128, World Civilization III</td>
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<tr>
<td>MATH 141, Precalculus I</td>
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<td><strong>Total Credits</strong></td>
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<table>
<thead>
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<tbody>
<tr>
<td>CHEM 123, Introduction to Biochemistry or CHEM 163, General Chemistry III w/Lab</td>
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<tr>
<td>ENVS 101, Introduction to Environmental Science</td>
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<td>MATH 142, Precalculus II</td>
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<thead>
<tr>
<th>YEAR TWO</th>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>.</td>
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<tr>
<td>BIOL 211, Majors Cellular</td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
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<tr>
<td>WTM 139, Watershed Management</td>
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<tr>
<td>ART 100, Art Appreciation</td>
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<tr>
<td>BIOL 213, Majors Plant</td>
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<tr>
<td>ENT 151, Advanced GIS</td>
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<tr>
<td>GEOL 103, Historical Geology</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
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<tr>
<th>Quarter Three</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGRI 222, Agricultural and Water Policy</td>
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<tr>
<td>BIOL 212, Majors Animal</td>
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<tr>
<td>MATH 146, Introduction to Statistics</td>
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| Year One Total | **.** | **55** |

| Year Two Total | **.** | **51** |

| Grand Total | **.** | **106** |

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Counseling Center must be completed prior to starting the program.

Program Level Outcomes:

- An understanding of discipline specific terminology and methods.
- An ability to correctly use discipline-specific tools and/or techniques.
- Critical thinking skills necessary in science including appropriate study techniques, problem solving skills and the use of data to assess the validity of claims.
- The ability to research, interpret and communicate concepts obtained from scientific literature.
- An understanding of the relationships between course concepts and society, including the impact of course-specific technology.

Environmental Studies

http://www.wwcc.edu/environmentalstudies

Steve May 509.527.2644 steve.may@wwcc.edu
Cynthia Robinett- Ck 509.758.1727 cynthia.robinett@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Environmental Sciences studies the physical makeup and history of the Earth to protect the environment. Students develop an understanding of the properties of underground and surface waters, how to locate water and energy resources, and environmental assessment procedures.

Program Level Outcomes:

- People Skills: demonstrate high levels of successful interaction
with clients who provide horses for lab work; demonstrate high levels of cooperation with fellow students and instructors as noted by instructors.

- Business Skills: demonstrate necessary skills in operating a sound business.

**Degrees:** Students may earn an Associate in Applied Arts and Sciences Degree in Farrier Science upon completion of the two-year program of study. This degree prepares students to take the American Farriers Association (AFA) Certified Farrier Examination. A Farrier Science Certificate is available upon completion of the first year of the program. This certificate prepares students to take the American Farriers Association Intern Test.

**Industry Description:** Farriers are trained in the art and science of trimming and shoeing horses of all breeds. They trim the hoof to remove extra growth and to align the bone structure of the leg so it meets the ground squarely. The process that farriers use involves removing the old shoe, cleaning out the dead exfoliating material, and then using nippers to remove excess hoof wall growth. The foot is then made flat using the rasp. Horse shoes are shaped to fit the hoof and nailed on. Due to popularity and diverse uses of horses, there is a steady demand for qualified farriers throughout the world.

**Entrance Requirements:** It is recommended that the student contact the lead instructor regarding appropriate program placement and to determine specific quarter start in the program. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement process must be completed through the Testing Center. Visit [wwcc.edu/placement](http://wwcc.edu/placement) for more information.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).

---

### Degrees and Certificates

#### Farrier Science Certificate

This certificate is equivalent to the first year of the AAAS Degree in Farrier Science.

**Certificate available at/via:** [Walla Walla]

**Certificate Outcomes:**

- Competently do a basic horseshoeing job.
- Apply basic remedial shoes.
- Trim a horse’s hooves.
- Make and apply therapeutic shoes.
- Apply handmade shoes with clips.

---

### YEAR ONE

**Quarter One**

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART 115, Drawing for Farrier Science</td>
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<tr>
<td>FRR 194, Basic Shoeing</td>
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<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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**Quarter Two**

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIOL 150, Applied Equine Biology</td>
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<tr>
<td>FRR 195, Intermediate Shoeing</td>
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<td>WRITE 100, Written Communication in the Workplace (W)</td>
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**Quarter Three**

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<tr>
<th>Course</th>
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<td>FRR 197, Advanced Shoeing</td>
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<td>FRR 162, Small Business Management for Farriers</td>
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<td>FRR 292, Leadership (L)</td>
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<td>OCSUP 101, Human Relations (R)</td>
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**Year One Total** **73**

**Grand Total** **73**

---

### Associate in Applied Arts and Sciences Degree in Farrier Science

This technical degree prepares the student for immediate employment in the farrier industry. It may be utilized by individuals planning to enter their chosen career upon graduation or for the individual who is interested in improving current skills and knowledge.

**Degree available at/via:** [Walla Walla]

**Degree Outcomes:**

- Competently do a basic horseshoeing job.
- Apply basic remedial shoes.
- Trim a horse’s hooves.
- Make and apply therapeutic shoes.
- Apply handmade shoes with clips.

**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.
Program Level Outcomes:

- Support Fire Service Agencies in providing quality service to their communities through training and education.
- Ensure that all Walla Walla Community College Fire Science education courses reflect current industry standards.
- Promote a culture of health, safety, and welfare for all Fire Service personnel and the public they serve. Ensure “everyone goes home” as our overriding philosophy of fire training and education.
- Promote collaboration and sharing of training resources between agencies on a local and regional basis to more efficiently deliver fire training and education.
- Design curriculum which promotes articulation between degree levels and educational institutions.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Fire Science upon completion of the two-year program of study. A Fire Science Certificate is available upon completion of the first year of the program. The first year prepares the student to take the Washington State Firefighter 1 Certificate Examination.

Industry Description: Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters help protect the public against these dangers by rapidly responding to a variety of emergencies. They must be prepared to respond rapidly, regardless of the weather or hour. Firefighters have assumed a range of responsibilities, including emergency medical services; they rescue victims and provide emergency medical attention as needed, ventilate smoke-filled areas, and attempt to salvage the contents of buildings. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries, or perform other vital functions. Most calls to which firefighters respond involve medical emergencies, and about half of all fire departments provide ambulance service for victims. Firefighters receive training in emergency medical procedures, and many fire departments require them to be certified as emergency medical technicians (EMT). Firefighters work in a variety of settings, including urban and suburban areas, airports, chemical plants, other industrial sites, and rural areas like grasslands and forests. In addition, some firefighters work in hazardous materials units that are trained for cleaning up hazardous materials incidents.

Entrance Requirements: Students may begin their study in the Fire Science program in fall quarter of every even numbered year. Students who miss the fall enrollment period may take the EMT and general educational courses at any time and then take the fire related courses when the program begins again. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information. Due to the nature of the work, students wishing to enroll in the Fire Science program must submit to a Washington State criminal background check.

Other Information: Students are encouraged to seek positions in the local student resident firefighter programs, in which lodging is provided in exchange for taking calls as a volunteer member of local fire agencies. For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees and Certificates

Fire Science Certificate

This certificate is equivalent to the first year of the AAAS Degree in Fire Science.

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate knowledge of personal protective equipment, search and rescue techniques, health and safety, fire behavior, incident command systems, ladders and ventilation, and hazardous materials.
- Prepare to take the test for Level I firefighter conducted by the State Fire Protection Bureau.
- Understand sprinkler system operation, maintenance, and inspection.
- Apply basic firefighting skills to a wild land/urban interface environment.
### Associate in Applied Arts and Sciences Degree in Fire Science

This technical degree provides the student the fundamental knowledge and skills required to function in a fire service setting as an entry-level firefighter.

#### Degree available at/via: [Walla Walla] [50% Online]

#### Degree Outcomes:

- Perform duties and responsibilities of a pump operator.
- Demonstrate knowledge of personal protective equipment, search and rescue techniques, health and safety, fire behavior, incident command systems, ladders and ventilation, and hazardous materials.
- Predict the behavior and potential harm of material components of a fire.
- Prepare to take the test for Level I firefighter conducted by the State Fire Protection Bureau.
- Describe and use a systematic approach to the examination of a fire scene.
- Understand sprinkler system operation, maintenance, and inspection.
- Describe strategic and tactical considerations associated with building construction types, materials, and components.
- Apply basic firefighting skills to a wild land/urban interface environment.
- Demonstrate the ability to deliver a public safety education lesson to a target audience using a prepared lesson plan and the four step method of instruction.

#### Transferability:
The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

### Transferability:

The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

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**YEAR ONE**

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<td>WRITE 100, Written Communication in the Workplace (W)</td>
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<td>MATH&amp; 107, Math in Society (M)</td>
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<td><strong>Total Credits</strong></td>
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**FORESTRY**

- **Department Overview:** The Water Technologies & Management program now offers four new 2+2 degree pathways to Washington State University in Wildlife Ecology & Conservation Science, Environmental & Ecosystem Sciences, Forestry, and Earth Sciences.

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**Associate in Applied Arts and Sciences Degree in Forestry**

- **Program available at/via:** [Walla Walla] [50% Online]

- **Degree Outcomes:**
  - Demonstrate knowledge of forest ecosystems, management, and conservation.
  - Understand the role of forestry in natural resource conservation and sustainability.
  - Describe and apply principles of ecological restoration and forest regeneration.
  - Demonstrate effective communication and research skills in the field of forestry.

- **Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

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**FOR THE MOST CURRENT INFORMATION SEE:** www.wwcc.edu
In addition the program offers certificate, Associate in Applied Arts & Sciences degrees (AAAS) and transfer options in Watershed Ecology, Natural Resources Technology and Management, and Irrigation Technology.

**Program Level Outcomes:**
- An understanding of discipline-specific terminology and methods.
- An ability to use discipline-specific tools and/or techniques correctly.
- Critical thinking skills necessary in water and natural resources, including problem-solving skills and the use of data.
- The ability to research, interpret, and communicate concepts.
- An understanding of the relationships between course concepts and society, including the impact of course-specific technology.

**Degrees:** Students will earn a two year degree that matriculates into a Bachelor of Science in Environmental Sciences degree in Forestry in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

**Industry Description:** Foresters plan, maintain, and preserve forests and forest resources for public and private use. A strong background in the plant sciences with a strong emphasis on spatial analysis, including landscape ecology and GIS, prepares you to work as a professional forester, performing tasks ranging from increasing timber production to restoring wildlife habitat.

**Entrance Requirements:** Students may begin their student in the fall, winter, spring, or summer quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

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### Degrees

**Associate of Applied Science-Transfer - Watershed Ecology-Forestry**

Students will earn a two year degree that matriculates into a Bachelor of Science in Earth and Environmental Sciences degree in Forestry in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

**Degree available at/via: [Walla Walla]**

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<td>CMST&amp; 220, Public Speaking</td>
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<td>GEOL&amp; 103, Historical Geology</td>
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<td>CHEM&amp; 122, Introduction to Organic Chemistry or CHEM&amp; 162, General Chemistry II w/Lab</td>
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**Total Credits:** **50**

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### Year Two

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<td>ENGL 101, English Composition I</td>
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<td>HIST&amp; 128, World Civilization III</td>
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<td>MATH&amp; 142, Precalculus II</td>
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**Grand Total:** **46**

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**Program available at/via: [Walla Walla]**

**Department Overview:** The study of a modern language is a way of expanding one’s horizons while developing specific linguistic skills that will enhance career, academic, and travel opportunities. One of the many benefits derived from modern-language study is the ability to transcend linguistic and cultural parochialism. To understand the uniqueness of one’s own language and civilization, knowledge of another culture is essential. Language study is the key that unlocks the mysteries surrounding a foreign people. Through language, one is able to explore their literature, art, history, and philosophy-in short, their way of life.

**Program Level Outcomes:**
- Practice French communication skills with emphasis on interpersonal communication.
- Identify and discuss principal areas of difference between American and French cultures.
- Compare and contrast the construction and use of French and English and demonstrate an increased grammatical and syntactic competency in both languages.
- Demonstrate competence in reading, writing, speaking, and listening to French as measured by ACTFL standards and O.P.I. criteria.

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**FOR THE MOST CURRENT INFORMATION SEE: WW.WWCC.EDU**
**Gender and Women's Studies**

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**Entrance Requirements:** There is no prerequisite for FREN& 121. The series of French courses numbered FREN& 122 and above are a set of sequentially designed courses and must be taken in order (unless the student has received written permission to deviate from that order from the French instructor).

**Preparation for Success:** Students can prepare for these careers by taking a broad range of courses that include English writing and comprehension, foreign languages, and basic computer proficiency. Other helpful pursuits include spending time abroad, engaging in comparable forms of direct contact with foreign cultures, and reading extensively on a variety of subjects in English and at least one other language. Beyond high school, there are many educational options. Although a bachelor’s degree is often required, interpreters and translators note that it is acceptable to major in something other than a language. However, specialized training in how to do the work is generally required.

**Other Information:** Baccalaureate institutions vary considerably in their language requirements, especially schools within universities and college. Transfer students are advised to check requirements carefully when they plan their schedules.

**Program available at/via:** [Walla Walla]

**Department Overview:** Gender and Women's Studies at WWCC provides critical thinking and writing skills and an understanding of the contributions of diverse groups that have traditionally been outside the ideals of dominant American culture, specifically people of various genders, races, body types, income levels, and more. GWST courses are committed to realizing the equality of all people in all areas of life so that our relationships—social, personal, and professional—are exemplified by the freedom and mutuality that can occur only among equals. Courses are interdisciplinary, taught by faculty from Sociology, Psychology, Philosophy, Literature, and the Sciences, and through various lenses, e.g. Feminist, Race Theory, Queer Theory, etc. Because students acquire the ability to think more globally, they are better equipped for employment with the various public, private, government, and non-profit organizations that increasingly seek candidates with a background in GWST studies.

**Program Level Outcomes:**

- An aesthetic and intellectual comprehension of culturally and linguistically diverse works in literature, philosophy, visual and performing arts, including film and music.
- An understanding and working knowledge of terminology commonly used in the humanities.

- An appropriate level of creativity, discipline, and technique in the production of assigned work in the humanities.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**Preparation for Success:** A major in Gender and Women's Studies is strengthened by advanced studies in psychology, sociology, literature, and history.
Students considering Environmental Geology should also take courses in chemistry, physics, and mathematics. The geology courses offered will serve students interested in pursuing a major in Geology as well as general students taking the courses to fulfill the Natural Sciences requirement for graduation with an AA or AS degree.

**Program Level Outcomes:**
- An understanding of discipline specific terminology and methods.
- An ability to correctly use discipline specific tools and/or techniques.
- Critical thinking skills necessary in science including appropriate study techniques, problem solving skills and the use of data to assess the validity of claims.
- The ability to research, interpret and communicate concepts obtained from scientific literature.
- An understanding of the relationships between course concepts and society, including the impact of course specific technology.

**Degrees:** Students may earn an Associate in Science Degree - Option I (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AS Option I in Degrees section of catalog.)

**Preparation for Success:** Students interested in a major in Geology should take additional courses in chemistry, physics, and mathematics. Students considering Environmental Geology should also take courses in environmental science, biology, and ecology.

**High School Completion**

http://www.wwcc.edu/highschool

High School Programs Director - 509.527.4687

**Program available at/via:** [Walla Walla]

**Department Overview:** The High School Completion program provides another alternative for students needing to complete their high school diploma. In order to enroll in the program, students must bring transcripts from all high schools they have attended. Washington residents enrolled in high school completion classes who are under 19 years of age, pay full tuition and must have a release from their high school to participate in the program. Residents who are 19 or older pay reduced tuition rate; see the WWCC tuition and fee schedule for current rates. Non-residents need to inquire about the fee schedule at the Student Development Center.

**History**

http://www.wwcc.edu/history

Jim Peitersen 509.527.4601  james.peitersen@wwcc.edu
John Van Slyke 509.527.4493  johan.vanslyke@wwcc.edu

**Program available at/via:** [Walla Walla] [Clarkston]

**Department Overview:** History is the study of past human experiences. Only by learning about that past can we come to know the fullness of humankind’s ideas and actions, tragedies, and triumphs. But, while we learn of the past, we are also learning about the present. The History department at WWCC provides courses to meet general education needs in the first two years in the disciplines of history and world history. In addition to these introductory courses, specialty courses are offered in a number of different areas. These courses have no academic prerequisites and are open to all interested persons.

**Program Level Outcomes:**
- The ability to analyze past and present society, diverse cultures and histories to better understand individual and group behavior and enhance self-awareness.
- An understanding and working knowledge of the theories, concepts, ideas, terminology, and factual evidence in selected fields within the social sciences.
- Sensitivity in understanding diverse views and perspectives.
- An understanding of the historically and socially constructed nature of human differences.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog.)

**Preparation for Success:** History is a study that emphasizes interpreting past human experiences through evidence such as written record and cultural materials. As such it is useful to take additional courses in the social sciences and humanities. Strong research and writing skills are required for success in this discipline.

**Honors**

http://www.wwcc.edu/academics/honors

Staci Simmelink Johnson 509.527.4298  staci.simmelink-johnson@wwcc.edu

**Department Overview:** The Honors Program offers successful and highly motivated students the chance to advance both their learning and their prospects for college, scholarship, and career advancement through uniquely challenging coursework and focused activities. The program is designed to be completed within an AA/AS degree pathway. Transcripts of Honors graduates indicate their achievement by listing the specific courses they took for Honors credit. Students may enroll in the Honors Program if they enter WWCC with a 3.5 high school GPA, or if they have earned at least 15 college credits at WWCC with a 3.5 GPA.

**Human & Social Services**

AAS-T, AAS

http://www.wwcc.edu/humanservices

Curtis Phillips 509.527.4296  curtis.phillips@wwcc.edu

**Program available at/via:** [Walla Walla]

**Department Overview:** The Human & Social Services program is designed to provide preparation and career development required to be an effective human services professional. Students will have the opportunity to study human behavior and human development within the context of the psychological, social, and biophysical environments in which people live. Students learn the attributes and needs of diverse populations served by
human service organizations and the professional and ethical standards to work with people in need. Students work directly with community agencies and institutions to gain hands-on experience through two field placements.

**Program Level Outcomes:** Upon successful completion of the Human & Social Services program, the graduate will be able to:

- Demonstrate adequate preparation for career development required to be an effective human services professional.
- Recognize and apply ethical and professional standards within the human services field.
- Demonstrate an understanding of human development and how social systems interact in producing human problems.
- Identify the full spectrum of a diverse community and appropriate techniques for working with diverse individuals.
- Identify strategies, interventions, and goal attainment that promote healthy functioning and treatment-rehabilitation congruent with organizations in the human service profession.
- Employ proficient written and verbal communication skills and the appropriate uses of technology.

**Degrees:** The Associate in Applied Science (AAS) is designed for students seeking immediate employment upon graduation. Emphasis is placed on theoretical and practical knowledge important to be a successful professional in human and social services and to apply those concepts in a variety of settings. Students may concentrate in specialized areas by choosing specific electives related to their interests. An Associate of Applied Science - Transfer (AAS-T) degree is available for students planning to pursue a four year degree at a Washington baccalaureate institution.

**Industry Description:** The Human & Social Services program is designed for students interested in working with people in need. Students will have the opportunity to study human behavior and human development within the context of the psychological, social and biophysical environments in which people live. They will develop skills needed to work with others both one-on-one and in groups. They will develop the value base from which they will practice and learn the ethical standards of the helping professions. They will learn to appreciate and work in a multicultural environment. As a major part of their study, they will also have the opportunity to work directly with people in need by being assigned two field placements with agencies and institutions in the community.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).

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**Degrees**

**Associate of Applied Science - Transfer Human & Social Services**

This is a dual-purpose degree intended to prepare students for employment in Human & Social Services and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.

**Degree available at/via:** [Walla Walla] [Online (100%)]

**Degree Outcomes:**

- Demonstrate adequate preparation for career development required to be an effective human services professional.
- Demonstrate an understanding of human development and how social systems interact in producing human problems.
- Identify the full spectrum of a diverse community and appropriate techniques for working with diverse individuals.
- Identify strategies, interventions, and goal attainment that promote healthy functioning and treatment-rehabilitation congruent with organizations in the human service profession.
- Employ proficient written and verbal communication skills and the appropriate uses of technology.

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**For the most current information see:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
HSS 201 Case Management .......................... 5 credits
HSS 202 Co-occurring Diseases ................. 5 credits
HO 142-148 Patient Navigation ................. 7 credits
HSS 022 Mental First Aid ......................... 8 credits
IFA 022 AHA Heartsaver First Aid ........... 4 credits
HO 110 HIV/AIDS Education ..................... 7 credits
HO 169 Suicide Prevention Training .......... 6 credits

Total Credits ........................................... 116.294.2-

YEAR ONE

ELECT HUM2, Humanities Elective ** ................. 5 credits

Total Credits ............................................ 1615-

YEAR TWO

ENGL& 101, English Composition I (W) .......... 5 credits
HSS 101, Introduction to Human Services ...... 5 credits
HSS 201 Co-occurring Disorders ................. 5 credits
PSYC 160 Psychology of Criminal Behavior ...... 5 credits
PSYC 200 Lifespan Psychology ................... 5 credits
PSYC 205 Social Psychology ....................... 5 credits
PSYC 220 Abnormal Psychology ................. 5 credits
SOC 101 Introduction to Sociology ............ 5 credits
PSYC 112 Criminal Justice ....................... 5 credits
EDUC& 136 School Age Care ..................... 3 credits
HO 142-148 Patient Navigation ................. 7 credits
HO 110 HIV/AIDS Education ..................... 7 credits
HO 169 Suicide Prevention Training .......... 6 credits

Total Credits ............................................ 20.415.4-

*With the assistance of an adviser students will select a minimum of 25 credits but up to 35 credits in supporting elective courses. Refer to the complete list of supporting elective courses below:

CJ & 1112 Criminology ................................. 5 credits
ECSE 255 Children at Risk ......................... 3 credits
ECED& 107 Health/Safety/Nutrition ............. 5 credits
EDUC& 115 Child Development .................... 5 credits
EDUC& 130 Guiding Behavior ..................... 3 credits
EDUC& 136 School Age Care ..................... 3 credits
EDUC& 150 Child/Family/Community .......... 3 credits
EDUC& 203 Exceptional Child ................. 3 credits

Select one course or one course from the list of approved Natural Science [NS] courses:

BIOL & 100 Survey of Biology ................. 5 credits
BIOL 130 General Ecology ....................... 5 credits
BIOL & 160 General Biology ..................... 5 credits
BIOL & 175 Human Biology ....................... 5 credits

CJ & 1112 Criminology ................................. 5 credits
ECSE 255 Children at Risk ......................... 3 credits
ECED& 107 Health/Safety/Nutrition ............. 5 credits
EDUC& 115 Child Development .................... 3 credits
EDUC& 130 Guiding Behavior ..................... 3 credits
EDUC& 136 School Age Care ..................... 3 credits
EDUC& 150 Child/Family/Community .......... 3 credits
EDUC& 203 Exceptional Child ................. 3 credits

**Humanities Elective (5 credits):
Select one course or one course from the list of approved Humanities [H] courses:

GWST 124 Women Artists in History ............... 5 credits
GWST 200 Introduction to Gender and Women’s Studies .... 5 credits
GWST 251 Voices of Women in Literature ....... 5 credits
HUM 107 Gender Perceptions in American Film .... 5 credits
HUM 109 World Arts and Culture ................. 5 credits
HUM 110 Four Perspectives ......................... 5 credits
PHIL& 101 Introduction to Philosophy .......... 5 credits
PHIL& 115 Critical Thinking ....................... 5 credits

Associate in Applied Science Degree in Human & Social Services

Grads are prepared with important theoretical and practical knowledge for immediate employment in a variety of settings, available upon completion of the two year program of study.

Degree available at/via: [Walla Walla] [50% Online]

Degree Outcomes:

- Demonstrate adequate preparation for career development required to be an effective human services professional.
- Recognize and apply ethical and professional standards within the human services field.
- Demonstrate an understanding of human development and how social systems interact in producing human problems.
- Identify the full spectrum of a diverse community and appropriate techniques for working with diverse individuals.
- Identify strategies, interventions, and goal attainment that promote healthy functioning and treatment-rehabilitation congruent with organizations in the human service profession.
- Employ proficient written and verbal communication skills and the appropriate use of technology.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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<td>ELECT CMST1, CMST&amp; 220, Public Speaking (O)</td>
<td>53</td>
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<tr>
<td>ELECT HSS2, HSS Supporting Elective Course *</td>
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*With the assistance of an adviser students will select a minimum of 25 credits but up to 35 credits in elective courses. Refer to the complete list of supporting elective courses below:

- CJ& 1112 Criminology | 5 |
- ECE 255 Children at Risk | 3 |
- ECED& 107 Health/Safety/Nutrition | 5 |
- EDUC& 115 Child Development | 5 |
- EDUC& 130 Guiding Behavior | 3 |
- EDUC& 136 School Age Care | 3 |
- EDUC& 150 Child/Family/Community | 3 |
- EDUC& 203 Exceptional Child | 3 |
- HO 142 148 Patient Navigation | 7 |
- HO 110 HIV/AIDS Education | 7 |
- HO 169 Suicide Prevention Training | 6 |
- HSS 201 Case Management | 5 |
- HSS 202 Co-credit occurring Disorders | 5 |
- PSYC 160 Psychology of Criminal Behavior | 5 |
- PSYC 200 Lifespan Psychology | 5 |
- PSYC 205 Social Psychology | 5 |
- PSYC& 220 Abnormal Psychology | 5 |
- SOC& 101 Introduction to Sociology | 5 |
- SOC 204 Drugs and Society | 5 |
- SOC 205 Racial and Ethnic Relations | 5 |

**Humanities Elective (5 credits):**
Select one course or one course from the list of approved Humanities [H] Fine Arts [HP] courses:
- GWST 124 Women Artists in History
- GWST 200 Introduction to Gender and Women's Studies
- GWST 251 Voices of Women in Literature
- HUM 107 Gender Perceptions in American Film
- HUM 110 World Arts and Culture
- HUM 110 Four Perspectives
- PHIL& 101 Introduction to Philosophy
- PHIL& 115 Critical Thinking
- PHIL 207 Philosophy of Religion

**Natural Science Elective (5 credits)**
Select one course or one course from the list of approved Natural Science [NS] courses:
- BIOL& 100 Survey of Biology
- BIOL 130 General Ecology
- BIOL& 160 General Biology
- BIOL& 175 Human Biology
- BIOL& 251 Human Anatomy & Physiology I
- BIOL& 252 Human Anatomy & Physiology II

**CHEM 105 Chemical Concepts**
**CHEM 110 Chemical Concepts w/Lab**
**CHEM& 121 Introduction to Chemistry**
**NUTR& 101 Nutrition**

EPC: 422

(W) - BUS 136, ENGL& 101
(M) - BUS 112, MATH& 107, MATH& 146
(J) - HSS 142
(R) - BUS 157
(O) - CMST 201, CMST& 220

**Humanities**

http://wwcc.edu/humanities

Jesse Burgess 509.527.1869 jesse.burgess@wwcc.edu
James Bower-Clk 509.758.1771 james.bower@wwcc.edu

**Program available at/via: [Walla Walla] [Clarkston]**

**Department Overview:** Humanities courses (those with a HUM designation) focus on a blend of topics in art, literature, philosophy, history, religion, music, theatre, film, and architecture. Segments include 1) The Classical, 2) The Medieval and Renaissance, and 3) The Modern. These courses prepare students for success on the world stage by exploring the diversity and the influences of these historical moments on the values of the western world and especially of modern Americans.

**Program Level Outcomes:**

- Critique culturally diverse works in art, literature, music, and architecture.
- Identify the major characteristics of the era and connect them to western culture today.
- Competently employ creativity, discipline, and technique in the production of assigned class projects.
- Analyze these eras critically by presenting opinions and responses to reading/viewing through use of textual evidence and other rhetorical devices.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**John Deere Technology**

AAAS

http://wwcc.edu/johndeere

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**Program available at/via: [Walla Walla]**

**Department Overview:** The John Deere Tech program is an educational experience designed to upgrade the technical competence and professional skills of incoming John Deere employees and enhance the skills of existing John Deere personnel. The program consists of classroom lecture and laboratory experiences on actual John Deere products and includes a unique paid cooperative work experience for
students at a John Deere dealership. The curriculum was designed in partnership with the John Deere Corporation and is maintained with input from an advisory committee of local and regional dealership employees and John Deere personnel.

Program Level Outcomes:
- Implement competency-based education, skill standards, and program certification.
- Create and maintain a marketing plan related to student recruitment.
- Update facilities with consideration for function and appearance.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in John Deere Technology upon completion of the seven quarter program of study.

Industry Description: The John Deere Company is a worldwide leader in machinery manufacturing. It envisions the need for highly trained technicians to repair and maintain the world’s most sophisticated farm machinery. The John Deere Company has been innovative in the training and recruitment of prospective employees due to the need for trained Management, Marketing, Sales, and Service Technician personnel to work in dealerships in the United States and throughout the world. In an effort to meet this demand, partnerships have been developed with educational institutions.

Entrance Requirements: Students can enter this program during the fall quarter each year or winter quarters of every even numbered year. Since considerable time is spent at the dealership, the program requires the student to have a sponsoring dealer. The main responsibility of the dealership is to provide training-related employment for the student during work experience quarters. If necessary, students can request assistance in locating a sponsoring dealer. In order to start this program, the placement process including a mechanical reasoning test must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and recruitment. See http://www.careerbridge.wa.gov.

Degrees

Associate in Applied Arts and Sciences Degree in John Deere Technology

This technical degree is a two-year mechanics program designed to upgrade the technical competence and professional level of the incoming dealer technician. The degree involves classroom lecture and laboratory experiences with John Deere products on the campus and a unique paid work experience for students at a John Deere sponsoring dealership.

Degree available at/via: [Walla Walla]

Degree Outcomes:
- Use Service Advisor electronic parts and technical manuals.
- Perform basic engine diagnostic procedure and tune up.
- Diagnose electrical problems.
- Diagnose and safely repair air conditioning systems.
- Repair and adjust John Deere fuel systems.
- Rebuild John Deere gas and diesel engines.
- Make proper ballasting adjustments to a tractor depending on type of implement and field.
- Repair various hydraulic components by using a technical manual.
- Disassemble, assemble, and test all types of John Deere agricultural power train components.
- Build, repair, and diagnose circuits in each application.
- Troubleshoot row crop planters, grain drill planters, and monitoring systems.
- Adjust various types of harvesting equipment for maximum productivity.
- Repair various hydraulic controlled transmissions, hydraulic valves, and controllers.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

<table>
<thead>
<tr>
<th>Odd Year Start – Year One</th>
<th>Quarter One Credits</th>
</tr>
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<tbody>
<tr>
<td>JD 102, Forklift Safety Training and Certification</td>
<td>1</td>
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<tr>
<td>OCSUP 105, Intro. to Quant. Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
<tr>
<td>WELD 141, Welding Basics *</td>
<td>4</td>
</tr>
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<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>AGPR 139, Agriculture Safety</td>
<td>3</td>
</tr>
<tr>
<td>JD 101, John Deere Fundamentals and Orientation</td>
<td>3</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
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</tr>
<tr>
<td>JD 105, John Deere Hydraulics</td>
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<tr>
<td>JD 115, John Deere Electrical</td>
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<td>JD 190, Cooperative Work Experience I</td>
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<tr>
<td>JD 192, Human Relations Seminar (R)</td>
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<td>12</td>
</tr>
<tr>
<td>Quarter Four Credits</td>
<td></td>
</tr>
<tr>
<td>JD 120, John Deere Heating and Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>JD 125, John Deere Fuel and Emissions Systems</td>
<td>4</td>
</tr>
<tr>
<td>JD 131, Engine Testing, Repair, and Performance</td>
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<td>Total Credits</td>
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</tr>
<tr>
<td>Year One Total</td>
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<table>
<thead>
<tr>
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<tr>
<td>JD 191, Cooperative Work Experience II</td>
<td>10</td>
</tr>
<tr>
<td>JD 193, Job Advancing Skills (J)</td>
<td>2</td>
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<td>Total Credits</td>
<td>12</td>
</tr>
<tr>
<td>Quarter Two Credits</td>
<td></td>
</tr>
<tr>
<td>JD210, John Deere Power Train</td>
<td>10</td>
</tr>
<tr>
<td>JD221, Ag Management Solutions</td>
<td>4</td>
</tr>
<tr>
<td>JD225, John Deere Planting Equipment</td>
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<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
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<tr>
<td>Total Credits</td>
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<tr>
<td>Quarter Three Credits</td>
<td></td>
</tr>
<tr>
<td>JD 290, Cooperative Work Experience III</td>
<td>10</td>
</tr>
</tbody>
</table>

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

144
### MATHEMATICS

**Quarter One Credits**
- JD 190, Cooperative Work Experience I .................. 10
- JD 192, Cooperative Seminar I (R) .................. 2
- Total Credits .................. 12

**Quarter Two Credits**
- JD 120, John Deere Heating and Air Conditioning .................. 4
- JD 125, John Deere Fuel and Emissions Systems .................. 4
- JD 131, Engine Testing, Repair, and Performance .................. 10
- OCSUP 105, Intro to Quant Prob Solving Skills (M) .................. 5
- Total Credits .................. 23

**Quarter Four Credits**
- JD 191, Cooperative Work Experience II ** .......................... 10
- JD 193, Cooperative Seminar II (J) .............................. 2
- Total Credits .................. 12

**Year One Total .................. 70.4**

**Even Year Start – Year Two**

**Quarter One**
- JD 210, John Deere Power Train .......................... 10
- JD 221, Ag Management Solutions .................. 4
- JD 225, John Deere Planting Equipment .................. 1
- OCSUP 102, Oral Communication in the Workplace (O) .................. 3
- WELD 141, Welding Basics * .................. 4
- Total Credits .................. 22

**Quarter Two**
- JD 290, Cooperative Work Experience III .................. 10
- JD 292, Cooperative Seminar III (L) .................. 2
- Total Credits .................. 12

**Quarter Three**
- JD 215, John Deere Electronics .................. 5
- JD 230, John Deere Harvesting Equipment .................. 4
- JD 235, John Deere Hydraulics II .................. 5
- JD 240, John Deere Advanced Power Training II .................. 4
- WRITE 100, Writing in the Workplace (W) .................. 3
- Total Credits .................. 21
- Year Two Total .................. 55
- Grand Total .................. 125.4

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**Program available at/via:** [Walla Walla] [Clarkston] [50% Online]

**Department Overview:** Mathematics is important in virtually every field of study. The purpose of the mathematics department is to offer courses to a wide variety of students. The courses offered in the math department are meant to satisfy the needs of both majors and non-majors in mathematics. They provide basic instruction for students interested in a broad educational experience.

The general student will find preparatory courses in introductory algebra, intermediate algebra, pre-calculus and traditional mathematics courses such as finite mathematics, calculus, and statistics. The department strives to offer learning experiences that reflect the latest current teaching methodologies and implements current technological innovations and tools.

**Program Level Outcomes:**
- The ability to analyze problems to determine what mathematical principles apply.
- Logical reasoning and mathematical principles to solve problems.
- An ability to interpret information and reasoning expressed mathematically (symbols, tables, graphs, formulas, etc.).
- The ability to communicate mathematical information effectively.
- Mathematical skills in critical thinking and reasoning.

**Degrees:** Students may earn an Associate in Arts degree (90 credits) or an Associate in Math Education for students planning to teach high school math which are both designed to prepare students for upper division study in math. Please consult with an advisor at WWCC and your intended transfer institution to determine an appropriate education plan. (See AA-DTA in Degrees section of catalog.)

**Entrance Requirements:** Students must take a placement test to determine enrollment level.

**Preparation for Success:** High school students interested in a major in Mathematics should take four years of high school mathematics including a year of mathematics their senior year. Those planning to take

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*Any welding course 141 or above will satisfy the welding requirement.

**JD 191, Cooperative Work Experience may be taken over several quarters. A minimum of 360 hours (12 credits) actual on-the-job mechanical experience is required. Students must have at least 800 hours of actual shop experience to meet the requirements for graduation. At least 600 hours must be on-campus shop experience. Students may also elect to substitute 6 credits of TRK 101 for DT 191. TRK 101 will be taken for 11-12 credits but only 6 credits will be applied to DT 191.

**DT 186 Advanced Mechanics and DT 268 Equipment Repair III may be substituted for Cooperative Work Experience with instructor permission.**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (J) - JD 193
- (L) - JD 292
- (R) - JD 192
- (W) - BUS 137, ENGL 101, WRITE 100
- (M) - OCSUP 105, OCSUP 106
- (O) - CMST 102, CMST & 220, OCSUP 102

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://www wwcc edu)
a math course in college should also take a full year of mathematics as a senior. Taking four years of math is highly recommended for all high school students.

**Other Information:** The Tutoring and Learning Center is a great place for students to work one-on-one with a tutor to review their math in any course at the College. Students can also work on math, whether or not they need help. It is a comfortable and supportive atmosphere for students to come together and study, in groups or individually.

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**Medical Assisting**

CERT

[http://www.wwcc.edu/medicalassisting](http://www.wwcc.edu/medicalassisting)

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Jenny Charlo-Clk 509.758.1706 jennifer.charlo@wwcc.edu

**Program available at/via:** [Walla Walla] [Clarkston] [50% Online]

**Department Overview:** The Medical Assisting program prepares students for a career as a Medical Assistant. The program combines instruction in core courses directed toward all healthcare providers with courses specific to Medical Assisting. Completion of the Medical Assisting program will provide the student with the necessary knowledge and skills to succeed in an entry level position in Medical Assisting. Medical Assisting courses will combine cognitive learning and practice of psychomotor skills in classroom and laboratory settings. Clinical training through internships in local outpatient clinics and physician offices will allow students to observe and practice skills gained in the classroom and laboratory in actual healthcare settings.

Medical Assistants are skilled professionals who have specific training to work in a physician's office or a clinic. Medical Assistants perform administrative functions and basic clerical skills, including writing business letters, compilation and filing of patient records, medical insurance coding and processing third party reimbursement, transcription, reception, and preparing requisitions. Additionally, Medical Assistants are trained in many clinical skills, including obtaining vital signs, sterile technique, assisting physicians with diagnostic testing, minor surgical procedures and physical examinations, administering medications orally and via injection, laboratory procedures, phlebotomy, and processing/sterilization of medical equipment by autoclaving or other methods of disinfection.

The five-year weighted average for national certification exam pass rate of the Medical Assisting Certificate program at Walla Walla Community College is 94%, based on the most recent Annual Report Form submitted to the Medical Assisting Education Review Board.

The medical assisting program at Walla Walla Community College has a job placement rate of 73.5% over the past 5 years.

The Walla Walla Community College Medical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Medical Assisting Education Review Board.

**Program Level Outcomes:**

- The Medical Assisting graduate will be able to apply the fundamental knowledge base acquired in medical assisting courses to safely, efficiently, and accurately perform clinical and administrative competencies.
- The Medical Assisting graduate will use knowledge gained in interrelated social science courses to assist him/her in being able to communicate with patients and other members of their healthcare team with sensitivity to cultural, legal and ethical implications.
- The Medical Assisting graduate will integrate knowledge gained in medical assisting courses to prepare for and assist with medical emergencies.
- The Medical Assisting graduate will use technology skills, including computer hardware and software, in the performance of clinical and administrative competencies.
- The Medical Assisting graduate will employ appropriate medical terminology to communicate professionally and accurately in the clinic setting, both verbally and in their documentation.
- The Medical Assisting graduate will demonstrate professionalism in all of their courses and as they relate to the practice of medical assisting in their personal, institutional, local, state, and national levels.
- The Medical Assisting graduate will be prepared to enter the profession competently, as entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

**Degrees:** Students may earn the Medical Assisting certificate after four quarters of full time study.

**Entrance Requirements:** Depending upon placement testing, students may need to complete additional prerequisite coursework in computer and keyboarding skills. Students must have a high school diploma or GED® prior to entering the program.

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**Degrees and Certificates**

**Medical Assisting Certificate**

The Medical Assisting program may be completed in four quarters of full time study. These courses will combine cognitive learning and practice of psychomotor skills in classroom and laboratory settings. Clinical training through internships in local outpatient clinics and physician offices will allow students to observe and practice skills gained in the classroom and laboratory in actual healthcare settings.

**Other Information:** Students must complete CS 100, Introduction to Microcomputers and OT 025 Keyboarding prior to entering the program.

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MEDA 105, Health Occupations Mathematics (M) *</td>
<td>5</td>
</tr>
<tr>
<td>MEDA 110, Human Body Structure and Function in Health and Disease I</td>
<td>5</td>
</tr>
<tr>
<td>OT 280, Medical Terminology</td>
<td>5</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Program Level Outcomes:

- The program’s most recent annual licensure exam pass rate will be at least 80% for all first-time test-takers during the same twelve month period.
- Seventy percent (70%) or more of students will earn an Associate level degree in nursing within three years of enrollment in the first nursing course (150% of the stated nursing program length).
- Graduates will rate overall program satisfaction at average or above (>2.5) on a 1-4 point scale.
- Employers of the nursing program graduates will rate preparation of graduates at average or above (>2.5) on a 1-4 point scale.
- Ninety percent (90%) of the Nursing graduates will be employed in nursing and/or enrolled in a bachelor’s degree program six months after graduation.

ENTRANCE REQUIREMENTS: All students are welcome to enroll in music courses. Auditions may be required for some performance ensembles.

Preparation for Success: The WWCC Music department offers a curriculum designed to meet the needs of students interested in majoring in music at a four-year institution, including first and second year music theory, music appreciation and history, individual instrumental and vocal instruction, and solo and ensemble instrumental and vocal performance.

Music

<table>
<thead>
<tr>
<th>Quarter Two</th>
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<tbody>
<tr>
<td>CPR 051, Basic Life Support (BLS) for Healthcare Providers</td>
<td>4</td>
</tr>
<tr>
<td>HO 110, HIV/AIDS Education</td>
<td>7</td>
</tr>
<tr>
<td>HO 172, Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>HO 174, Transcultural Competency for Health Professionals</td>
<td>2</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>MEDA 114, Therapeutic Relationships (R)</td>
<td>2</td>
</tr>
<tr>
<td>MEDA 120, Human Body Structure and Function in Health and Disease II</td>
<td>5</td>
</tr>
<tr>
<td>MEDA 140, Medical Law and Ethics</td>
<td>2</td>
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<td><strong>Total Credits</strong></td>
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<table>
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<tr>
<th>Quarter Three</th>
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<tbody>
<tr>
<td>MEDA 125, Clinical Procedures</td>
<td>10</td>
</tr>
<tr>
<td>MEDA 144, Medical Office Administrative Procedures</td>
<td>5</td>
</tr>
<tr>
<td>MEDA 149, Medical Insurance Procedures for Medical Assisting</td>
<td>5</td>
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<tr>
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<table>
<thead>
<tr>
<th>Quarter Four</th>
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<tr>
<td>MEDA 191, Medical Assisting Practicum</td>
<td>7</td>
</tr>
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<td>MEDA 192, Medical Assisting Seminar (L)</td>
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<td><strong>Grand Total</strong></td>
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</table>

EPC: 381

Students must demonstrate computer and keyboarding skills through placement testing or complete CS 100, Introduction to Microcomputers and BUS 025 Keyboarding prior to entering the program.

*It is recommended students take MATH 071 before taking MEDA 105, Health Occupations or complete CS 100, Introduction to Microcomputers and BUS 025 Keyboarding prior to entering the program.*

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (W) - ENGL 101, WRITE 100
- (L) - MEDA 192
- (M) - MEDA 105

Music

Program available at/via: [Walla Walla] [Clarkston]

Department Overview: The Music department provides instruction in music appreciation and history, music theory, individual instrumental and vocal instruction, and solo and ensemble instrumental and vocal performance. These courses are designed for students who wish to develop a greater appreciation for music as well as those who plan to pursue a music degree at a four-year institution.

Program Level Outcomes:

- An aesthetic and intellectual comprehension of culturally and linguistically diverse works in literature, philosophy, visual and performing arts, including film and music.
- An understanding and working knowledge of terminology commonly used in the humanities.
- An appropriate level of creativity, discipline, and technique in the production of assigned work in the humanities.

Degrees: Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

Nursing Education

CERT, Associate in Nursing - DTA

http://wwcc.edu/nursing

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Grace Hiner 509.527.4421  grace.hiner@wwcc.edu
Lana Toelkel 509.527.4242  lana.toelkel@wwcc.edu
Ilona Pease Verwer 509.527.4244  ilona.verwer@wwcc.edu
Jodi Bice-Cilk 509.758.1728  jodi.bice@wwcc.edu
Genevieve Bross-Clik 509.758.1787  genevieve.bross@wwcc.edu
Melany Coronado-Clik 509.758.1704  melany.coronado@wwcc.edu
Stephanie Macon Moore-Clik 509.758.1786  stephanie.maconmoore@wwcc.edu
Kaye McGehee-Clik 509.758.1717  kaye.mcgehee@wwcc.edu
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Susan Rammelsberg-Clik 509.758.1705  susan.rammelsberg@wwcc.edu

Program available at/via: [Walla Walla] [Clarkston]

Department Overview: The Associate Degree Nursing Program at WWCC is approved by the Washington State Nursing Care Quality Assurance Commission: 310 Israel Rd, Tumwater, WA 98501, phone (360) 236-4700, http://www.doh.wa.gov. The Associate Degree Nursing Program is also accredited by the Accreditation Commission for Education in Nursing-ACEN (formerly called the National League for Nursing Accrediting Commission-NLNAC): 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326. Phone (404) 975-5000. http://www.acenursing.org/.

Program Level Outcomes:

- Ninety percent (90%) of the Nursing graduates will be employed in nursing and/or enrolled in a bachelor’s degree program six months after graduation.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
**Student Learning Outcomes:**

- Integrate research/nursing science, current standards of practice, clinical expertise, and patient preferences to formulate sound nursing judgments.
- Plan and provide safe, holistic nursing care that is individualized to address patients’ diverse preferences, values and needs, and respects their capacity as a full partner with shared decision making.
- Effectively use interpersonal communication and management/leadership principles when collaborating with health care team members to promote optimal health outcomes and minimize risk of harm.
- Use technology to manage and communicate information, enhance patient safety, and support decision-making within professional, ethical, and legal standards.
- Continuously improve the quality, value, and safety of patient care and healthcare systems by using data and improvement methods to implement and evaluate changes.
- Demonstrate professional behaviors that are consistent with moral/ethical and legal principles, that adhere to regulatory guidelines and standard-based care, and which promote the profession of nursing.

**Degrees:**

Associate in Nursing DTA/MRP (Direct Transfer Agreement/Major Related Program) Degree.

Graduates who complete the Associate in Nursing DTA/MRP degree are eligible to take the National Council Licensure Examination-Registered Nurse (NCLEX-RN) exam to become licensed as a Registered Nurse. Passing the NCLEX-RN exam and completion of this transfer degree provide the general education and nursing courses for direct transfer with only one additional year of study to complete the Bachelor of Science in Nursing (BSN) degree at four-year institutions in Washington state. While the agreements with baccalaureate institutions assure the transfer of credit, the admission to a particular university program is not assured. Each institution has separate admission criteria which can be based on grades and other considerations.

Practical Nursing Certificate (Please Note: Practical Nursing Certificate option is not accredited by ACEN.)

The Practical Nurse is able to recognize and meet the basic needs of the client while providing nursing care under the direction and supervision of a registered nurse or licensed physician in routine nursing situations. Students who complete the first year ADN courses and additional coursework in the summer quarter are eligible to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN). If successful, they are licensed as practical nurses (LPN).

**Industry Description:**

According to the Bureau of Labor Statistics, employment of Registered Nurses (RN) is expected to grow 16% from 2014-2024, faster than the average for other occupations. The median pay for an RN in 2016 was $68,450 or $32.91/hour (http://www.bls.gov/ooh/healthcare/registered-nurses.htm). Retirement of a large number of “baby boomers”, chronic disease management, and longer life expectancies are all factors in the ongoing national shortage of nurses. In the future, more focus will be placed on preventive care, patient education, and community management of chronic diseases and nurses are essential in this objective. All associate level RNs are strongly encouraged to pursue further education in nursing to at least the Bachelor of Nursing (BSN) level to provide the most effective evidence-based nursing care in this ever changing healthcare environment.

**Other Information:**

The Nursing Program strongly encourages applicants to complete as many of the nursing degree requirements as possible prior to the application deadline. These courses provide points towards an applicant’s Nursing Admission Rating score for the competitive admission process. All applicants are required to complete the Test of Essential Skills (TEAS V) test prior to application and must meet the nursing assistant state testing or certification requirement prior to admission; please plan accordingly. For a full description of the requirements for admission to nursing core classes please see the Nursing Admission Guide.

**Degrees**

**Associate in Nursing DTA/MRP Degree**

Graduates who complete the Associate in Nursing DTA/MRP degree are eligible to take the National Council Licensure Examination-Registered Nurse (NCLEX-RN) exam to become licensed as a Registered Nurse. Passing the NCLEX-RN exam and completion of this transfer degree provide the general education and nursing courses for direct transfer with only one additional year of study to complete the Bachelor of Science in Nursing (BSN) degree at four-year institutions in Washington state. While the agreements with baccalaureate institutions assure the transfer of credit, the admission to a particular university program is not assured. Each institution has separate admission criteria which can be based on grades and other considerations.

**Degree available at/via:** [Walla Walla] [Clarkston]

**Degree Outcomes:**

- Integrate research/nursing science, current standards of practice, clinical expertise, and patient preferences to formulate sound nursing judgments.
- Plan and provide safe, holistic nursing care that is individualized to address patients’ diverse preferences, values and needs, and respects their capacity as a full partner with shared decision making.
- Effectively use interpersonal communication and management/leadership principles when collaborating with health care team members to promote optimal health outcomes and minimize risk of harm.
- Use technology to manage and communicate information, enhance patient safety, and support decision-making within professional, ethical, and legal standards.
- Continuously improve the quality, value, and safety of patient care and healthcare systems by using data and improvement methods to implement and evaluate changes.
- Demonstrate professional behaviors that are consistent with moral/ethical and legal principles, that adhere to regulatory guidelines and standard-based care, and which promote the profession of nursing.

**Other Information:** Applicants are strongly encouraged to complete as many of the Nursing Degree Requirement classes as possible prior to the application deadline. These courses provide points towards an applicant’s admission rating score for the competitive admission process. All applicants are required to complete the Test of Essential
NURSING EDUCATION

Skills (TEAS V) test prior to application and must meet the nursing assistant state testing or certification requirement prior to admission; please plan accordingly. For a full description of application and admission requirements, please see the Nursing Admission Guide at http://www.wwcc.edu/nursing

These MUST be completed prior to entering the first year of nursing core courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 160, General Biology w/lab</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 251, Human A &amp; P I</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 252, Human A &amp; P II</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 260, Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 110, Chemical Concepts w/lab</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 146, Intro to Statistics</td>
<td>5</td>
</tr>
<tr>
<td>(Statistics course number MUST have a MATH prefix)</td>
<td></td>
</tr>
<tr>
<td>NURS 101, Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 100, General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>PSYC 200, Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Completion of the ATI TEAS test
Show evidence of Nursing Assistant Certification or proof of passing the State exam for Nursing Assistants.

**These Must Be Completed Prior To Entering**

**The Second Year Of Nursing Core Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications (from Distribution List)</td>
<td>5</td>
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<tr>
<td>Humanities (from Distribution List)</td>
<td>10</td>
</tr>
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</tr>
<tr>
<td><strong>Grand Total</strong></td>
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</tr>
</tbody>
</table>

Humanities must be selected from at least two disciplines from the WWCC Master List of Transfer Courses, no more than 10 credits allowed from any one discipline, no more than 5 credits in foreign language at the 100 level, no more than 5 credits in performance/skills courses are allowed.

**Nursing Core Courses**

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 100, Fundamentals of Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NURS 110, Fundamentals Practicum</td>
<td>4</td>
</tr>
<tr>
<td>NURS/PHIL 140, Ethics and Policy in Healthcare I</td>
<td>4</td>
</tr>
<tr>
<td>NURS/PSYC 150, Psychosocial Issues in Healthcare I-II</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 101, Beginning Nursing Concepts I</td>
<td>5</td>
</tr>
<tr>
<td>NURS 111, Practicum I</td>
<td>4</td>
</tr>
<tr>
<td>NURS/PSYC 151, Psychosocial Issues in Healthcare III</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>10</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 102, Beginning Nursing Concepts II</td>
<td>6</td>
</tr>
<tr>
<td>NURS 112, Practicum II</td>
<td>4</td>
</tr>
<tr>
<td>NURS/PHIL 142, Ethics and Policy in Healthcare II</td>
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<td><strong>Year One Total</strong></td>
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**YEAR TWO**

<table>
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<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>NURS 200, Advanced Nursing Concepts I</td>
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<tr>
<td>NURS 210, Practicum III</td>
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</tr>
<tr>
<td>NURS/PHIL 240, Ethics and Policy in Healthcare III</td>
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**Total Credits**

**Century One**

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>NURS 201, Advanced Nursing Concepts II</td>
<td>5</td>
</tr>
<tr>
<td>NURS 211, Practicum IV</td>
<td>4</td>
</tr>
<tr>
<td>NURS/PHIL 241, Ethics and Policy in Healthcare IV</td>
<td>1</td>
</tr>
<tr>
<td>NURS/PSYC 251, Psychosocial Issues in Healthcare V</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

**Quarter Two**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 202, Advanced Nursing Concepts III</td>
<td>7</td>
</tr>
<tr>
<td>NURS 212, Practicum V</td>
<td>4</td>
</tr>
<tr>
<td>NURS/PHIL 242, Ethics and Policy in Healthcare</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Year Two Total</strong></td>
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</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>70</strong></td>
</tr>
</tbody>
</table>

**Practical Nursing Certificate**

Please Note: Practical Nursing Certificate is NOT accredited by ACEN

The Practical Nurse is able to recognize and meet the basic needs of the client while providing nursing care under the direction and supervision of a registered nurse or licensed physician in routine nursing situations. Students who complete the first year ADN courses and additional coursework in the summer quarter are eligible to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN). If successful, they are licensed as practical nurses (LPN).

**Certificate available at/via** [Walla Walla] [Clarkston]

**Certificate Outcomes:**

- Identify ways in which research/nursing science, current standards of practice, clinical experience, and patient preferences are used to make nursing judgments.
- Plan and provide safe, holistic nursing care that is individualized to address patients’ diverse preferences, values, and needs.
- Effectively use interpersonal communication and management principles when working with health care team members to promote optimal health outcomes and minimize risk of harm.
- Use technology to obtain and communicate information, enhance patient safety, and support decision-making within professional, ethical, and legal standards.
- Identify ways to improve the quality, value, and safety of patient care by using data.
- Demonstrate professional behaviors that are consistent with moral/ethical and legal principles, that adhere to regulatory guidelines and standard-based care, and which promote the profession of nursing.

**Requirements for Admission to Nursing Core Courses**

Students may prepare for admission to Nursing Core Courses by meeting the minimum requirements as outlined in the most recent Nursing Admission Guide posted online on the Nursing homepage http://www.wwcc.edu/nursing. Students are responsible for submitting high school and/or college transcripts to WWCC’s Office of Admissions along with a Transcript Evaluation Request form. GPA requirements: 2.0 for all college level classes.

**Other Information:** Applicants are strongly encouraged to complete as many of the Nursing Degree Requirement classes as possible prior to entering the first year of admission requirements, please see the Nursing Admission Guide at http://www.wwcc.edu/nursing

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
to the application deadline. These courses provide points towards an applicant's admission rating score for the competitive admission process. All applicants are required to complete the Test of Essential Skills (TEAS V) test prior to application and must meet the nursing assistant state testing or certification requirements prior to admission; please plan accordingly. For a full description of application and admission requirements, please see the Nursing Admission Guide at http://www.wwcc.edu/nursing.

These MUST be completed prior to entering the first year of nursing core courses. Credits
BIOL& 160, General Biology w/lab ........................................ 5
BIOL& 251, Human A & P I ............................................. 5
BIOL& 252, Human A & P II ............................................ 5
BIOL& 260, Microbiology ................................................. 5
CHEM& 110, Chemical Concepts w/lab ................................ 5
ENGL& 101, English Composition I ...................................... 5
MATH& 146, Intro to Statistics ........................................... 5
(Statistics course number MUST have a MATH prefix)
NUTR& 101, Nutrition ..................................................... 5
PSYC& 100, General Psychology ........................................ 5
PSYC& 200, Lifespan Psychology ....................................... 5

Total Credits ............... 50

COMPLETION OF THE ATI TEAS TEST
Show evidence of Nursing Assistant Certification or proof of passing the State exam for Nursing Assistants.

Nursing Core Courses

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Quarter One</th>
<th>Credits</th>
<th>Quarter Two</th>
<th>Credits</th>
<th>Quarter Three</th>
<th>Credits</th>
<th>Quarter Four *</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 100, Fundamentals of Nursing</td>
<td>4</td>
<td>NURS 101, Beginning Nursing Concepts I</td>
<td>5</td>
<td>NURS 102, Beginning Nursing Concepts II</td>
<td>6</td>
<td>NURS 103, Practical Nursing</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>NURS 110, Fundamentals Practicum</td>
<td>4</td>
<td>NURS 111, Practicum I</td>
<td>4</td>
<td>NURS 112, Practicum II</td>
<td>4</td>
<td>NURS 113, Practical Nursing Practicum</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>NURS/PHIL 140, Ethics and Policy in Healthcare I</td>
<td>1</td>
<td>NURS/PSYC 150, Psychosocial Issues in Healthcare II</td>
<td>2</td>
<td>NURS/PHIL 140, Ethics and Policy in Healthcare II</td>
<td>1</td>
<td>Total Credits</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>NURS/PSYC 150, Psychosocial Issues in Healthcare I-II</td>
<td>2</td>
<td>Total Credits</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total Credits</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grand Total ............... 44

*Practical Nursing Certificate requires completion of summer quarter. The Associate in Nursing DTA/MPR degree does not require summer quarter. Please Note: the Practical Nursing Certificate option is not accredited by the Accreditation Commission for Education in Nursing (ACEN).

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
in the related instruction requirements. Students may elect to take identified optional courses or advanced courses of instruction with advisor approval.

**Industry Description:** The demand for professional-technical graduates who meet both institutional and national standard certification requirements is increasing steadily as employers strive to compete in the ever-changing marketplace. Research confirms that individuals completing training programs and the related national certification training receive higher rates of compensation, experience reduced chances of layoff, and advance in their chosen career field at a higher rate. Occupational Support courses include: applied math, job seeking skills, job psychology, communications, and leadership.

**Entrance Requirements:** In order to start this program, the placement process must be completed through the Testing Center. Visit www wwcc edu/ placement for more information.

---

**Oceanography**

http://www wwcc edu/oceanography

**Program available at/via:** [Walla Walla]

**Department Overview:** Oceanography is the study of the world’s oceans and coastal waters. More specifically it is the study of motion and circulation of the ocean waters; the physical and chemical properties of the oceans; and how these properties affect coastal areas, climate, and weather.

**Program Level Outcomes:**

- An understanding of discipline-specific terminology and methods.
- An ability to correctly use discipline-specific tools and/or techniques.
- Critical thinking skills necessary in science including appropriate study techniques, problem solving skills and the use of data to assess the validity of claims.
- The ability to research, interpret and communicate concepts obtained from scientific literature.
- An understanding of the relationships between course concepts and society, including the impact of course specific technology.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**Preparation for Success:** Students interested in a major in Oceanography should take courses in natural sciences, with an emphasis on biology, chemistry and geology. The ability to utilize computers is also essential.

---

**Outdoor Power Equipment**

CERT, AAAS

http://wwcc.edu/turfequipment

George Klein  509.527.3673  george.klein@wwcc.edu

**Program available at/via:** [Walla Walla] [100% Online]

**Department Overview:** The Outdoor Power Equipment Technician Program provides intensive career preparation through interactive web-based classroom instruction with live shop, hands-on application either on-campus or off-campus, with the off-campus students learning in on-the-job environments. The program is certified by the national Equipment and Engine Training Council (EETC) and is led by an EETC certified instructor. Students prepare technical knowledge and mechanical skills necessary to service, troubleshoot and repair today’s sophisticated recreational, residential and commercial outdoor power equipment using the competencies and national testing provided by the EETC. Training materials and equipment are provided through cooperative agreements with regional dealerships, national manufacturers, and the local community. Curriculum is reviewed by the Outdoor Power and Turf Equipment Technician advisory board which is composed of local and regional industry members.

**Program Level Outcomes:**

- Implement competency-based education and skill standards.
- Provide students with marketable, technical and interpersonal skills in the trade resulting in career placement.
- Prepare students in acquiring appropriate licenses, certifications and degrees upon exiting Walla Walla Community College.
- Provide relevant training through hands-on and field experience to prepare the students for living wage jobs.
- Develop analytical thinking and problem-solving abilities through instructional labs, projects and testing.
- Provide training in environmental and work-place safety that meets appropriate industry standards.
- Develop partnerships and/or relationships with manufacturers and distributors to provide a place to upgrade professional technicians along with updated skill standards.

**Degrees:** After completion of four college quarters, students may receive a Certificate as an Outdoor Power Equipment Technician.

Two additional quarters can lead to an AAAS degree as an Outdoor Power and Turf Equipment technician.

After completing any one of the seven core classes and passing its corresponding test a student will receive an EETC certification certificate and a set of arm patches from the EETC.

**Industry Description:** The growth and expansion of the home and recreation industries nationwide have created a growing need for qualified technicians to service, manage and sell equipment specific to this industry. Opportunities abound for technicians in various settings including golf courses, landscaping businesses, parks and recreation departments, rental businesses, dealerships, consumer equipment, and motorcycle dealers.

**Entrance Requirements:** Depending upon placement testing, students may need to complete additional computer classes as a prerequisite to entering the program. It is recommended that the...
student contact the lead instructor regarding appropriate program placement to determine specific quarter start in the program. While students may enter the program fall, winter or spring quarter, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement process must be completed through the Testing Center. Visit ww.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

---

**Degrees and Certificates**

**Outdoor Power Equipment Certificate**

Students may earn a Certificate as an Outdoor Power and Turf Equipment Technician upon completion of four quarters of course instruction. This certificate is taught via web-based learning and either on or off campus lab. This certificate allows students to acquire the master competencies to complete five EETC Certification Tests.

**Certificate available at/via:** [Walla Walla] [100% Online]

**Certificate Outcomes:**

- Paint and protect equipment using appropriate equipment, materials, and techniques.
- Explain the theory and diagnosis of electrical systems, testing, and rebuilding.
- Disassemble, diagnose, and repair transmissions, differentials, and drive axles.
- Demonstrate proper safety, handling, usage, and disposal of common chemicals used in the shop.
- Demonstrate the ability to find and use reference material in multiple forms such as CD, Internet, and operator’s and technical manuals.
- Recognize and accurately identify the effects of abrasive damage, operator error, and other failures that lead to machine failure.
- Explain to customers the cause of failure, alternatives, and ways to prevent this type of damage from occurring in the future.

---

**OUTDOOR POWER EQUIPMENT**

---

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 154, Basic 4-Stroke Engine Principles</td>
<td>10</td>
</tr>
<tr>
<td>TST 151, Shop Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>TST 152, Forklift Safety Training and Certification</td>
<td>1</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 156, Electrical Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative</td>
<td></td>
</tr>
<tr>
<td>Problem Solving for the Trades (M)</td>
<td>5</td>
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<tr>
<td>TST 159, Generator Fundamentals</td>
<td>5</td>
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<tr>
<td>WELD 141, Welding Basics</td>
<td>4</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
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<tbody>
<tr>
<td>TST 158, Power Trains</td>
<td>10</td>
</tr>
<tr>
<td>TST 157, Hydraulics</td>
<td>10</td>
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<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
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<td><strong>23</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
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**YEAR TWO**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TST 155, Basic 2-Stroke Engine Principles</td>
<td>10</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>TST 125, Paints and Painting *</td>
<td>3</td>
</tr>
<tr>
<td>TST 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tr>
<tr>
<td><strong>Year Two Total</strong></td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>82</strong></td>
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</table>

**EPC: 126C**

Depending on placement testing, a student may be required to complete CS 110, Introduction to Computers and Applications for 5 credits.

*TST 125, Paints and Painting is optional for the certificate. Students may substitute ABT 163, Auto Body Refinishing for 3 credits.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - AGPR 100, OCSUP 103, PSYC 140
- (L) - TST 299
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (O) - CMST 102, CMST& 220, OCSUP 102

---

**Associate in Applied Arts and Sciences Degree in Outdoor Power and Turf Equipment Technician**

This technical degree prepares the student for immediate employment in the turf equipment service industry. The degree is six quarters (two years) in length and includes the five EETC certifications obtained in the certificate, and two additional EETC certifications. The final two quarters of the degree are offered on campus only.

**Degree available at/via:** [Walla Walla]

**Degree Outcomes:**

- Paint and protect equipment using appropriate equipment, materials, and techniques.
- Explain the theory and diagnosis of electrical systems, testing, and rebuilding.
- Disassemble, diagnose, and repair transmissions, differentials, and drive axles.
- Operate and observe engine operation and perform necessary repairs and adjustments.
- Adjust, sharpen, grind, and rebuild reel and rotary mowing units.
- Demonstrate proper safety, handling, usage, and disposal of common chemicals used in the shop.
- Demonstrate the ability to find and use reference material in multiple forms such as CD, Internet, and operator’s and technical manuals.
- Display a working knowledge of how internal combustion gas and diesel engines function, their components, and service requirements.
- Recognize and accurately identify the effects of abrasive damage, operator error, and other failures that lead to machine failure.
- Explain to customers the cause of failure, alternatives, and ways to prevent this type of damage from occurring in the future.

**Transferability:** The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)

152
**Department Overview:**

Program available at/via: [Walla Walla] [Clarkston] [50%

**James Bower- Clk 509.758.1771 james.bower@wwcc.edu**

**Jennifer Bayne Lemma 509.527.4640 jennifer.baynelemma@wwcc.edu**

(O) - CMST 102, CMST& 220, OCSUP 102  (R) - BUS 102, OCSUP 101, PSYC 111, PSYC& 100

(J) - AGPR 100, OCSUP 103, PSYC 140  (W) - BUS 137, ENGL& 101, WRITE 100

L - OCSUP 299, TST 299  (M) - BUS 112, OCSUP 105, OCSUP 106

http://wwcc.edu/philosophy

**Program available at/via:** [Walla Walla] [Clarkston] [50%

**Department Overview:** Philosophy courses ask fundamental questions about how we can improve our critical thinking methods and how we can effectively evaluate the paradigms upon which we build our belief systems. Philosophy courses examine ancient thinkers and their ideas as well as contemporary scholars and their contributions to the discipline.

**Program Level Outcomes:**

- Examine culturally diverse works in philosophy and apply philosophical concepts to other academic areas of inquiry.
- Construct, formulate, and utilize an appropriate level of creativity, discipline, and technique in the production of assigned work in the humanities.
- Compare and analyze culturally diverse works in literature and philosophy
- Identify and employ terminology commonly used in the humanities.
- Apply ancient ideas to contemporary issues.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**Preparation for Success:** Students who plan to major in philosophy at the four year college or university should take all of the Philosophy courses offered at WWCC, including Symbolic Logic. The great majority of schools require at least two years of a language other than English for a Bachelor of Arts in Philosophy.

**Physical Education and Recreation**

http://wwcc.edu/pe

Chelsie Speer 509.524.5235 chelsie.speer@wwcc.edu

Justin Speer 509.527.4238 justin.speer@wwcc.edu

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Tim Toon 509.527.4307 tim.toon@wwcc.edu

**Program available at/via:** [Walla Walla] [Clarkston] [50%

**Department Overview:** Recent studies reported by the U.S. Surgeon General and the Centers for Disease Control and Prevention confirm that physical activity reduces the risk of developing some of the leading causes of illness and death, including heart disease, high blood pressure, and diabetes for all ages. Many students, however, are not getting enough physical activity; and are not learning to be responsible for their own health.” (National Association for Sport & Physical Education)

The Physical Education department at WWCC offers a variety of courses that expose the student to leisure activity skills and fitness activities that educate students how to be responsible for their own health.

**Program Level Outcomes:**

- Calculate target heart rate and demonstrate its use.
- Articulate and practice proper activity mechanics.
- Develop an individual workout plan with strategic design and attainable goals.
- Identify the benefits of proper exercise methods, warm-up and cool down techniques, stretching techniques, and safety.
- Demonstrate the progressive increase of workload to improve fitness levels.
- Articulate and practice concepts associated with general fitness, cardiovascular improvement, muscular strength and endurance, flexibility, stress reduction and safety.

**http://wwcc.edu/pe**

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Anna Taylor 509.527.1860 anna.taylor@wwcc.edu

Tim Toon 509.527.4307 tim.toon@wwcc.edu

**Program available at/via:** [Walla Walla] [Clarkston] [50%
**Physics**

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**Preparation for Success:** Students interested in fitness careers should be outgoing, good at motivating people, and sensitive to the needs of others. Excellent health and physical fitness are important due to the physical nature of the job. Those who wish to be personal trainers in a large commercial fitness center should have strong sales skills.

**Other Information:** Introductory physics courses are offered that fulfill the needs of three different groups of students. All physics course fulfill the Natural Sciences requirement for graduation with an AA or AS degree.

- Students interested in pursuing a major in physics, engineering, or other physical sciences should enroll in the 3-quarter sequence PHYS& 221, 222, 223, a calculus-based series.
- The other 3-quarter sequence, PHYS& 114, 115, 116, an algebra-based series, is appropriate for students interested in pursuing degrees in life sciences, pre-professional programs (i.e. medicine, dentistry, etc.), or any student with a desire to learn about the laws of physics through a problem-solving course.
- For the student interested in a general survey of the science of physics, PHYS 110, a one-quarter, conceptual course is offered.

**Program available at/via:** [Walla Walla] [50% Online]

**Political Science**

**Program available at/via:** [Walla Walla] [50% Online]

**Department Overview:** Political science as a discipline encompasses a broad range of subfields that attempt to describe and explain the political process, politics, and relationships among governments. The general areas of study in political science include American government and politics, political theory, public administration, public law, comparative politics, and international relations.

**Program Level Outcomes:**

- The ability to analyze past and present society, diverse cultures and histories to better understand individual and group behavior and enhance self-awareness.
- An understanding and working knowledge of the theories, concepts, ideas, terminology, and factual evidence in selected fields within the social sciences.
- Sensitivity in understanding diverse views and perspectives.
- An understanding of the historically and socially constructed nature of human differences.

**Degrees:** Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

**Preparation for Success:** A major in Political Science is strengthened by studies in statistics and history. The ability to utilize computers for research purposes is mandatory in most disciplines.

**Psychology**

**Program available at/via:** [Walla Walla] [Clarkston] [50% Online]

**Department Overview:** Psychology is the scientific study of individual human behavior and mental processes. As a discipline, psychology uses scientific research methodology to understand the physiological, cognitive, and social processes that influence behavior. Scientific research methods assist psychologists in evaluating behavioral data and solving human problems such as those associated with development over the life span, brain functioning, learning, memory, psychopathology, and personality.

**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://www.wwcc.edu)
Program Level Outcomes:

- The ability to analyze past and present society, diverse cultures and histories to better understand individual and group behavior and enhance self-awareness.
- An understanding and working knowledge of the theories, concepts, ideas, terminology, and factual evidence in selected fields within the social sciences.
- Sensitivity in understanding diverse views and perspectives.
- An understanding of the historically and socially constructed nature of human differences.

Degrees: Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).

Preparation for Success: A major in psychology is strengthened by studies in research and statistics, as well as courses in anatomy and physiology.

Other Information: Courses in psychology are valuable across a wide range of academic and vocational disciplines and professions. Successful completion of General Psychology (PSYC 100) and Lifespan (PSYC 200) are prerequisites for the Nursing program. Other program and transfer colleges may also require successful completion of a psychology course.

Preparation for Success: A major in sociology is strengthened by studies in research and statistics, as well as courses in anatomy and physiology.

Other Information: Courses in sociology are valuable across a wide range of academic and vocational disciplines and professions. Successful completion of General Psychology (PSYC 100) and Lifespan (PSYC 200) are prerequisites for the Nursing program. Other program and transfer colleges may also require successful completion of a psychology course.

Program available at/via: [Walla Walla] [Clarkston]

Department Overview: Reading courses provide students with the opportunity to improve their reading skills. The courses offered are college preparation courses designed to prepare students for academic and occupational success.

The number of quarters required to complete the college preparation coursework is dependent upon the individual's entrance examination scores. A student is typically co-enrolled in an AAAS or AA Degree.

Sociology

- Practice Spanish communication skills with emphasis on interpersonal communication.
- Identify and discuss principal areas of difference between American and Latin cultures.
- Compare and contrast the construction and use of Spanish and English and demonstrate an increased grammatical and syntactic competency in both languages.
- Demonstrate competence in reading, writing, speaking, and listening to Spanish as measured by ACTFL standards and O.P.I. criteria.

Degrees: Students may earn an Associate in Arts AA-DTA degree (90 credits) which is designed for students planning to transfer to a baccalaureate institution with junior standing. Students pursuing this degree should meet with an academic advisor at WWCC and an advisor at their intended baccalaureate institution to determine an appropriate educational plan. (See AA-DTA in Degrees section of catalog).
Preparation for Success: Students seeking a modern language major should take a broad range of courses that include writing and comprehension, both in English and in at least one other modern language. Competence in word-processing is very important. Other helpful pursuits include spending time abroad, engaging in comparable forms of direct contact with non-English speaking cultures, and reading extensively on a variety of subjects in English and at least one other language.

**Turf Management**

CERT, AAS-T, AAAS, AA-DTA

http://wwcc.edu/turfmanagement

Gwen Stahnke  509.527.4225  gwen.stahnke@wwcc.edu

Program available at/via: [Walla Walla] [100% Online]

Department Overview: Turf Management offers training for a wide variety of industries from golf courses to sports fields to parks departments with a focus on environmental awareness and appreciation. The study of turf management includes: turfgrass application, installation and management; equipment operation and maintenance; and irrigation system installation. Students in this program have the unique opportunity to participate in a work experience in spring and summer quarters of the program providing them relevant hands-on and field experience to prepare for the industry. Many courses are offered via distance delivery and the variety of courses offered provides students the option of transfer to WSU & OSU four year Turf Management programs. The Turf Management curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- To provide a variety of courses in order to prepare students for careers in turf management.
- To provide students with a variety of courses that allow them to transfer to WSU four year Turf Management Program with academic skills needed to succeed in upper division work.
- Provide relevant training through hands-on and field experience to prepare the students for industry.
- To encourage students to explore and develop critical thinking and creative thinking.
- To help students develop and perfect communication skills.
- To assist students in understanding, and using the concepts of each course.
- To develop increased environmental awareness and appreciation.
- To help students develop and perfect the most efficient use of natural resources.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Turf Management upon completion of the two year program of study. A Turf Management Certificate is available upon completion of the first year of the program.

Industry Description: The turf management industry has shown a steady growth rate in job opportunities for trained turf professionals. The turf management sector employs individuals as grounds keepers, golf course maintenance supervisors, parks grounds supervisors, sports field supervisors, turf landscape technicians, turf grass specialists, and sod farm managers.

Entrance Requirements: It is recommended that the student contact the lead instructor regarding appropriate program placement. Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended to begin in the fall. In order to start this program, the placement process must be completed through the Testing Center. Visit [wwcc.edu/placement](http://wwcc.edu/placement) for more information.

Other Information: All courses are offered on campus or through Distance Learning. For more information on Distance Learning please contact the Turf Management program.

For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).

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### Degrees

**Associate of Applied Science - Transfer - Turf Management**

This degree provides the science and general education courses appropriate for the student who is planning a future transfer to a Bachelor of Science in Turfgrass Management at Washington State University.

**Degree available at/via: [Walla Walla]**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 121 or CHEM&amp; 161</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 114, Plant Physiology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 122 or CHEM&amp; 162</td>
<td>5</td>
</tr>
<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
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<table>
<thead>
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<tbody>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 123 or CHEM&amp; 163</td>
<td>5</td>
</tr>
<tr>
<td>ENT 151, Advanced GIS</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
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| **Year One Total** | **56** |

<table>
<thead>
<tr>
<th>Quarter Four</th>
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<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 202, Soils Fertility and Management</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 213, Majors Plant</td>
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</tr>
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<td><strong>Total Credits</strong></td>
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</tr>
</tbody>
</table>

| **Year Two Total** | **56** |
Turf Management Certificate

This certificate is equivalent to the first three quarters of the AAAS Degree in Turf Management.

Certificate available at/via: [Walla Walla] [100% Online]

Certificate Outcomes:
- Operate and maintain a variety of mower units, top dressers, aerification units, trimmers, and miscellaneous turf equipment.
- Calibrate a variety of sprayers.
- Demonstrate proper watering techniques and the ability to assess plant water use, knowledge of the nutritional needs of plants, fertilizer selection, and use.
- Perform various functions related to the care and maintenance of golf courses, including material and equipment selection.
- Demonstrate knowledge of turf grass cultivars and seed selection.
- Demonstrate knowledge of construction methods used for decks, patios and walkways.
- Demonstrate knowledge of tree pruning and tree removal principles and the ability to prune.
- Demonstrate knowledge of safety and first aid of pesticides and proper pesticide handling.

YEAR ONE

Quarter One

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<thead>
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<th>Course</th>
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<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
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<td>AGPR 113, Cultivated Plants</td>
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<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
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<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
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<td>TURF 122, Turf Maintenance Practices</td>
<td>3</td>
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Quarter Two

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<td>AGPR 140, Agriculture Safety and Pesticides</td>
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<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
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<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
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<td>TURF 215, Turf Diseases and Insects</td>
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<td>WTM 112, Irrigation Principles</td>
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Quarter Three

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<td>TURF 191, Cooperative Work Experience</td>
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<tr>
<td>TURF 192, Cooperative Seminar (R)</td>
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YEAR TWO

Quarter One

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<tr>
<td>TURF 291, Cooperative Work Experience II</td>
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<tr>
<td>TURF 292, Cooperative Seminar II (L)</td>
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<td>Total Credits</td>
<td>8</td>
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</table>

Grand Total | 59.4-63.4 |

YEAR THREE

Quarter Two

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TURF 122, Turf Maintenance Practices</td>
<td>3</td>
</tr>
<tr>
<td>TURF 111, Turf Equipment Operations II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>19</td>
</tr>
</tbody>
</table>

Grand Total | 59.4-63.4 |

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
TURF 215, Turf Diseases and Insects .......................... 5
WTM 112, Irrigation Principles ........................................ 5
Total Credits .................................................. 20.4

Quarter Three  Credits
TURF 191, Cooperative Work Experience ......................... 10
TURF 192, Cooperative Seminar (R) .......................... 2
Total Credits .................................................. 12

Quarter Four  Credits
TURF 291, Cooperative Work Experience II ..................... 6 - 10
TURF 292, Cooperative Seminar II (L) ......................... 2
Total Credits .................................................. 8-12

Year One Total ........................................ 59.4-63.4

Water - Irrigation Technology

CERT, AAAS
http://www.wwcc.edu/wec

Program available at/via: [Walla Walla] [50% Online]

Department Overview: The Water Technologies and Management program offers several degree tracks for students which include Irrigation Technology, Natural Resources Technology and Management and Watershed Ecology. Certificate, Associate in Applied Arts & Sciences Degrees (AAAS), and transfer options are available.

Irrigation Technology provides practical learning experience in both the agriculture and the turf industries. The study of irrigation principles and practices, water and energy conservation, pumps, fluid hydraulics, troubleshooting, and installation prepares students for irrigation industry challenges. Graduates of the Irrigation Technology program are highly recruited to design, sell, install, operate, maintain, manage, and/or service turf, landscape, and agricultural irrigation systems. The Irrigation Technology degree prepares graduates for highly skilled entry-level positions within the industry and/or transferability to Washington State University.

Students in the program have the unique opportunity to participate in a paid work experience in spring and summer quarters of the program. Approximately half of the courses required for the degree can be taken online.

The Water Technologies & Management curriculum is reviewed annually by an advisory board composed of local and regional industry members.

Program Level Outcomes:

• Provide the natural resource and irrigation industries with highly trained, fully employable, skilled technicians.
• Develop relationships and/or partnerships with existing natural resource and irrigation organizations and agencies to provide continuing education opportunities for industry practitioners.
• Provide industry work experience during the educational process, giving students exposure to the actual applications of natural resource protection and recovery methods and irrigation principles and practices.
• Provide campus labs, classrooms, equipment and general facilities utilizing cutting edge technologies and practices.
• Provide highly trained instructors who have significant field experiences as successful practitioners in this industry.

Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Irrigation Technology upon completion of the two-year program of study. A Center Pivot Technology Certificate is available upon completion of the first year of the program.

Industry Description: Water is a resource that impacts our lives on a daily basis. Due to water shortages, today and in the future, management of this precious resource is critical. With heightened emphasis on environmental concerns, the demand on water supplies requires that old, inefficient practices and systems be updated or replaced. This notion is creating a demand for a broad range of irrigation and hydrological expertise. Knowledge of water management and policy is important in the agriculture, turf maintenance, and municipal landscape industries. The water management industry is experiencing a period of rapid technological advancement in labor saving and water conserving irrigation systems, while having to manage a finite resource. Highly skilled technicians are required to design, install, operate and maintain these new technologies. Graduates of this program have been highly recruited, and job placement is exceptional.

Entrance Requirements: Students may begin their study in fall, winter, spring, or summer quarter, however. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.
Degrees and Certificates

Center Pivot Irrigation Certificate
Certificate available at/via: [Walla Walla]
Certificate Outcomes:

- Distinguish between types of irrigation equipment and their applications.
- Install properly designed lawn systems.
- Identify mechanical components of valves, center pivots and pumps.
- Generate IRRICAD and Eagle Point designs.
- Design basic drip systems.
- Analyze irrigation pumps and controls in relation to a complete irrigation system.
- Perform soil moisture measurements and water scheduling.
- Assess and design fish screens.
- Develop an understanding of water related cultural perspectives, views and opinions.
- Understand watershed processes and how they relate to the natural environment.
- Gain insight into western water law and policies which affect the use and non-use of water.
- Develop an awareness and understanding of fundamental elements of leadership, interpersonal communication, teamwork and collaborative problem solving.

<table>
<thead>
<tr>
<th>YEAR ONE</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>Fall Quarter</td>
<td>WTM 110, Turf Irrigation Design and Components</td>
<td>5</td>
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<tr>
<td>Winter Quarter</td>
<td>WTM 225, Turf Irrigation Controls, Installation, and Troubleshooting</td>
<td>5</td>
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<tr>
<td></td>
<td>Total Credits</td>
<td>10</td>
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EPC: 125S

(W) - Written Communications (O) - Oral Communications
(R) - Human Relations (M) - Computation/Mathematics
(J) - Job Seeking Skills (L) - Leadership Associate in

Applied Arts and Sciences Degree in Irrigation Technology

This technical degree prepares the student for immediate employment in the water management and irrigation service industry in both the rural and urban setting.

Degree available at/via: [Walla Walla] [50% Online]
Degree Outcomes:

- Distinguish between types of irrigation equipment and their applications.
- Install properly designed lawn systems.
- Identify mechanical components of valves, center pivots and pumps.
- Generate IRRICAD and Eagle Point designs.
- Design basic drip systems.
- Analyze irrigation pumps and controls in relation to a complete irrigation system.
- Perform soil moisture measurements and water scheduling.
- Assess and design fish screens.
- Develop an understanding of water related cultural perspectives, views and opinions.
- Understand watershed processes and how they relate to the natural environment.
- Gain insight into western water law and policies which affect the use and non-use of water.
- Develop an awareness and understanding of fundamental elements of leadership, interpersonal communication, teamwork and collaborative problem solving.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

For the most current information see: www.wwcc.edu
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- AGRI 100, Agriculture Safety and Pesticides .......................... 3
- EST 132, Principles of Electricity AC Application ......................... 5
- IFA 022, AHA Heartsaver First Aid ......................................... 4
- TURF 101, Turf Equipment Operations I .................................... 3
- WTM 112, Irrigation Principles .............................................. 5

**Total Credits .................. 18.4**

**Quarter Two**

- EST 115, Industrial Mechanics ............................................. 5
- EST 133, Introduction to Controls .......................................... 5
- WTM 135, Issues in Agriculture and Natural Resources (R) ........ 5
- WTM 221, Pump Applications ............................................... 3

**Total Credits .................. 18**

**Quarter Three**

- ENGL 097, Basic Expository Writing (W) .............................. 5
- ENGL 150, Electric Motors and Motor Maintenance .................... 5
- OCSUP 107, Quantitative Problem Solving for the Trades II (M) ... 5
- WTM 241, Advanced Center Pivot Controls and Troubleshooting . 3

**Total Credits .................. 18**

**Quarter Four**

- WTM 191, Cooperative Work Experience ................................ 6 - 10
- WTM 292, Cooperative Seminar II (L) .................................. 2

**Total Credits .................. 8-12**

**Year One Total ............ 62.4-66.4**

**YEAR TWO**

**Quarter One**

- AGPR 100, Introduction to Agriculture and
  Natural Resource Careers (J) .................................................. 3
- AGPR 113, Cultivated Plants .................................................. 5
- AGPR 201, Basic Soil Science .............................................. 5
- WTM 215, Basic Fluid Dynamics of Piping Systems .................. 3

**Total Credits .................. 16**

**Quarter Two**

- AGRI 210, Fundamentals of Selling and Customer Service * ........ 3
- ENGR& 111, Engineering Graphics 1 ....................................... 3
- WTM 110, Turf Irrigation Design and Components ................... 5
- WTM 230, Water and Energy Conservation ............................. 3

**Total Credits .................. 14**

**Quarter Three**

- CMST 102, Interpersonal Communication (O) .......................... 3
- WTM 220, Drip Irrigation ..................................................... 2
- WTM 225, Turf Irrigation Controls, Installation,
  and Troubleshooting ....................................................... 5

**Total Credits .................. 10**

**Year Two Total .............. 40**

**Grand Total ............. 102.4-106.4**

**EPC: 1238**

*Business Core Elective: AGRI 201, AGRI 221, AGRI 210, AGRI 211, AGRI 102, AGRI 108, OR CS 110

The Water Technologies and Management program offers several degree tracks for students which include Natural Resources Technology and Management, Irrigation Technology and Watershed Ecology. Certificate, Associate in Applied Arts & Sciences Degrees (AAAS), and transfer options are available.

Natural Resources Technology & Management provides practical learning experience in the natural resource, agriculture, and the turf industries. Natural resource technicians are skilled in planning, developing, managing, and evaluating programs designed to protect and regulate natural habitats and resources. Technicians will have the skills necessary to analyze soil, plant, and water relationships, as well as understand water relationships to environmental, economic, and social impacts to communities. Graduates of the Natural Resource Technology & Management program are highly recruited to work in soil and water conservation, water right related work, as well as design, sell, install, operate, maintain, manage, and/or service turf, landscape, and agricultural irrigation systems. The Natural Resources Technology & Management degree prepares graduates for highly skilled entry-level positions within the industry and/or transferability to Washington State University.

Students in the program have the unique opportunity to participate in a paid work experience as part of the program. Some courses can be taken online.

The Natural Resource Technology & Management curriculum is reviewed annually by an advisory board composed of local and regional industry members.

**Program Level Outcomes:**

- Provide the natural resource and irrigation industries with highly trained, fully employable, skilled technicians.
- Develop relationships and/or partnerships with existing natural resource and irrigation organizations and agencies to provide continuing education opportunities for industry practitioners.
- Provide industry work experience during the educational process, giving students exposure to the actual application of natural resource protection and recovery methods and irrigation principles and practices.
- Provide campus labs, classrooms, equipment and general facilities utilizing cutting edge technologies and practices.
- Provide highly trained instructors who have significant field experiences as successful practitioners in this industry.

**Degrees:** Students may earn an Associate in Applied Arts and Sciences Degree (AAAS) in Natural Resources Technology upon completion of the two-year program of study. The Natural Resource Technology & Management degree prepares graduates for highly skilled entry-level positions within the industry and/or transferability to Washington State University.
Industry Description: Water is a resource that impacts our lives on a daily basis. Due to water shortages, today and in the future, management of this precious resource is critical. With heightened emphasis on environmental concerns, the demand on water supplies requires that old, inefficient practices and systems be updated or replaced. This notion is creating a demand for a broad range of irrigation and hydrological expertise. Knowledge of water management and policy is important in the agriculture, turf maintenance, and municipal landscape industries. The water management industry is experiencing a period of rapid technological advancement in labor saving and water conserving irrigation systems, while having to manage a finite resource. Highly skilled technicians are required to design, install, operate and maintain these new technologies. Graduates of this program have been highly recruited, and job placement is exceptional.

Entrance Requirements: Students may begin their study in fall, winter, spring, or summer quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

### Degrees

Associate in Applied Arts and Sciences Degree in Natural Resources Technology and Management

This technical degree prepares the student for immediate employment in the water resources industry.

Degree available at/via: [Walla Walla] [50% Online]

Degree Outcomes:

- Develop an understanding of water related cultural perspectives, views and opinions.
- Understand watershed processes and how they relate to the natural environment.
- Gain insight into western water law and policies which affect the use and non-use of water.
- Develop an awareness and understanding of fundamental elements of leadership, interpersonal communication, teamwork and collaborative problem solving.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

### YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
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<tr>
<td>AGRI 108, Computers in Agriculture</td>
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</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
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<tbody>
<tr>
<td>AGRI 110, Livestock Production</td>
<td>5</td>
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<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
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### YEAR TWO

<table>
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<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>AGRI 201, Basic Soil Science</td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>WTM 139, Watershed Management</td>
<td>5</td>
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<tr>
<td>WTM 215, Basic Fluid Dynamics of Piping Systems</td>
<td>3</td>
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<tr>
<td>AGRI 140, Agriculture Safety and Pesticides</td>
<td>5</td>
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<tr>
<td>ENT 151, Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td>ENT 161, Elementary Surveying</td>
<td>3</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>WTM 110, Turf Irrigation Design and Components</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<tbody>
<tr>
<td>AGRI 105, Weed Biology and Identification</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 103, Intro to Precision Ag for Farm Management</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>ENT 152, Practical Field Applications of GIS</td>
<td>3</td>
</tr>
<tr>
<td>WTM 220, Drip Irrigation</td>
<td>2</td>
</tr>
<tr>
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</tbody>
</table>

| Year Two Total                  | 52.4    |
| Grand Total                     | 115.4-119.4 |

EPC 1658

*Business Core electives: AGRI 201, AGRI 221, AGRI 211, AGRI 102

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

(J) - AGRI 100, EST 109, OCSUP 103
(W) - ENGL 097, ENGL 101
(M) - MATH 146, MATH 141, OCSUP 107
(L) - WTM 292, any 292 course
(O) - CMST 102, CMST 220, OCSUP 102
(R) - WTM 135, any 192 course

**Water - Watershed Ecology**

CERT, AAAS

http://www.wwcc.edu/wec

Melissa Holecek 509.524.5208 melissa.holecek@wwcc.edu
Dave Stockdale 509.524.5193 dave.stockdale@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: The Water Technologies and Management program offers several degree tracks for students which include Watershed Ecology, Natural Resources Technology and Management and Irrigation Technology. Certificate, Associate in Applied Arts &
Watershed Ecology will enable students to learn about ecosystems as they relate to watershed processes. Students will become well-versed in living systems, flora and fauna, as well as non-living systems. Watershed Ecology will expose students to technical courses to provide them with cutting-edge scientific skills and necessary written and oral communication skills. The Watershed Ecology degree prepares graduates for entry level employment and provides skill improvements for individuals already in the workforce. Graduates of the Watershed Ecology program are highly recruited for work in fisheries, environmental restoration, and soil and water quality testing. Students in the program have the unique opportunity to participate in paid work experience as part of the program. The Watershed Ecology program is reviewed annually by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Provide the natural resource and irrigation industries with highly trained, fully employable, skilled technicians.
- Develop relationships and/or partnerships with existing natural resource and irrigation organizations and agencies to provide continuing education opportunities for industry practitioners.
- Provide industry work experience during the educational process, giving students exposure to the actual applications of natural resource protection and recovery methods and irrigation principles and practices.
- Provide campus labs, classrooms, equipment, and general facilities utilizing cutting edge technologies and practices.
- Provide highly trained instructors who have significant field experience as successful practitioners in the natural resource and irrigation industries.

Degrees: Students may earn an Associate in Applied Arts and Sciences in Watershed Ecology upon completion of the two-year program of study. A Watershed Ecology Certificate is available upon completion of the first year of the program.

Industry Description: Watershed Ecology blends knowledge of biological sciences with application of cutting-edge technical skills. Technicians will be skilled in identifying and assessing natural habitat needs of fish and wildlife in relation to healthy ecosystems, with emphasis on the restoration and management of aquatic environments.

Entrance Requirements: Students may begin their study in fall, winter, spring, or summer quarters. In order to start this program, the placement process must be completed through the Testing Center. Visit wwwc.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degree available at/via: [Walla Walla]

Degree Outcomes:

- Identify watershed processes of capture, storage and release of water throughout a geographic area.
- Identify selected trees, shrubs, forbs and grasses native to the Pacific Northwest.
- Identify species and habitat needs of common northwest terrestrial and aquatic species.
- Collect samples, complete field surveys, and analyze and report data.
- Collect and identify aquatic organisms from invertebrate insects to fish species and relate what is found to the habitat and aquatic ecosystem conditions.
- Set up monitoring plans and schedules to collect, measure, analyze and report water quality parameters.
- Identify restoration practices used to improve riparian and aquatic habitats and water quality.
- Understand Federal and State laws that pertain to water and exhibit a working knowledge of water rights laws.
- Operate a hand compass, staff compass, transit, level, global positioning systems (GPS), and electronic instruments in determining slopes, turning angles, running traverses, locating ownership boundaries, and determining locations.
- Utilize maps and aerial photographs in the management of natural resources, including the use of geographic information systems (GIS).
- Apply basic knowledge in soils to the management of natural resources.
- Demonstrate interpersonal skills needed for successful job performance.
- Write effective reports and give meaningful presentations.
- Explain the relationships between soil, water and plants.

### YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
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<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
<td>5</td>
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<table>
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<tr>
<th>Quarter Two</th>
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<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 210, Fundamentals of Selling and Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 100, Survey of Biology</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
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<tr>
<th>Quarter Three</th>
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<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
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<tr>
<td>BIOL 130, General Ecology</td>
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<tr>
<td>CMST 102, Interpersonal Communication (O)</td>
<td>3</td>
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<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
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<tr>
<td>WTM 112, Irrigation Principles</td>
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<table>
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<tr>
<td>WTM 191, Cooperative Work Experience</td>
<td>6 - 10</td>
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<tr>
<td>WTM 292, Cooperative Seminar II (L)</td>
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</table>

WATeR - WATeRSHEd ECology
WELDING TECHNOLOGY

Total Credits .................. 8-12
Year One Total .................. 62.4-66.4

YEAR TWO
Quarter One                  Credits
AGPR 201, Basic Soil Science . 5
AGRI 222, Agricultural and Water Policy . 5
ENT 150, Introduction to GIS . 3
WTM 139, Watershed Management . 5
Total Credits .................. 18

Quarter Two                  Credits
Ecology Elective ** .............. 3
Ecology Elective ** .............. 3
ENT 151, Advanced GIS ........... 3
WTM 230, Water and Energy Conservation .... 3
WTM 239, Watershed Processes and Restoration .... 5
Total Credits .................. 17

Quarter Three                Credits
AGPR 224, Pasture and Range Management ... 5
WTM 190, Water Quality and Environmental Chemistry ... 5
WTM 229, Aquatic Ecology and Research Methods ... 5
Total Credits .................. 15
Year Two Total .................. 50
Grand Total ..................... 112.4-116.4

EPC. 165
*WTM Business Core Elective: AGRI 102, AGRI 108, AGRI 201, AGRI 219, AGRI 211, AGRI 221, CS 110, TURF 211
*Ecology Elective: TURF 101, WTM 221, ENT 161, ENT 152
The following courses meet the related instruction requirements of this certificate/degree
(one course per category required):
(J) - AGRI 100, OCSUP 103  (W) - ENGL 097, ENGL & 101
(L) - WTM 292, any 292 course  (M) - MATH & 141, OCSUP 107
(O) - CMST 102, CMST & 220, OCSUP 102  (R) - WTM 135, any 192 course

Watershed Ecology Certificate
This certificate is equivalent to the first year of the AAAS Degree in Watershed Ecology.

Certificate available at/via: [Walla Walla]

YEAR ONE
Quarter One                  Credits
AGPR 100, Introduction to Agriculture and Natural Resources .... 3
(J) .................................. 3
AGPR 113, Cultivated Plants .... 5
ENGL 097, Basic Expository Writing (W) .............. 5
WTM 135, Issues in Agriculture and Natural Resources (R) .... 5
Total Credits .................. 18

Quarter Two                  Credits
AGPR 105, Weed Biology and Identification .............. 5
AGRI 210, Fundamentals of Selling and Customer Service * ........... 3
BIOL & 100, Survey of Biology .................. 5
OCSUP 107, Quantitative Problem Solving for the Trades II (M) .... 5
Total Credits .................. 18

Quarter Three                Credits
AGPR 140, Agriculture Safety and Pesticides .............. 5
BIOL 130, General Ecology .............. 5
CMST 102, Interpersonal Communication (O) .............. 3
IFA 022, AHA Heartsaver First Aid .................. 4
WTM 112, Irrigation Principles .................. 5
Total Credits .................. 18
Year One Total .................. 54.4
Grand Total ..................... 54.4

EPC (165C)
*WTM Business Core Elective: AGRI 102, AGRI 108, AGRI 201, AGRI 219, AGRI 211, AGRI 221, CS 110, TURF 211
The following courses meet the related instruction requirements of this certificate/degree
(one course per category required):
(J) - AGRI 100, OCSUP 103  (W) - ENGL 097, ENGL & 101  (R) - WTM 135, any 192 course
(M) - MATH & 141, OCSUP 107  (O) - CMST 102, CMST & 220, OCSUP 102

Welding Technology
CERT, AAAS
http://wwcc.edu/welding
Michael Haggard 509.527.4219 michael.haggard@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Welding Technology offers a certified, state-of-the-art welding facility complemented by certified welding instructors. Students train and learn to meet the current certification requirements of manufacturing and construction industries and exploring many career alternatives related to the welding industry. The program's technical training complies with American Welding Society (AWS) S.E.N.S.E. standards, increases the students' understanding of welding and the related science, meets employers' expectations, and increases the students' ability to compete in the employment marketplace. Training includes oxyacetylene cutting and welding, brazing, soldering, SMAW, GMAW, FCAW, GTAW, blueprint/layout standards and methods, welding procedure specifications, testing methods, quality control, metallurgy, and safe work practices. Welder certifications are conducted according to AWS/ASME and WABO (Washington Association of Building Officials) standards. Process certifications are available and include plate and pipe welding using shielded metal arc, gas metal arc, flux cored, and gas tungsten arc welding. The Welding Technology curriculum is reviewed by an advisory board composed of local and regional industry members.

Program Level Outcomes:

- Assure the Welding program is in full compliance with AWS/WAB standards and the needs of the metals welding industry.
- Upgrade welding curriculum relevance to employer technical needs in the region with assistance from the advisory committee.
- Enhance student enrollment, retention, and completion rates.
- Train students to be employed at an entry level by possessing knowledge, attitudes, skills, and habits required to perform welding operations.

Degrees: Students may earn an Associate in Applied Arts and Science in Welding Technology upon completion of the second year of instruction. To demonstrate welding proficiencies, students must pass certification tests prior to completion. Welding certifications include plate and pipe welding using shielded metal arc, gas metal arc, and gas tungsten arc welding processes. To meet the degree requirements, welding students must become certified in at least two processes, with at least one according to WABO Standards. A Welding Technology certificate is available upon completion of three specific welding courses and related instruction during the first year of instruction in the program.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Industry Description: Welding is a joining process that produces coalescence of metals by heating them to the welding temperature forming a permanent connection. Due to the strength of this connection, welding is used in shipbuilding, automobile manufacturing and repair, aerospace applications, and thousands of other manufacturing activities. Welding is also used in the construction of buildings, bridges, pipelines, power plants, and refineries. Due to the wide variety of applications, welders utilize many types of welding processes: i.e. SMAW (Arc), GTAW (Tig), GMAW (Mig) and OAW/C (Gas), as well as soldering and brazing. The demand for qualified welders is increasing steadily as the industry strengthens certification requirements and improves construction standards.

Entrance Requirements: It is recommended that the student contact the lead instructor regarding appropriate program placement and to determine specific quarter start in the program. Students may enter the program fall, winter or spring quarter. In order to start this program, the placement process must be completed through the Testing Center. Visit wwcc.edu/placement for more information.

Other Information: For additional information including regional employment data, completion rates, student characteristics, and employment see http://www.careerbridge.wa.gov.

Degrees and Certificates

Welding Technology Certificate
Certificate available at/via: [Walla Walla]
Certificate Outcomes:

- Identify major requirements to safely operate equipment to produce cuts, gouges, grinds and weldments.
- Demonstrate set-up, operation and shut down operations using welding and cutting equipment.
- Demonstrate welding, brazing and cutting techniques using fuel gas and electric arc processes.
- Demonstrate print reading knowledge and experience and perform weldment testing using industry accepted standards and practices.
- Demonstrate manual welding experience using stainless steel and aluminum alloys.
- Demonstrate welding mild steel, stainless steel and aluminum alloys using semi-automatic equipment/procedures.
- Perform welding visual inspection procedure to determine compliance with appropriate codes and standards.

Associate in Applied Arts and Sciences Degree in Welding Technology
This technical degree trains the student according to American Welding Society (AWS) standards. Through completion of this degree, the student will have completed the Washington Association of Building Officials (WABO) certification. Students will be prepared to enter the welding, manufacturing and/or fabrication industry.

Degree available at/via: [Walla Walla]
Degree Outcomes:

- Identify major requirements to safely operate equipment to produce cuts, gouges, grinds and weldments.
- Demonstrate set-up, operation and shut down operations using welding and cutting equipment.
- Demonstrate welding, brazing and cutting techniques using fuel gas and electric arc processes.
- Demonstrate print reading knowledge and experience and perform weldment testing using industry accepted standards and practices.
- Demonstrate manual welding experience using stainless steel and aluminum alloys.
- Demonstrate welding mild steel, stainless steel and aluminum alloys using semi-automatic equipment/procedures.
- Perform welding visual inspection procedure to determine compliance with appropriate codes and standards.

Transferability: The AAAS Degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Quarter One</td>
<td>Credits</td>
</tr>
<tr>
<td>WELD 151, Shielded Metal Arc Welding</td>
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</tr>
<tr>
<td>ENGR&amp; 111, Engineering Graphics</td>
<td>3</td>
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<tr>
<td>Total Credits</td>
<td>20</td>
</tr>
<tr>
<td>Quarter Two</td>
<td>Credits</td>
</tr>
<tr>
<td>WELD 255, Gas Tungsten Arc Welding</td>
<td>17</td>
</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<td>Total Credits</td>
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<tr>
<td>Quarter Three</td>
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<td>WELD 256, Gas Metal Arc Welding</td>
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<td>Year One Total</td>
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EPC 814C
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- I - AGPR 100, OCSUP 103, PSYC 140
- W - BUS 137, ENGL& 101, WRITE 100
- M - BUS 112, OCSUP 105, OCSUP 106
- J - AGPR 100, OCSUP 103, PSYC 140
- W - BUS 137, ENGL& 101, WRITE 100

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
### Wildlife Ecology & Conservation Science

#### Degrees


Students will earn a two year degree that matriculates into a Bachelor of Science in Earth and Environmental Sciences degree in Wildlife Ecology & Conservation Science in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

#### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
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</tr>
<tr>
<td>CMST &amp; 220, Public Speaking</td>
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<tr>
<td>CHEM &amp; 121, Intro to Chemistry or CHEM &amp; 161, General Chemistry I w/Lab</td>
<td>5</td>
</tr>
<tr>
<td>GEOL &amp; 103, Historical Geology</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART &amp; 100, Art Appreciation</td>
<td>5</td>
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<tr>
<td>CHEM &amp; 122, Introduction to Organic Chemistry or CHEM &amp; 162, General Chemistry II w/Lab</td>
<td>5</td>
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<tr>
<td>MATH &amp; 141, Precalculus I</td>
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<th>Quarter Three</th>
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<tbody>
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<td>CHEM &amp; 123, Introduction to Biochemistry or CHEM &amp; 163, General Chemistry III w/Lab</td>
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<tr>
<td>ENGL &amp; 101, English Composition I</td>
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<tr>
<td>MATH &amp; 142, Precalculus II</td>
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<tr>
<td><strong>Total Credits</strong></td>
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| **Year One Total** | **50** |

#### Year Two

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>BIOL &amp; 211, Majors Cellular</td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>WTM 139, Watershed Management</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>13</strong></td>
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The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

- (J) - AGPR 100, OCSUP 103, PSYC 140  
- (W) - BUS 137, ENGL 101, WRITE 100  
- (M) - BUS 112, OCSUP 105, OCSUP 106  
- (L) - WELD 299  
- (O) - CMST 102, CMST 220, OCSUP 102  
- (R) - BUS 157, OCSUP 101, PSYC 111, PSYC & 100

#### Program Outcomes:

- An understanding of discipline-specific terminology and methods.
- An ability to use discipline-specific tools and/or techniques correctly.
- Critical thinking skills necessary in water and natural resources, including problem solving skills and the use of data.
- The ability to research, interpret, and communicate concepts.
- An understanding of the relationships between course concepts and society, including the impact of course-specific technology.

#### Degrees:

Students will earn a two year degree that matriculates into a Bachelor of Science in Earth and Environmental Sciences degree in Wildlife Ecology & Conservation Science in the College of Agricultural, Human and Natural Resources (CAHNRS) and College of Arts and Sciences (CAS) at Washington State University.

---

**Wildlife Ecology & Conservation Science**

**AAS-T**

[http://www.wwcc.edu/htmwe](http://www.wwcc.edu/htmwe)

Melissa Holecek 509.524.5208 melissa.holecek@wwcc.edu

Dave Stockdale 509.524.5193 dave.stockdale@wwcc.edu

Program available at/via: [Walla Walla]

**Department Overview:** The Water Technologies & Management program now offers four new 2+2 degree pathways to Washington State University in Wildlife Ecology & Conservation Science, Environmental & Ecosystem Sciences, Forestry, and Earth Sciences.

In addition, the program offers certificate, Associate in Applied Arts & Sciences degrees (AAAS) and transfer options in Watershed Ecology, Natural Resources Technology and Management, and Irrigation Technology.

**Program Level Outcomes:**

- An understanding of discipline-specific terminology and methods.
- An ability to use discipline-specific tools and/or techniques correctly.
- Critical thinking skills necessary in water and natural resources, including problem solving skills and the use of data.
- The ability to research, interpret, and communicate concepts.
- An understanding of the relationships between course concepts and society, including the impact of course-specific technology.

**Industry Description:** Wildlife ecologists research and implement scientifically sound strategies for the conservation, protection, and sustainable management of wild animals and their habitat. The wildlife ecology and conservation sciences option combines strong science and a broad background in natural resources and the environment to help you fully understand the ecology, habitat, and conservation of wild animals. Students in this program will complete the basic science and related courses needed to transfer to WSU to pursue discipline-specific upper level courses.

**Entrance Requirements:** Students may begin their study in fall, winter, spring, or summer quarter. A placement test offered by the WWCC Testing Center must be completed prior to starting the program.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see [http://www.careerbridge.wa.gov](http://www.careerbridge.wa.gov).
### Writing

[http://wwcc.edu/writing](http://wwcc.edu/writing)

**Program available at/via:** [Walla Walla] [Clarkston]

**Department Overview:** Writing classes prepare students to be effective technical writers. The course focuses on career related writing, especially for students in a professional-technical career pathway. Students compose, design, revise, and edit effective letters, memos, reports, descriptions, instructions, and employment documents. An emphasis of the course is on the use of language and graphics to communicate technical and procedural information clearly, and precisely.

**Entrance Requirements:** In order to start this program, the placement process must be completed through the Testing Center. Visit [wwcc.edu/placement](http://wwcc.edu/placement) for more information.

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<table>
<thead>
<tr>
<th>Quarter Two</th>
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<tr>
<td>BIOL&amp;213, Majors Plant</td>
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<tr>
<td>ENT151, Advanced GIS</td>
<td>3</td>
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<td>HIST&amp;127, World Civilization II</td>
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<td><strong>Total Credits</strong></td>
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<th>Quarter Three</th>
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<tr>
<td>AGRI 222, Agricultural and Water Policy</td>
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<tr>
<td>BIOL&amp; 212, Majors Animal</td>
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<tr>
<td>HIST&amp; 128, World Civilization III</td>
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<tr>
<td>MATH&amp; 146, Introduction to Statistics</td>
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**Year Two Total** | **46**  

**Grand Total** | **96**  

**EPC: 165X**
Course Descriptions
### Accounting Technology

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<tr>
<th>Course Code</th>
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<td>ACCT 115</td>
<td>Integrated Computer Applications for Accounting</td>
<td>5</td>
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<tr>
<td>ACCT 175</td>
<td>Payroll Accounting</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 199</td>
<td>Special Topics</td>
<td>1-5</td>
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<tr>
<td>ACCT&amp; 201</td>
<td>Principles of Accounting I</td>
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<td>ACCT&amp; 202</td>
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<td>Principles of Accounting III</td>
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<td>ACCT 204</td>
<td>Intermediate Accounting I</td>
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<td>Cost Accounting</td>
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<tr>
<td>ACCT 216</td>
<td>Principles of Income Tax</td>
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<tr>
<td>ACCT 297</td>
<td>Special Projects</td>
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### Adult Basic Education

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<td>ABE 001</td>
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<td>ABE 002</td>
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<td>ABE 005</td>
<td>Educational Interview</td>
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<tr>
<td>ABE 013</td>
<td>Basic Math</td>
<td>1-9</td>
</tr>
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</table>

**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
ABE 014 Applied Math II 1 - 9 Credits
Students will read, write, and interpret mathematical information by measuring whole numbers and extending skills in fractions, decimals, ratios, and percents. Students will use basic patterns, data, algebraic concepts, measurement, geometry, and computational skills to solve 1-3 step theme based contextualized word problems. This course will integrate these skills into contextualized units. Students completing this course with a 70% or better will meet the requirements of High School 21+ to earn 1 credit of high school math equivalency. All students who are under 18 years of age must have a signed release form from their school district. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) Eligibility or the Underage Admissions Policy, which is available in the High School Programs office. Prerequisite: Grade of C or higher in ABE 013, CASAS Score of 220, or instructor permission.

ABE 017 Integrated Algebra and Geometry I 1 - 9 Credits
In this course, students will be introduced to basic algebraic and geometric concepts through a contextualized, integrated curriculum. Students will review basic concepts of number sense, ratios, proportions, and percents and apply these skills to algebraic and geometric word problems. Students will also become familiar with polygons, circles, lines, and angles and their relationship with algebra by solving multi-step real life word problems. Students will increase their basic knowledge of algebra by understanding and applying signed numbers to real world concepts, solving multi-step equations, solving and graphing inequalities, linear equations, and an introduction to nonlinear equations, with an emphasis on quadratics. Students completing this course with a 70% or better will meet the requirements for High School 21+ to earn one (1) credit of high school math equivalency. Prerequisite: All students who are under 18 years of age must have a signed release form from their school district. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office. Grade of C or higher in ABE 014, CASAS score of 230, or instructor permission.

ABE 023 ABE Health and Nutrition 1 - 9 Credits
This course is designed for students seeking High School 21 credit, students studying for the GED® exam, and students seeking educational enrichment. Course content emphasizes the importance of knowledge, attitudes, and practices relating to personal health and wellness so the student can make healthy lifestyle choices that support their whole well-being. Students will also gain familiarity with evidence-based writing, reading for comprehension, computer/media literacy, as well as math, science, and social studies concepts used in health and nutrition. This course is designed to prepare students for a successful transition to college-level courses and to develop the behaviors and values relevant to success in higher education and the labor market. Students who successfully complete this course will earn a High School 21 credit in Health; students can earn an additional credit in English if they demonstrate the requisite competencies in reading and writing. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction. Prerequisite: CASAS score of 201 or above. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

ABE 024 ABE General Science 1 - 9 Credits
This course is designed for students seeking an adult high school diploma through the High School 21 Program, students studying for the GED® exam, and students seeking educational enrichment. Students will explore foundational topics in biology, chemistry, and ecology; a special focus will be placed on understanding those issues within the context of everyday life. Throughout this course students will gain familiarity with evidence-based writing, reading for comprehension, media/computer literacy, and math concepts used in science. Students who successfully complete this course will earn a High School 21 lab credit in science; students can earn an additional credit in English if they demonstrate the requisite competencies in reading and writing. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction. Prerequisite: CASAS score of 211 or above. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

ABE 025 ABE English Language Arts 1 - 9 Credits
This course is intended for students seeking an adult high school diploma through the High School 21 program, students studying for the GED® exam, and students seeking educational enrichment. In this course, students will increase their confidence and ability in writing and reading for academic purposes, employment, and everyday life. Course content emphasizes the mechanics of writing as well as strategies to develop and organize complex ideas in writing. The reading component of this course focuses on interpreting and analyzing a variety of texts, including fiction, nonfiction, and informational. This course is designed to prepare students for a successful transition to college-level courses and to develop the behaviors and values relevant to success in higher education and the labor market. Students who successfully complete this course will earn a High School 21 credit in English. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction. Prerequisite: CASAS score of 201. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

ABE 026 ABE Social Studies Contemporary World Issues 1 - 9 Credits
This course is designed for students seeking an adult high school diploma through the High School 21 Program, students studying for the GED® exam, and students seeking educational enrichment. In this course, students will investigate a current world issue in depth; the issue will vary by quarter according to instructor and/or student interest. Course content will focus on understanding the historic, geographic, and economic context of the current world issue and how it intersects with questions of human rights, environmental change, globalization, and civic action. This course is designed to prepare students for a successful transition to college-level courses and/or to pass the GED®, and places an emphasis on acquiring reading, writing, math, and computer skills, and developing the behaviors and values relevant to a successful transition into higher education and the labor market. Students who successfully complete this course will earn a High School 21 credit in Social Studies; students can earn an additional credit in English if they demonstrate the requisite competencies in reading and writing. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
of instruction. Prerequisite: CASAS score of 201 or above. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

**ABE 027 ABE Advanced Reading** 5 Credits
This course develops reading techniques for adult basic education students through focusing on the reading of pre-college textbooks and academic discussion of literature. This course helps to improve comprehension skills, critical reading skills and application of reading strategies. Students will be expected to analyze and synthesize materials at an appropriate reading speed as well as formulate critical analysis of readings. Daily discussions, outside readings, written assignments and examinations are required. A CASAS score of 221-256 and writing assessment are used for placement. Students with an end quarter CASAS score of 236 and above, and a grade of A may qualify for Read 88 or College Level Reading. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions policy, which is available in the High School Programs office.

**ABE 028 ABE Advanced Writing** 5 Credits
The course focus is on organizing and presenting information to serve a specific purpose. Graphic organizers are routinely used to generate ideas. Students use a variety of sentence types and transition words to organize ideas into logical paragraphs with main ideas and supporting details. Students work on editing skills and observe writing conventions of grammar, spelling and sentence structure. This course includes daily discussion, individual and group writing activities, examinations and homework. This course is designed to prepare students for a successful transition to college-level courses and to develop the behaviors and values relevant to success in higher education and the labor market. Students who successfully complete this course will earn up to three High School 21 credits in English. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction. Prerequisite: CASAS score of 221 or above and writing sample. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

**ABE 029 ABE Occupational Education** 1 - 5 Credits
This course is designed to assist students in determining their personal, educational and occupational goals by identifying marketable skills and exploring the current labor market. Students who successfully complete this course will earn a High School 21 credit in Occupational Education; students can earn an additional credit in English if they demonstrate the requisite competencies in reading and writing. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

**ABE 031 ABE United States History and Government and the Arts** 1 - 9 Credits
This course is designed for students seeking an adult high school diploma through the High School 21 Program, students studying for the GED® exam, and students seeking educational enrichment. In this course, students will investigate US History and Government through a variety of multimedia, reading, writing, fine art, and music. Students will respond to a wide variety of themes, by era in American History, beginning with the American Revolution through the development of our modern government, from the 1600s to the present. The content will examine the pathway and the development of the modern day culture, democracy and the federal government. Students who successfully complete this course could earn High School 21 credit in American History/Government and fine arts. Students can earn additional credit if they demonstrate the requisite competencies in reading and writing. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction. Prerequisite: CASAS score of 190 or above. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

**ABE 032 ABE HS 21 Portfolio Class** 1 - 2.5 Credits
ABE HS 21 Portfolio classes are self-paced computer classes offered in a variety of learning modalities - including face-to-face, hybrid and online. Portfolio classes are conducted using Canvas. This competency based course allows students to work at their own pace and is designed to prepare students for a successful transition to college-level courses and to develop the behaviors and values relevant to success in higher education and the labor market. Prerequisite: HS 21 Transcript Evaluation: Score under 246 or placement in basic skills program. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) eligibility or Underage Admissions Policy, which is available in the High School Programs office.

**ABE 033 ABE Washington State History and the Arts** 1 - 5 Credits
This course is designed for students seeking an adult high school diploma through the High School 21 program, students studying for the GED® exam, and students seeking educational enrichment. In this course, students will investigate Washington state history and government through a variety of multimedia, reading, writing, art, and music. Students will get a foundational overview of Washington state, its history and government, beginning with the geographical location and features, exploration and settlement, statehood and the structure of government and culminating in a project to be submitted to the HS 21 portfolio to demonstrate competency. Students who successfully complete this course earn HS 21+ credit for the Washington State History requirement. Students can earn additional credit if they demonstrate the requisite competencies in reading and writing. WAC 180 51-061. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) Eligibility or Underage Admissions Policy, which is available in the High School Programs office.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
**ABE 052 Writing Skill Building** 1 - 4.5 Credits
Prepares the ABE/ESL student for pre-college courses. Focuses on topics which parallel those covered in English 077 and English 097, including composition and organization of a well-developed paragraph, including sentence structure, grammar, and mechanics. Students will improve online computer skills. Online work emphasizes reading in order to expand background knowledge and build vocabulary. Prerequisite: CASAS score of ESL 211 or above or CASAS score of ABE 200 or above.

**ABE 066 Basic e-Learning** 1 - 10 Credits
This course is designed for adult basic education students at all levels of literacy competency. This e-learning course familiarizes beginners with the basic operation and navigation of the computer, utilizes office programs for college writing and occupational applications, enhances basic communication skills using e-mail, helps students gain basic keyboarding skills, and become competent using work-related computer forms. Students will be prepared to use the computer as a tool to continue their education and obtain, or retain employment.

**ABE 067 Advanced e-Learning** 1 - 9 Credits
This course is an introduction to vocational and technical skills that are necessary to become (1) employable in the changing world of technology, (2) successful in education and employment by utilizing technology, (3) competitive in technology for today's society. Prerequisite: Students must have knowledge and basic skills using a computer, accessing the Internet including email and utilizing software programs to include Microsoft Windows, Word, Excel, and PowerPoint. Students are required to take the Orientation to Canvas before beginning the Basic eLearning classes.

**GED 024 GED ® Skill Building** 1 - 10 Credits
The focus of instruction in this course is to strengthen reading, writing, problem solving, computational skills, and employability skills for individuals whose entrance assessment does not place them in GED®-025. This class will provide lecture, group work, individual work, and hands on learning with practical application to GED® and individual career and academic goals. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) Eligibility or Underage Admission Policy, which is available in the High School Programs Office. Prerequisite: CASAS Score below 235.

**GED 025 GED ® Preparation** 1 - 10 Credits
The focus of instruction in this course is to strengthen reading, writing, mathematics, problem solving, employment, and computational skills to successfully complete the official GED ® examinations. This class will provide lecture, group work, individual work, and hands-on learning with practical application to GED ®, and individual career and academic goals. All students under 19 years of age must have a signed release from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Alternative Education Program (AEP) Eligibility or Underage Admission Policy, which is available in the High School Programs Office. Prerequisite: Students have credits placing them at 11th or 12th grade, and/or score of 236 or above on a CASAS assessment.

**Adult Basic Education/ELA**

**ELA 001 Educational Interview** 1 Credit
Learner-focused college readiness course designed to provide English Language Acquisition (ELA) learners with an understanding of college culture, learning needs and goal setting. The course is offered with students one-to-one, in small or large groups, or in a combination of these configurations. Student can register for three consecutive 1-credit courses. The course must meet for at least 10 hours per quarter to earn one credit. State-mandated assessment as well as the college’s registration processes are included. Course has fully developed modules of instruction and is offered as a computer enhanced course.

**ELA 005 ELA Foundations** 1 - 12 Credits
This foundational skills course is directed toward fostering students’ understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. The skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. In this course students will achieve foundational reading skills anchors as specified by the College Career and Readiness Standards for Adult Education produced by U.S. Department of Education Office of Vocational and Adult Education. Prerequisite: Placement by CASAS of 185, oral screen, or instructor permission.

**ELA 010 ELA A** 1 - 12 Credits
This is an integrated course for beginning English Language Acquisition (ELA) students. In the pursuit of reaching higher educational needs, students improve reading, writing, speaking, listening, grammar, basic math, and digital literacy skills in real life contexts including identifying job and work-related abilities. This course is informed by the College Career and Readiness Standards for Adult Education produced by U.S. Department of Education Office of Vocational and Adult Education and is not limited to the outcomes below. Upon successful completion of the course, the successful ELA A student will reach the level of “proficient” as listed in the College and Career Readiness rubrics. Formerly ESL 010. Prerequisite: Placement by CASAS of 186-200.

**ELA 014 ELA Communications** 1 - 5 Credits
In this course, ELA students improve their ability to communicate in English in personal, social, and workplace environments, and acquire academic skills to advance in college and career pathways. Upon successful completion of the course, the successful student will achieve foundational reading, speaking and listening, and language anchors level A informed by the College Career and Readiness Standards for Adult Education produced by the U.S. Department of Education Office of Vocational and Adult Education. Prerequisite: CASAS placement score of 210 and below or instructor recommendation.

**ELA 015 Communication** 1 - 5 Credits
Designed to meet the needs of students who speak with difficulty in familiar settings either face-to-face or in brief telephone conversations. Focus is on developing vocabulary, word choice, register, pace and gesture in order to increase effectiveness of communication. Formerly ESL 015. Prerequisite: CASAS placement score of 211 and above.

For the most current information see: [WWW.WWCC.EDU](http://www.wwcc.edu)
ELA 027 ELA Advanced Reading  5 Credits
This class develops reading techniques for advanced ELA students through focusing on the reading of pre-college textbooks and academic discussion of literature. This course helps to improve comprehension skills, critical reading skills and application of reading strategies used to increase comprehension. Students will be expected to analyze and synthesize materials at an appropriate reading speed as well as formulate critical judgments of readings. Daily discussions, outside readings, written assignments and examinations are required. Formerly ESL 027. Prerequisite: CASAS score of 221-236 and writing assessment. Students with a CASAS score of 236 and above, and a grade of A or B may qualify for Read 88 and College Level Reading.

ELA 028 ELA Advanced Writing  5 Credits
Course focus is on organizing and presenting information to serve a specific purpose. Graphic organizers are routinely used to generate ideas. Students use a variety of sentence types and transition words to organize ideas into logical paragraphs with main ideas and supporting details. Students work on editing skills and observe writing conventions of grammar, spelling and sentence structure. This course includes daily discussion, individual and group writing activities, examinations and homework. This course is designed to prepare students for a successful transition to college-level courses and to develop the behaviors and values relevant to success in higher education and the labor market. Students who successfully complete this course will earn up to three High School 21 credits in English. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction. Prerequisite: CASAS Reading 221 or above and writing assessment.

ELA 030 ELA B  1 - 11 Credits
This is an integrated course for lower-intermediate English Language Acquisition (ELA) students. In the pursuit of reaching higher educational needs, students improve reading, writing, speaking, listening, grammar, basic math, and digital literacy skills in real life contexts including identifying job and work-related abilities. This course is informed by the College Career and Readiness Standards for Adult Education produced by the U.S. Department of Education Office of Vocational and Adult Education and is not limited to the outcomes below. Upon successful completion of the course, the successful ELA B student will reach the level of “proficient” as listed in the College and Career Readiness rubrics. Prerequisite: Placement by CASAS of 201-221.

ELA 031 ELA United States History and Government and the Arts  1 - 9 Credits
This course is designed for students seeking an adult high school diploma through the High School 21 Program, students studying for the GED® exam, and students seeking educational enrichment. In this course, students will investigate US History and Government through a variety of multimedia, reading, writing, fine art, and music. Students will respond to a wide variety of themes, by era in American History, beginning with the American Revolution through the development of our modern government, from the 1600s to the present. The content will examine the pathway and the development of the modern day culture, democracy and the federal government. Students who successfully complete this course could earn High School 21 credit in American History/Government and fine arts. Students can earn additional credit if they demonstrate the requisite competencies in reading and writing. WAC 180 51-061 CASAS post-test will be given after 45 hours of instruction. Prerequisite: CASAS score of 190 or above.

ELA 032 ELA HS 21 Portfolio Class  1 - 2.5 Credits
ABE HS 21 Portfolio classes are self-paced computer classes offered in a variety of learning modalities – including face-to-face, hybrid and online. Portfolio classes are conducted using Canvas. This competency based course allows students to work at their own pace and is designed to prepare students for a successful transition to college-level courses and to develop the behaviors and values relevant to success in higher education and the labor market. Prerequisite: HS 21 Transcript Evaluation: Score under 246 or placement in basic skills program.

ELA 060 Multi-Level ELA  1 - 13.5 Credits
Offered for ELA students in levels I-VI. Student-centered instruction designed to develop language proficiency in reading, writing, speaking, listening and basic numeracy. Skills are developed in the context of everyday life situations with the goal of communicative and cultural competence. Technology is used to enhance learning opportunities as available.

ELA 065 Basic e-Learning for ELA  1 - 5 Credits
This course is designed for ELA students at all levels of English proficiency. Students gain information literacy skills, media literacy skills, and information, communication, and technology literacy skills.

ELA 066 e-Learning for ELA  1 - 9 Credits
Designed for ELA students at all levels of English competency. Students use a variety of computer programs and the Internet to improve language, grammar, vocabulary, study skills, and computer skills.

ELA 070 Special Purposes in ELA  1 - 11 Credits
Opportunity for students to pursue special interests and topics in ELA.

AGRICULTURE - AG-BUSINESS

AGRI 102 Farm Records and Analysis  5 Credits
Introduction to the principles of agri-business management. Identifies a practical system of farm record keeping with analysis of these records.

AGRI 103 Intro to Precision Ag for Farm Management  5 Credits
Introduction to precision agriculture application on the farm using industry specific software. Entering records, creating databases and developing field maps will be included as well as gathering and inputting yield and soils data.

AGRI 108 Computers in Agriculture  5 Credits
Introduction to microcomputer applications using Microsoft Office software. Hands-on experience including: word processing, spreadsheets, graphical presentations, databases, operating systems, and basic internet access. Student may not earn credit for both AGRI 108 and CS 110.

AGRI 191 Cooperative Work Experience  1 - 25 Credits
Opportunity to work in jobs directly related to the agriculture industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

AGRI 192 Cooperative Seminar  2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success.
AGRI 201 Microeconomics in Agriculture (SS)  5 Credits
Introduction to microeconomics as applied to production, consumption, and marketing issues in the business and production sectors of the economy. Topics include supply/demand theory, consumer choice theory, production theory, and costs of production. Student may not earn credit for both AGRI 201 and ECON& 201. Formerly AGRI 202.

AGRI 210 Fundamentals of Selling and Customer Service  3 Credits
Structure and background of personal selling, concepts of human relations, and communications as they relate to a sales presentation. The objective is to build good skills in selling and providing service to the customer.

AGRI 211 Small Business Management  5 Credits
Introduction to management theory as applied to small business firms. Course will include role of small business in the economy, forms of business ownership, main causes for business failure and success, and the elements of a business plan.

AGRI 220 Introduction to Finance  5 Credits
Tools and concepts useful to making financial management decisions in business firms will be discussed. Topics include: the role of national economic policy and the ways in which different financial institutions are operated.

AGRI 221 Introduction to Food and Agricultural Markets  5 Credits
Overview of the marketing system for agricultural commodities. Topics include the effect of public policy, the role of commodity futures in the marketing system, price and price analysis, and marketing strategies. Recommended: One quarter economics.

AGRI 222 Agricultural and Water Policy [SS]  5 Credits
This course covers goals, methods, and results of government programs and policies in the agriculture and natural resource industries. This includes the study of international trade policies, domestic farm policies, food safety and quality issues, resource issues and how these affect agribusiness, locally, nationally and internationally. The course will also cover western water policy with an emphasis on Washington State water policy, water rights and how these policies affect natural resources and agribusiness. Recommended: One quarter economics. Students may not earn credit for both AGRI 222 and POLS 222.

AGPR 105 Weed Biology and Identification  5 Credits
Introduction in weed science to provide an understanding of the principles and methods of controlling weeds, use and development of herbicides, methods of application and rate calculation, sprayer components and calibration, and practical knowledge of plant and seed samples of weeds common to the Pacific Northwest.

AGPR 110 Livestock Production  5 Credits
Introduction to the livestock industry and its importance to the U.S. economy. Animal products for consumers, biological principles, and management practices will be discussed.

AGPR 112 Feeds and Feeding  5 Credits
Addresses common feeding practices and nutrient characteristics of animal feeds. Topics include ration formulation and ration requirements for cattle, sheep, hogs, and horses.

AGPR 113 Cultivated Plants  5 Credits
Provides a practical understanding of plant anatomy, morphology, and growth of agriculture crops.

AGPR 114 Plant Physiology  5 Credits
Provides a practical understanding of plant structure, function and physiological processes involved in growth and development.

AGPR 115 Animal Health and Disease  5 Credits
Basic information on animal health and disease prevention. Topics include fundamentals of the nature of disease, nutrition, sanitation, disinfection, immunization, and basic husbandry practices.

AGPR 116 Livestock Selection and Carcass Evaluation  5 Credits
Principles of Livestock and Carcass evaluation for the purposes of selecting meat animals in production scenarios. The basic method and procedure for evaluating carcass characteristics of cattle, hogs, and sheep. Information on carcass quality and yield. The course will also include evaluating live animals before processing, and seeing the carcass of that animal in the cooler. Class material will also cover selection of females for producing meat animals.

AGPR 120 Agricultural Chemistry  5 Credits
Fundamental course in chemistry which overviews the basics of inorganic, organic, and biochemistry with applications to agriculture and other applied science fields. Recommended: high school chemistry or equivalent.

AGPR 121 Biomass Feedstock Management  3 Credits
Learn about growing, harvesting, storage, processing, and utilization of biomass such as: manure, forest slash, food waste, agriculture residues, wood processing residues, and dedicated energy crops (e.g. oilseeds, grasses, hybrid poplar, etc.). Review technologies that can utilize biomass to sequester carbon and generate electricity, heat, transportation fuels, recovered nutrients/soil amendments, reclaimed water, animal feed, bio-chemicals, and other byproducts. Lay the groundwork for soil fertility studies for oilseed crops and field corn amended with biochar, compost, and/or digestate from an anaerobic digester. Recommended for students working towards Biomass Feedstock Management Certificate, Plant and Soil Science, and/or Precision Agriculture degree(s).
AGPR 135 Mechanization of GIS 3 Credits
This course is an introduction to the practical applications of Geographic Informational Systems (GIS) and Global Positioning Systems (GPS) in agriculture. Content will include reasoning, methods, and technology used for data collection, and how that data is further applied through integration with mechanized equipment.

AGPR 139 Agriculture Safety 3 Credits
This course is a synopsis of safety practices and worker protections in the agricultural workplace. Topics will include safety in and around shops, on farm vehicles, using farm equipment, and safe practices around rotational and directional moving equipment. Personal protection equipment, pesticide standards, and MSDS sheets will be included. Safety standards for agriculture identified by the Washington State Administration codes(WAC 296-307) will be covered.

AGPR 140 Agriculture Safety and Pesticides 5 Credits
This course is a synopsis of safety and worker protection in the agricultural workplace. Topics will include safety in and around shops, on farm vehicles, using farm equipment, and safe practices around rotational and directional moving equipment. Personal protection equipment, pesticide standards, and MSDS sheets will be included. Safety plans will be analyzed and evaluated for completeness. It emphasizes agricultural pesticide uses and applications, chemical safety, and waste hazards associated with pesticides and fertilizer use. This course will prepare the student to become a licensed pesticide applicator with the state of Washington. Safety standards for agriculture identified by the Washington State Administration codes(WAC 296-307) will be covered.

AGPR 170 Precision Equipment Installation and Troubleshooting 4 Credits
This course is an introduction to precision ag field equipment. Tracking, auto steering, and precision spraying equipment will be installed, calibrated, troubleshot and repaired. Hands on labs will have students in the field operating these types of equipment. Data acquisition, data analysis and compilation will also be covered.

AGPR 199 Special Topics 1 - 5 Credits
Study and train to meet established local needs in the agri-science industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

AGPR 201 Basic Soil Science [NS] 5 Credits
Provides an understanding of soil structure and composition as related to temperature, water, and other environmental controls. Emphasizes studying soils from a land use and management perspective. Lab work required.

AGPR 202 Soils Fertility and Management 5 Credits
Study of macro- and micronutrient uptake and utilization by plants and the fertilizer products used to supply different nutrients. Topics include soil conservation, erosion control practices, and utilization of soil survey reports. Prerequisite: AGPR 201 or instructor permission.

AGPR 215 Field Crop Production 5 Credits
Production and management of field crops designed to provide the most current information in the production and management of agronomic crops important to the economy of the Pacific Northwest.

AGPR 224 Pasture and Range Management 5 Credits
A study of the proper use and management of forage producing lands using grazing animals as a method to harvest and utilize this resource. This class will also focus on the economics of grazing livestock and the environmental sustainability issue surrounding the topic.

AGPR 230 Plant Diseases and Insects 5 Credits
Introduction to the identification, life cycles, and control of insects and diseases common to crops in Washington. Focuses on the fundamentals of entomology and plant pathology, not on specific problems and their control in a given crop. Formerly AGRI 215.

AGPR 245 Robotics and Drone Technologies 3 Credits
This course is an introduction to robotics and drone technologies in regards to precision agricultural applications. Autonomous and non-autonomous robots will be discussed. The laws of physics will be applied to the use of drones and how those laws affect the flying and/or driving of these apparatus. Wheeled and flying drones will be assembled, programmed and operated. Drones will also be programmed to perform duties using inputs and outputs from a multitude of different types of sensors.

AGPR 247 Beef Cattle Production 5 Credits
Study of the economics and management strategies for raising and marketing the various types and classes of beef cattle.

AGPR 252 Leadership 2 Credits
Explore issues related to effective workplace relationships and applying leadership skills to promote personal development. Students will also be required to participate in the activities of the Ag Technology club.

AGPR 254 Robotics and Drone Technologies 3 Credits
This course is an introduction to robotics and drone technologies in regards to precision agricultural applications. Autonomous and non-autonomous robots will be discussed. The laws of physics will be applied to the use of drones and how those laws affect the flying and/or driving of these apparatus. Wheeled and flying drones will be assembled, programmed and operated. Drones will also be programmed to perform duties using inputs and outputs from a multitude of different types of sensors.

AGPR 274 Special Projects 1 - 15 Credits
Project-oriented experiences in the area or applications not covered in the standard agriculture science curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

See Agriculture - Plant and Soil Science DEPARTMENT courses

**Allied Health and Safety Education**

HO 027 Nurse Delegation 0.9 Credit
Outlines the caregiver’s educational requirements for Nurse Delegation in community-based long-term care settings. This course meets Washington State DSHS/ADSA requirements for training in Nurse Delegation. Students must be a NA-C, NA-R, or be co-enrolled in the Nursing Assistant program to take this course. Students completing this course will receive a training certificate.

HO 100 Nursing Assistant 7 Credits
This course prepares the student with the skills and behaviors needed for working under the direction of licensed medical professional in administering basic nursing care to patients. Students who successfully complete the classroom, laboratory, and clinical requirements will be eligible to take the Certified Nursing Assistant Exam (NACES). This course is approved by the State of Washington Department of Health. An application is required and available in the Allied Health Department or by calling 527-4589. Prerequisite: READ 088 or CASAS Level 5. Co-requisite: HO 110 HIV/AIDS.

For the most current information see: www.wwcc.edu
### Allied Health and Safety Education

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HO 100A Nursing Assistant-Part A</td>
<td>4 Credits</td>
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<tr>
<td>This is the first half of a 2-course sequence for HO 100 Nursing Assistant. This course prepares the student with the skills and behaviors needed for working under the direction of licensed medical professionals in administering basic nursing care to patients. Students who successfully complete the classroom and clinical requirements in both HO 100A and HO 100B will be eligible to apply for and participate in the Certified Nursing Assistant Exam. This course is approved by the State of Washington Department of Health. Prerequisite: READ 88 or CASAS Spanish Proficiency Test.</td>
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| HO 100B Nursing Assistant-Second Half | 3 Credits |
| This is the second half of a 2-course sequence for HO 100 Nursing Assistant. This course prepares the student with the skills and behaviors needed for working under the direction of licensed medical professionals in administering basic nursing care to patients. Students who successfully complete the classroom and clinical requirements in both HO 100A and HO 100B will be eligible to apply for and participate in the Certified Nursing Assistant Exam. This course is approved by the State of Washington Department of Health. Prerequisite: HO 100A. |

| HO 101 Survey of Healthcare Careers | 2 Credits |
| This course is both an exploration of potential healthcare-related fields of study and how to succeed in preparing for specific healthcare professional programs. A review of educational requirements and availability of programs leading to starting a career as a healthcare professional will be conducted. Profiles of successful health science students will be examined, with a focus on communication, problem solving and survival skills in training and in the workforce. |

| HO 102 Nursing Assistant/Advanced | 1 - 5 Credits |
| An advanced training course designed for Nursing Assistants who have completed the basic course. Classroom, lab, and clinical components will prepare the student to work in a variety of settings. |

| HO 104 OTEP Training | .1 - 1 Credit |
| Satisfies the continuing education requirement for EMTs and EMRs to remain certified in Washington State. Courses cover the state mandated topics and are offered throughout the county under the direction of the Medical Program Director, Walla Walla County Emergency Medical Services. This curriculum is approved by the state and is offered in Walla Walla County and throughout the South Central Region of Washington. Students must be certified EMT or EMR to enroll. |

| HO 106 Phlebotomy Technician Program | 9 Credits |
| Prepares the student to perform competently and safely in a clinical setting as a phlebotomy technician. The student learns to collect, handle, transport, and process blood specimens for analysis. Upon successful completion of the course, the student will qualify to apply for WA DOH MA-Phlebotomist (MA-P) certification and will be eligible to sit for examination for credentialing with the American Society of Clinical Pathologists. Recommended: READ 088. |

| HO 109 Bilingual Spanish/English Writing in the Workplace | 3 Credits |
| Designed to help students attain skills for Spanish/English language writing. Provides a foundation for Fundamentals of Medical Translation, which leads to preparation for Washington State Translator Certification Exam. Prerequisite: ENGL& 101 or WRITE 100 and Bilingual English-Spanish Proficiency Test. |

| HO 110 HIV/AIDS Education | .7 Credit |
| HIV/AIDS Education provides the healthcare professional with mandatory instruction involving information/knowledge associated with HIV/AIDS, Hepatitis, tuberculosis, and related diseases. The seven-hour course presents the six state-required topics of etiology and epidemiology, transmission and infection control, testing and counseling, clinical manifestations and treatment, legal and ethical issues, and psychosocial issues. Students completing this class will receive a certificate documenting the mandatory training. |

| HO 120 Emergency Medical Responder (EMR) | 5 Credits |
| Provides the student with basic skills necessary to provide the initial emergency care in a pre-hospital setting to victims of accidents or illness. Emergency Medical Responders are initial caregivers in an emergency situation and have knowledge and skill level above basic first aid and below the Emergency Medical Technician. Prerequisite: Instructor permission. |

| HO 130 Emergency Medical Technician Program | 10 Credits |
| Instruction in delivering proper emergency care to the sick and injured in a pre-hospital setting. The overall goals are to save lives, reduce complications, and combine effective interpersonal communication with medical knowledge and skills for every patient. The course follows the DOT EMT curriculum with the addition of Washington State objectives as required by the Washington State Department of Health, Division of Emergency Medical and Trauma Services. Students completing this course may participate in the National Registry of Emergency Medical Technicians (NREMT) EMT examination and upon affiliation with a WA State approved EMS agency be certified by WA DOH as an EMT. Prerequisite: Acceptance to the EMT Program. |

| HO 135 Advanced EMT | 9 Credits |
| This course is advanced training for current EMTs seeking additional credentialing by WA DOH and complies with DOT and WA DOH required curriculum. Healthcare topics and continuing education are offered as they relate to the direct care provider/Advanced EMT. Instruction will be given in starting IVs and airways, endotracheal intubation, in-depth patient assessment, and administering aspirin, albuterol, dextrose, epinephrine, naloxone, and nitroglycerin chemicals. Prerequisite: At least one year service as EMT and affiliation with local fire department or EMS agency. Instructor permission required. |

| HO 142 Survey of Patient Navigation | 1 Credit |
| This survey course introduces the interrelationships and intricacies of the very complex health and community services system, and identifies the role of the patient care navigator in assisting the patient to effectively maneuver within this system. This is the first of a seven course series. |

| HO 143 The Patient Experience | 1 Credit |
| This course focuses on the whole patient, including cultural considerations, barriers to optimal healthcare, and the impact of chronic illness, and discusses promoting individual wellness using defined advocacy and engagement techniques. This is the second course of a seven course series. Recommended: HO 142. |

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HO 144 The Medical Team 1 Credit
This course introduces the interrelationship and intricacies of the very complex health and community services system, and identifies the role of the patient care navigator in assisting the patient to effectively maneuver within this system. This is the third course of a seven course series. Recommended: HO 143.

HO 145 The Whole Patient 1 Credit
This course introduces the interrelationship and intricacies of the very complex health and community services system, and identifies the role of the patient care navigator in assisting the patient to effectively maneuver within this system. This is the fourth course of a seven course series. Recommended: HO 144.

HO 146 The Communication Link 1 Credit
This course introduces the interrelationship and intricacies of the very complex health and community services system, and identifies the role of the patient care navigator in assisting the patient to effectively maneuver within this system. This is the fifth course of a seven course series. Recommended: HO 145.

HO 147 The Navigator as Coach 1 Credit
This course introduces the interrelationship and intricacies of the very complex health and community services system, and identifies the role of the patient care navigator in assisting the patient to effectively maneuver within this system. This is the sixth course of a seven course series. Recommended: HO 146.

HO 148 The Navigator Skills 1 Credit
This course introduces the interrelationship and intricacies of the very complex health and community services system, and identifies the role of the patient care navigator in assisting the patient to effectively maneuver within this system. This is the seventh course of a seven course series. Recommended: HO 147.

HO 150 Healthy Lifestyle 2 Credits
Provides an insightful overview of healthy lifestyles. Students learn about diabetes, obesity, cholesterol, effects of smoking, and other aspects of modern living. Learn current information related to influenza (the flu) and the common cold. This course is intended for both healthcare providers and the general public.

HO 161 Basic Arrhythmias 1.7 Credits
Introduction to both normal and abnormal cardiac rhythms. A review of cardiac anatomy and physiology followed by general information regarding rhythm strips will be part of the course. The remainder of the course will focus on recognition of the common arrhythmias. Recommended: BIOL& 251 or previous medical experience.

HO 162 12 Lead ECG Interpretation 1 - 1.2 Credits
Introduction to interpretation of the 12 lead ECG. Topics include axis deviation, Bundle Branch blocks, Acute M.I. patterns, and Acute Coronary Syndromes. Recommended: previous training in 3 lead ECG or completion of HO 161.

HO 164 Spanish for the Medical Experience 2.0 Credits
Enables professionals working in healthcare settings to offer immediate help to Spanish-speaking patients while waiting for Language Access Services. Emphasis is on basic, practical language needed to communicate with Spanish speaking patients and their families at the hospital or doctor's office, on the telephone, or at the patient's home.

HO 169 Suicide Prevention Training .6 Credit
This interactive course is for healthcare professionals responsible for the care and safety of those patients/clients at elevated risk for suicidal behaviors in all settings and across the age span. The course includes training in best practices for the assessment and management of adult, youth and/or veteran suicide risk as required by WA State DOH & WAC regulation. Six clock hours of continuing education credit may be obtained upon completion.

HO 172 Pharmacology 2 Credits
An overview of the principles of pharmacology and general drug classifications and formulations. Legal aspects of medication administration will be discussed. The students will be introduced to the care and handling of many medications and receive an awareness of drug related problems. This class is open to Medical Assisting students, Nursing students, and other interested health professionals.

HO 174 Transcultural Competency for Health Professionals 2 Credits
An introduction to basic concepts of transcultural competency in Nursing and Allied Health with a focus on the applied aspects of cultural difference. Examines how different cultural communities relate to health care in terms of behavior, attitude, and policy and how these are transformed into practices and standards in the medical community, impacting quality of service and producing a given outcome. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097; or instructor permission.

HO 176 Spirituality in Healthcare 2 Credits
Spiritual care is within the capability and scope of responsibility of all healthcare professionals. Students will explore the importance of spirituality in providing whole person care. Classes will include didactic and experiential learning. Evaluations of students will be by student engagement with the material and weekly written reflections on class content. Students will complete the course with tools and resources for promoting spiritual well-being for their patients and themselves.

HO 180 Fundamentals of Spanish/English Medical Translation 1 Credit
Designed to help students attain the skills for Spanish/English language translation to be used in health care settings. Students will participate in written and oral translation methodologies. This course is both a foundation for HO 182 Fundamentals of Interpreting II and provides preparation for the Washington State Translator Certification Exam. Prerequisite: HO 109.

HO 181 Fundamentals of Medical Interpreting I 7 Credits
Designed to help students attain the skills for Spanish/English language interpretation to be used in healthcare settings. Students will participate in written and oral interpretation methodologies. This course is a foundation for Fundamentals of Interpreting II which leads to preparation for the Washington State Spanish Medical Interpretation Certification Exam. Prerequisite: BUS 280 and instructor permission.

HO 182 Fundamentals of Medical Interpreting II 12 Credits
Builds on the concepts from Fundamental of Interpreting I. Emphasis is placed on Spanish medical terminology relevant to healthcare settings and the general rules that apply to speaking the Spanish language. Students will participate in sight translation and oral interpretation methods. Thirty hours of practicum are required at an arranged
healthcare facility. This course prepares students to take the Washington State Spanish Medical Interpretation Certification Exam. Prerequisite: HO 181. Instructor permission required.

**HO 189 Social Services Interpreting**  2 Credits
Designed to help students attain the skills for Spanish/English language interpretation to be used in Social Service settings. Students will participate in written and oral interpretation methodologies. This course is a foundation for the preparation for the Washington State Social Service Interpreter Exam. Prerequisite: HO 181.

**HO 199 Special Topics**  1 - 5 Credits
Study and train to meet established local needs in the healthcare industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

**HO 266 Physical Assessment**  2 Credits
Designed as a review for the practicing nurse or allied health professional, or as skills reinforcement for the student nurse. Practical application of clinical physical assessment skills will be the major focus of this course. Content will begin with a technique for history-taking and then assess selected major body systems. Prerequisite: BIOL& 251 and BIOL& 252 or instructor permission.

**HO 279 Medical Vocabulary**  2 Credits
This course is an introduction to basic medical vocabulary. It provides the student a systematic approach to the language used in the health care system beginning with root words, prefixes and suffixes, and continuing on with the specific terms relating to normal and abnormal conditions of the body. This course is offered as needed, and may be scheduled in Fall, Winter, Spring, and Summer quarters.

**HO 297 Special Projects**  1 - 10 Credits
Project-oriented experiences in the area or applications not covered in the standard allied health and safety education curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

### American Sign Language

**ASL& 121 American Sign Language I [H]**  1 - 5 Credits
Introduction to American Sign Language including basic sign language vocabulary and deaf culture. Students will learn to communicate in basic conversation with individuals who are deaf or have impaired hearing. From a variety of media, students will be exposed to techniques and strategies used by the profoundly deaf and the hearing-impaired to cope with life functions. Formerly COMM 107, American Sign Language I.

**ASL& 122 American Sign Language II [H]**  1 - 5 Credits
This is the second course in a series introducing the basics of American Sign Language (ASL). This expands on the student’s knowledge of the ASL vocabulary and grammar. The deaf culture is explored in relation to the use of ASL for communication. Emphasis is on vocabulary for every day communication, proper grammar, facial expression, and the tone of voice created through specific motions. Prerequisite: C- or better in ASL& 121 or equivalent course. Formerly COMM 108, American Sign Language II.

**ASL& 123 American Sign Language III [H]**  1 - 5 Credits
Continuation of ASL& 122. This is the third course in a series of three courses that introduces the basics of American Sign Language (ASL). In this course students will learn appropriate ways to express emotion and opinion. Students will sign for the class from a creative work: poetry, a play, an excerpt from a novel, or some other written work approved by the instructor. Prerequisite: C- or better in ASL& 122 or equivalent course. Formerly COMM 109, American Sign Language III.

### Anthropology

**ANTH& 100 Survey of Anthropology [SS]**  5 Credits
Introduction to the study of anthropology and various cultures around the world. Provides a brief study of the four main subfields of anthropology: Biological Anthropology, Archaeology, Cultural Anthropology, and Linguistics. Recommended: READ 088. Formerly ANTH 101, Intro to Anthropology.

**ANTH& 206 Cultural Anthropology [SS]**  5 Credits
Holistic and comparative study of culture in selected communities around the world which illustrate unity and diversity in human culture. Recommended: READ 088. Formerly ANTH 202, Cultural Anthropology.

### Art

**ART& 100 Art Appreciation [H]**  5 Credits
An introduction to the history, vocabulary, purposes, themes, styles, methods, and materials of art. Formerly ART 100, Art Appreciation.

**ART& 100H Art Appreciation-Honors [H]**  5 Credits
An introduction to the history, vocabulary, purposes, themes, styles, methods, and materials of art. Formerly ART 100, Art Appreciation.

**ART 101 Drawing I [HP]**  4 Credits
Introductory course which explores the basic techniques of drawing using a variety of media such as charcoal, pen and ink, oil pastel, and mixed media. Appreciation and study of drawings by major artists are also included. Daily assignments and lab hours required. Materials to be purchased.

**ART 102 Drawing II [HP]**  4 Credits
Intermediate course which explores the basic techniques of drawing using a variety of media such as conte crayon, charcoal, pen and ink, oil pastel, and mixed media. Appreciation and study of drawings by major artists are also included. Daily assignments and lab hours required. Materials to be purchased. Prerequisite: ART 101.

**ART 103 Drawing III [HP]**  4 Credits
More advanced drawing course for students who are interested in drawing the human figure. Continued study of line, shape, value, texture, and color with emphasis on composition of life drawings. Also an appreciation and study of major artists. Daily assignments and lab hours required. Materials to be purchased. Prerequisite: ART 101 or instructor permission.

**ART 104 Design I (Black and White) [HP]**  4 Credits
An introductory course in which students explore a variety of materials and projects that incorporate basic art vocabulary and principles. Emphasis on individual expression and freedom to create within structured assignments; focus on 2-dimensional media in black and white. No previous experience necessary.
ART 105 Design II (Color) [HP]  4 Credits
An introductory course in which students explore a variety of materials and projects that incorporate basic art vocabulary and principles. Emphasis on individual expression and freedom to create within structured assignments; focus on 2-dimensional media in black and white and color.

ART 107 Fundamentals of Digital Art [HP]  5 Credits
An introductory course in which students explore the practical uses and creative possibilities of digital media through Adobe Illustrator and Adobe Photoshop. Emphasis is on understanding the basic tools and techniques for individual expression and visual problem-solving. No experience necessary.

ART 111 Introduction to Studio Art Practices  4 Credits
Basic studio/lecture format introducing a variety of the fine art studio techniques, processes, tools and materials commonly used by working artists: painting, drawing, printmaking, design (with various emphasis; digital, graphic, etc.), ceramics, sculpture, calligraphy, photography. Five of these studio areas will be chosen for the quarter. Emphasis on craftsmanship and visits to local studios.

ART 115 Drawing for Farrier Science [HP]  1 Credit
Visual acuity and technical dexterity are much needed skills for Farrier Science. Through the process/experience of drawing, one develops a greater visual awareness: an understanding between the difference of looking and seeing. Drawing for Farrier Science will utilize formal drawing skills in the depiction of both traditional still-life forms and equine anatomical schematics. Prerequisite: Must be enrolled in the Farrier Science program.

ART 120 Introduction to Ceramics [HP]  4 Credits
An introduction of fundamental skills and methods needed to create a set of two plates, four mugs, two cup and saucer sets, large bowls, lids, and deep footed vases. More decorative techniques will be applied to a greater range of shapes. Participating in the loading and firing of the gas kiln. Personal creativity is always emphasized. Lab hours required and materials to be purchased.

ART 121 Ceramics I [HP]  5 Credits
An introduction of fundamental skills and methods needed to create a variety of ceramics. While many hand building methods are learned, wheel throwing is at the center of this class. The emphasis is on proper wheel throwing techniques to achieve a ten inch cylinder, bowl, and vase. Theory, history, aesthetics, design principles and glaze making are all discussed. Creating rich, colorful and varied decorative surfaces are demonstrated at the green ware stage while many glazing and firing techniques are explored. Personal creativity is always emphasized. Lab hours required and materials to be purchased.

ART 124 Women Artists in History [D, H]  5 Credits
Explore over forty women artists in the context of their times. Discuss issues of social justice, moral conflicts, cultural expectations, institutional obstacles and limitations. Student may not earn credit for both ART 124 and GWST 124. Recommended: READ 088 or higher.

ART 129 History of Western Art III [H]  5 Credits
Study of art in Europe and the U.S. made during the nineteenth and twentieth centuries. Architecture, sculpture, painting, printmaking and the photo arts, are studied. Influences of the past, combined with the rapid technological and cultural changes of the Modern Age, are explored to develop an understanding of the art of our own times. This course is the third in a three-quarter sequence but may be taken out of sequence.

ART 130 Painting I [HP]  4 Credits
Exploration of the various methods of painting. Emphasis on composition and presentation of acrylic paintings. Also includes appreciation and study of paintings by major artists. Lab hours required and materials to be purchased.

ART 131 Painting II [HP]  4 Credits
Intermediate course for exploration of the various methods of painting. Emphasis on composition and presentation of acrylic paintings. Also includes appreciation and study of paintings by major artists. Lab hours required and materials to be purchased. Prerequisite: ART 130.

ART 132 Painting III [HP]  4 Credits
Advanced course for exploration of the various methods of painting.

ART 133 Painting IV [HP]  4 Credits
Emphasis on composition and presentation of acrylic paintings. Also includes appreciation and study of paintings by major artists. Lab hours required and materials to be purchased. Prerequisite: ART 131.

ART 160 Ceramics I [HP]  5 Credits
An introduction of fundamental skills and methods needed to create a variety of ceramics. While many hand building methods are learned, wheel throwing is at the center of this class. The emphasis is on proper wheel throwing techniques to achieve a ten inch cylinder, bowl, and vase. Theory, history, aesthetics, design principles and glaze making are all discussed. Creating rich, colorful and varied decorative surfaces are demonstrated at the green ware stage while many glazing and firing techniques are explored. Personal creativity is always emphasized. Lab hours required and materials to be purchased.

ART 161 Ceramics II [HP]  5 Credits
This course builds on the fundamentals learned in Ceramics I. The emphasis is on learning more complicated wheel throwing techniques to create shapes suitable for decorative processes such as carving, sgraffito, horsehair, and majolica. New methods will be learned such as creating crackle and spring wire vessels along with learning the lid making process. Hands-on introduction to making glazes, spraying glazes and loading the bisque kiln. Personal creativity is always emphasized. Lab hours required and materials to be purchased.

ART 162 Ceramics III [HP]  5 Credits
This course builds on the fundamentals learned in Ceramics II. The emphasis is on learning more complicated wheel throwing techniques to create shapes suitable for decorative processes such as carving, sgraffito, horsehair, and majolica. New methods will be learned such as creating crackle and spring wire vessels along with learning the lid making process. Hands-on introduction to making glazes, spraying glazes and loading the bisque kiln. Personal creativity is always emphasized. Lab hours required and materials to be purchased.

ART 167 Sculpture I [HP]  4 Credits
Introduction to the theory and application of three-dimensional forms in space using a variety of media such as plaster, wire, steel assemblage, cardboard and wood.

ART 168 Sculpture II [HP]  4 Credits
Intermediate study of theory and application of three-dimensional forms in space using a variety of media such as plaster, wire, steel assemblage, cardboard and wood. Prerequisite: ART 167 or instructor permission.

ART 169 Sculpture III [HP]  4 Credits
Advanced study of theory and application of three-dimensional forms in space using a variety of media such as plaster, wire, steel assemblage, cardboard and wood. Prerequisite: ART 168 or instructor permission.

ART 199 Special Projects  1 - 5 Credits
For intermediate students wishing to expand their knowledge and to develop their skills in the various fine arts media through directed individual studies. Prerequisite: Instructor permission.

ART 230 Painting IV [HP]  4 Credits
Advanced exploration of the various methods of painting. Emphasis on composition and presentation of acrylic painting projects, but students may choose to work with other media. Lab hours required and materials

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to be purchased. Prerequisite: ART 132.

**ART 260 Ceramics and Sculpture I [HP]** 5 Credits
An introduction of fundamental skills and methods needed to form creative and diverse ceramic sculpture. This includes learning coil, pinch, slab, paddle and wheel methods, while theory, history, aesthetics and design principles are all discussed. Also learning how different glazes and firing techniques produce a broad range of beauty. Personal creativity is always emphasized. Lab hours required and material to be purchased.

**ART 261 Ceramics and Sculpture II [HP]** 5 Credits
An introduction of fundamental skills and methods needed to form creative and diverse ceramic sculpture. This includes learning coil, pinch, slab, paddle and wheel methods, while theory, history, aesthetics and design principles are all discussed. Also learning how different glazes and firing techniques produce a broad range of beauty. Personal creativity is always emphasized. Lab hours required and materials to be purchased.

**ART 262 Ceramics and Sculpture III [HP]** 5 Credits
An introduction of fundamental skills and methods needed to form creative and diverse ceramic sculpture. This includes learning coil, pinch, slab, paddle and wheel methods, while theory, history, aesthetics and design principles are all discussed. Also learning how different glazes and firing techniques produce a broad range of beauty. Personal creativity is always emphasized. Lab hours required and materials to be purchased.

**ART 299 Special Projects** 1 - 5 Credits
For advanced students wishing to expand their knowledge and to develop their skills in the various fine arts media through directed individual studies. Students must consult with the instructor before enrolling. Prerequisite: Instructor permission.

**ASTR& 110 The Solar System [NS]** 5 Credits
This course, which includes a lab, examines the formation of our solar system and the nature of our sun and planets and is intended for the student interested in astronomy or in order to fulfill the general education lab science requirements. Topics include the historical development of the science of astronomy. Formerly ASTR 110, The Solar System. Prerequisites: Appropriate placement score or grade of C or higher in MATH 74C or MATH 075; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**ASTR 115 Stellar Astronomy [NS]** 5 Credits
This course, which includes a lab, explores the formation, evolution, and death of stars. Our sun is used as an example of ordinary stars in their middle age. This course is intended for the student interested in astronomy to fulfill the general education lab science requirements. Topics include the birth of stars and the final states they may occupy at their death, extraordinary stars, extremely massive stars, black holes, neutron stars, and white dwarfs. Prerequisites: Appropriate placement score or grade of C or higher in MATH 74C or MATH 075; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**ASTR 120 Galaxies, the Universe and Cosmology [NS]** 5 Credits
This course, which includes a lab, examines current ideas concerning the nature of galaxies and the universe as a whole. This course is intended for the student interested in astronomy to fulfill the general education lab science requirements. Topics include general relativity and curved space-time, black holes, quasars, and The Big Bang model of cosmology. These topics are studied in a descriptive, predominately non-mathematical manner. Prerequisites: Appropriate placement score or grade of C or higher in MATH 74C or MATH 075; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**AMM 100 Introduction to Auto Repair** 1 - 5 Credits
Provides high school students with the basics of automotive maintenance including the identification of vehicle systems and basic diagnostics and repairs. Topics include workplace safety, basic shop procedures, tool identification, proper use of fasteners and precision measurement. Prerequisite: Current high school student and instructor permission.

**AMM 104 Auto Upkeep: Basic Car Care** 1 - 3 Credits
Introduction to auto technician for anyone who is unfamiliar with basic auto maintenance and repair. Topics include vehicle basics, safety, fluids, wheels and tires, changing tires, emergency equipment, tools, brakes, and vehicle shopping tips/tools. The intent is to provide the consumer with the knowledge to make economic decisions and to take preventative measures to enhance owner satisfaction. (The class will not perform major vehicle repairs.) Dress in comfortable work clothes. This class is taught by ASE Certified instructors.

**AMM 105 Auto Technician In-Service** 1 - 3 Credits
Designed to prepare students for the ASE exam. Computer based training which introduces the student to electrical/electronic systems diagnosis. Students will use computer software to simulate use of a digital volt-ohmmeter to practice diagnostic procedures performed on electrical and electronic automotive systems found on today's automobiles. This course is suitable for apprentice and journeyman automotive technicians interested in furthering their understanding of modern automotive electronic systems.

**AMM 145 Auto Related Industry** 6 Credits
Introduction to the automotive repair industry. The student will learn automotive terminology, shop and personal safety, handling and storing of hazardous materials, identification and operation of shop equipment and specialized tools, identification of hand tools, micrometer use and measure given objects within .0005 tolerance and the use of drills, taps and dies. The student will become familiar with all major components of the vehicle. Students will study wheels and tires, theory, diagnosis and service. Students will learn automotive maintenance operations. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisites: AMM 149 and 245.

**AMM 149 Hybrid and Alternative Fuel Vehicles** 2 Credits
Introduction to alternative fuel and hybrid electric vehicles. The student will learn automotive terminology, vehicle safety, handling of high
voltage components and specialized tool and equipment usage. The student will become familiar with all major components of typical hybrid powered vehicles. Emergency procedures on hybrid vehicles will be covered. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisites: AMM 145 and 245.

**AMM 150 Automotive High Voltage Systems**  
2 Credits  
The student will learn high voltage vehicle safety and specialized tool and equipment usage. The student will become familiar with all major components of typical hybrid powered vehicles. Emergency procedures on hybrid vehicles will be covered. The student will learn diagnosis of failures found in high voltage circuits and components found on Hybrid Electrical Vehicles. Class will consist of hands-on practical application of concepts learned using various types of specialized equipment used on hybrid and alternative fueled vehicles. This class is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment. Co-requisite of AMM 161.

**AMM 151 Engine Performance**  
11 Credits  
Introduction to automotive fuel delivery and fuel injection systems. Students will study fuel pumps, fuel filters, fuel injection system operation, diagnosis and repair and emission systems. Students will learn to use automotive scan tools, automotive oscilloscopes, engine analyzers, gas analyzers and other specialized fuel system tools and equipment. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisites: AMM 150.

**AMM 152 Engine Performance II**  
9 Credits  
Introduction to automotive ignition system theory, diagnosis and repair, emission systems theory, diagnosis and repair and on-board computer system theory, diagnosis, and repair. Students will learn to use automotive scan tools, automotive oscilloscopes, engine analyzers and other specialized engine performance tools. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Prerequisite: AMM 161; Co-requisites: AMM 232, 242, 254, and 255.

**AMM 153 High Voltage Battery Reconditioning and Rebuild**  
2 Credits  
The course covers construction, operation and diagnosis of HV battery packs and battery control systems. Students will perform testing and reconditioning of HV batteries. Co-requisites: AMM 151, AMM 171, AMM 181.

**AMM 161 Electrical and Electronics**  
19 Credits  
Introduction to electricity and electronics used in the automotive industry. Students will study voltage, resistance, amperage, ohms law, circuits, wiring diagrams and use of electrical and electronics test equipment. This course will cover major and accessory electrical devices used on today's vehicles. Emphasis will be placed on theory, diagnosis, service and repair of all electrical components. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisite: AMM 150.

**AMM 171 Air Conditioning and Heating**  
4 Credits  
Introduction to Climate Control and Comfort systems. The student will learn air conditioning terminology, system safety, refrigeration principles, operation, service and repair of refrigeration plumbing systems. Students will learn the proper use of specialized tool and equipment usage. The student will become familiar with all major components of a typical climate control system. Class will consist of hands-on practical application of concepts learned in the classroom. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Prerequisite: AMM 161; Co-requisites: AMM 151 and 181.

**AMM 181 Suspension and Alignment**  
4 Credits  
Introduction to the automotive alignment and suspension theory, diagnosis and repair. The student will learn automotive terminology, shop and personal safety. Students will learn suspension and alignment principles, two and four wheel alignment, suspension diagnosis and repair, tire and wheel diagnosis and repair. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisites: AMM 151 and 171.

**AMM 191 Cooperative Work Experience**  
1 - 21 Credits  
Opportunity to work in jobs directly related to the auto repair and service industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

**AMM 192 Cooperative Seminar**  
1 - 2 Credits  
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Co-requisite: AMM 191.

**AMM 199 Specials Topics**  
1 - 10 Credits  
Study and train to meet established local needs in the automotive repair industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

**AMM 210 Engine Rebuild**  
21 Credits  
Disassembly, inspection, and reassembly of the gasoline internal combustion engine. Hands-on applications including emphasis on disassembly, cleaning and inspection of cylinder block and cylinder head components; instruction in the use of precision measurement tools to measure wear of cylinders and other major components of the engine. This instruction will include grinding valves, checking guides, and installing rod, main and cam bearings, timing gears and chain, pistons and rings. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations.

**AMM 224 Automatic Transmission/Transaxles**  
13 Credits  
Introduction to automatic transmission and transaxles. Students will learn automatic transmission and transaxle theory, diagnosis and repair. The student will learn automotive terminology, shop and personal safety. Students will learn suspension and alignment principles, two and four wheel alignment, suspension diagnosis and repair, tire and wheel diagnosis and repair. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Prerequisite: AMM 161; Co-requisites: AMM 151 and 181.
AMM 225 Manual Drive Train and Axles 8 Credits
Introduction to manual transmission, transaxles, clutches, differentials and transfer cases. Students will learn theory, diagnosis and repair of manual drivetrain components used on today’s vehicles. Students will learn to diagnose and repair clutches, differentials, transfer cases and drive axles. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisite: AMM 224.

AMM 232 Air Conditioning and Heating II 4 Credits
Review of refrigeration systems. The student will learn air conditioning terminology and system safety. Students will learn the proper use of specialized tools and equipment used to test advanced HVAC control systems. The student will become familiar with all major components of a typical manual and electronic climate control system. Class will consist of hands-on practical application of concepts learned in the classroom. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Prerequisite: AMM 171; Co-requisite: AMM 152, 242, 254, and 255.

AMM 242 Suspension and Alignment II 4 Credits
Advanced automotive alignment theory, diagnosis and repair. The student will learn automotive terminology, shop and personal safety. Students will learn advanced alignment procedures, electronic suspension theory, diagnosis and repair and vehicle stabilization theory, diagnosis and repair and vehicle suspension related drivability diagnosis and repair. Students will learn to operate advanced features of a four wheel alignment machine and specialized equipment necessary to diagnose and repair advanced suspension systems. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Prerequisite: AMM 181; Co-requisite: AMM 152, 232, 254, and 255.

AMM 245 Brakes 13 Credits
Training in theory, diagnosis and repair of automotive brake systems. Students will study disc, drum and anti-lock brake systems. This course is structured to provide competency-based application of NATEF automotive repair tasks in a working shop environment and will provide students with the background and knowledge to take the ASE certification examinations. Co-requisites: AMM 145 and 149.

AMM 247 Advanced Auto Repair 1 - 21 Credits
Provides advanced training for students who have completed the AAAS Degree in Auto Mechanics and desire specialized training in a specific area. Prerequisite: Instructor permission.

AMM 254 Compressed Natural Gas Vehicle Service and Repair 2 Credits
This course presents an introduction to compressed natural gas (CNG) vehicles. Students are required to gain an understanding of CNG theory, safety, regulations, maintenance and repair of CNG equipped vehicles. Students will perform diagnostic testing and analysis of failed CNG components. Students will apply basic competencies to grasp in-depth workings of CNG-fueled vehicles. This course will focus on combining classroom instruction and theory with the opportunity to apply theory through hands-on activities performed in the lab/shop. Co-requisites: AMM 152, 232, 242, 255.

AMM 255 CNG Conversion/Installation 2 Credits
This course presents an introduction to compressed natural gas (CNG) conversions and installation on vehicles. Students are required to gain an understanding of the process required to convert and install CNG systems on vehicles. Students will install CNG conversion kits on light and heavy duty vehicles. This course will focus on combining classroom instruction and theory with the opportunity to apply theory through hands-on activities performed in the lab/shop. Co-requisites: AMM 152, 232, 242, 255.

AMM 256 CNG Conversion/Installation Co-op 13 Credits
This course presents an introduction to compressed natural gas (CNG) conversions and installation on vehicles. Students are required to gain an understanding of the process required to convert and install CNG systems on vehicles. Students will install CNG conversion kits on light and heavy duty vehicles. This course will focus on combining classroom instruction and theory with the opportunity to apply theory through hands-on activities performed in the lab/shop. Prerequisite: Instruction permission required.

AMM 297 Special Projects 1 - 21 Credits
Project-oriented experiences in the area or applications not covered in the standard automotive repair technology curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

AMM 299 Leadership 1 Credit
Encourage students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities. Students will acquire information, experience diverse points of view, construct knowledge and practice a variety of interpersonal and social skills, such as communicating, goal-setting, decision-making, team-building, and managing stress.

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be illustrated. Topics will include discussions of recent advances in biology and the problems incurred. Formerly BIO 110, Survey of Biology. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**BIOL 130 General Ecology [NS]** 5 Credits
This lab science course studies the interrelationships of organisms with their environment. This course is intended for either science or non-science majors in fulfillment of the general education lab science requirements. Through an understanding of general ecological principles contemporary problems such as pollution, endangered species, energy shortages, and over-population are addressed. Field trips and lab exercises support lecture discussions. Formerly BIO 130. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**BIOL 150 Applied Equine Biology** 3 Credits
This non-lab course is focused on the structure and function of the horse and is intended for students in the farrier program or other interested students. Topics include units on the skeletal, muscular, digestive, and reproductive systems of the horse as well as nutrition, health care, emergency aid, and disease prevention. Formerly BIO 170. Recommended: READ 088 or higher.

**BIOL& 160 General Biology w/Lab [NS]** 5 Credits
This is an intensive course designed as a prerequisite for BIOL& 251 and BIOL& 260, and is intended specifically for students pursuing careers in Nursing or other Allied Health fields. Topics include cell chemistry, structure, metabolism, energetics, cell division, and genetic principles, and the basics of DNA technology. This course does not satisfy the prerequisite for BIOL& 212 or BIOL& 213. Formerly BIO 151, Cell Biology. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**BIOL& 170 Human Biology [NS]** 5 Credits
This non-lab course is a survey of all of the systems in the human body and is intended for non-science majors in fulfillment of the general education non-lab science requirements. Topics will provide a general overview of the structure (anatomy), organization and functions (physiology) of the human body and will investigate the range of human organization from molecules to cells to organs to organ systems to the organism as a whole. Prerequisite: Appropriate placement score of grade C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**BIOL& 175 Human Biology w/Lab [NS]** 5 Credits
This lab science course will provide the student with sufficient background to make informed decision relating to the biological aspects of the human body. This course is designed primarily for the non-science major in fulfillment of the general education lab science requirements. Topics include the evolution, ecology, and nutrition of cells. Additional topics include the functioning of cells, tissues, and the major organ systems of the human body. This course does not fulfill the requirements for the Nursing program. Formerly BIO 120, Bio of the Human Organism. Prerequisites: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**BIOL 180 Introduction to Conservation [NS]** 5 Credits
This is an introductory, non-lab science course designed for interested students in fulfillment of the general education non-lab science requirements. Topics include: the history, philosophical paradigms, central concepts, techniques, and challenges of conserving major natural resources in varied social, economic, and political contexts. A brief introduction of ecology and environmental biology will serve as the foundation for discussion of conservation concepts. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087. Recommended: READ 088 or higher.

**BIOL 199 Special Topics** 1 - 5 Credits
Special Topics in biology is a variable credit class to allow students to have the opportunity to engage in independent research or explore special interests and topics.

**BIOL 205 Introduction to Animal Behavior [NS]** 5 Credits
This lab science course will study the behavior and social organization of a variety of animal groups ranging from insects to primates and is intended for the interested student in fulfillment of the general education lab science requirements. Topics include the analysis of general principles of behavior modes and observation of animal behavior in the field and laboratory. Prerequisites: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**BIOL& 211 Majors Cellular [NS]** 5 Credits
This course is the first of a three quarter sequence intended for biology majors and other pre-professional students planning to transfer to a four-year university. It is an introductory cell biology course that can be taken in fulfillment of the AS Degree (Option I) lab science requirements. Topics include: an emphasis on cellular chemistry, eukaryotic and prokaryotic cell structure and function, metabolism, energetics, cell growth, Mendelian and molecular genetics. Students preparing for Allied Health programs are advised to take BIOL& 160. Prerequisite: Grade of C or higher in High School Chemistry (1 year) or CHEM& 110 or higher and appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

**BIOL& 212 Majors Animal [NS]** 5 Credits
This course is the second of a three quarter sequence of biology courses intended for biology majors and other pre-professional students planning to transfer to a four-year university. It is an introductory animal biology course that can be taken in fulfillment of the AS Degree (Option I) lab science requirements. Topics include: anatomy, physiology, and behavior of each of the invertebrate and vertebrate phyla. Lectures are supported by dissections, experiments, and field trips. Formerly BIO 153, General Zoology I. Prerequisite: BIOL& 211.

**BIOL& 213 Majors Plant [NS]** 5 Credits
This course is the third of a three quarter sequence intended for biology majors and other pre-professional students planning to transfer to a four-year university. It is an introductory plant biology course that can be taken in fulfillment of the AS Degree (Option I) lab science requirements. Topics include: an introduction to the basic
structure and function of stems, roots, leaves, flowers, fruits and seeds, growth, hormones, plant movements, photosynthesis, genetics, plant breeding, plant taxonomy and a survey of the kingdoms Protista, Fungi, and Plantae. Formerly BIO 152, General Botany. Prerequisite: BIOL& 211.

**BIOL 221 Systematic Botany (Plant Identification) [NS] 5 Credits**

This course is an introduction to plant identification with emphasis on plants native to Eastern Washington. It is intended for either science or non-science majors in fulfillment of the general education lab science requirements. Topics will include: techniques of collection, preservation, mounting, and flora identification through use of plant identification keys. This course will provide an introduction to basic botany principles related to the structure and function of a typical flowering plant. Formerly BIO 221. Prerequisite: BIOL& 100 or 211, or AGPR 113, 114 or AGRI 215. Recommended: READ 088 or higher.

**BIOL& 251 Human Anatomy & Physiology I [NS] 5 Credits**

This course is the first of a three quarter sequence which studies the structure and function of human body. This course is intended for Nursing and Allied Health majors in fulfillment of the pre-nursing (or health care related) lab science requirements. Topics include: introduction to the human body, histology and an examination of the skeletal, muscular, and nervous systems. Laboratory work may include mammalian dissections, model study and microscope. Formerly BIO 210, Anatomy & Physiology I. Prerequisite: Grade of C or higher in BIOL& 160 or 211. Formerly BIO 210, Anatomy & Physiology I.

**BIOL& 252 Human Anatomy and Physiology II [NS] 5 Credits**

This course is the second of a three quarter sequence which studies the structure and function of the human body. This course is intended for Nursing and Allied Health majors in fulfillment of the pre-nursing (or health care related) program lab science requirements; however, it may be used in order to fulfill general education lab science requirements. Topics include an examination of the following systems: endocrine, cardiovascular, respiratory, digestive, and urinary. Laboratory work may include mammalian dissections, study of models, and microscope. Formerly BIO 211, Anatomy & Physiology I. Prerequisite: Grade of C or higher in BIOL& 251. Concurrent enrollment in BIOL& 253 allowed with instructor permission.

**BIOL& 253 Human Anatomy and Physiology III [NS] 5 Credits**

This course is the third of a three quarter sequence which studies the structure and function of the human body. This course is intended for Nursing and Allied Health majors in fulfillment of the pre-nursing (or health care related) program lab science requirements; however, it may be used in order to fulfill general education lab science requirements. Topics include an examination of the following: reproductive system, embryology, the special senses, lymphatic and immune systems, metabolism, and fluids and electrolyte balance. Laboratory work may include mammalian dissections, study of models, and microscope. Formerly BIO 211, Anatomy & Physiology III. Prerequisite: Grade of C or higher in BIOL& 251. Concurrent enrollment in BIOL& 252 allowed with instructor permission.

**BIOL& 260 Microbiology [NS] 5 Credits**

This course involves the study of the general biology of microorganisms. While this course is primarily intended for Nursing and Allied Health majors, it may also be used in fulfillment of a general education lab science requirement. Topics include the classification, morphology, and physiology of microorganisms emphasizing the importance of microorganisms causing infectious diseases. Lab work focuses on the culturing and characterization of microorganisms. Formerly BIO 230, Microbiology. Prerequisite: Grade of C or higher in BIOL& 160 or 211 or permission of the Science Division Chair or designee.

**BIOL 265 Introduction to Immunology [NS] 2 Credits**

This non-lab course is a brief introduction to innate and acquired immunity, with particular focus on the essential concepts of the development, applications, and disorders of the specific immune system. Topics include: antibody mediated immunity, cell mediated immunity, vaccination, immune deficiency diseases, autoimmunity, and allergy. Formerly BIO 265. Prerequisite: Grade of C or higher in BIOL& 260 or BIOL& 252, or concurrent enrollment in the WWCC Nursing Program.

**BIOL 299 Special Topics 1 - 5 Credits**

Special Topics in biology is a variable credit class to allow students to have the opportunity to engage in independent research or explore special interests and topics. Instructor permission required.

**BUS 024 Keyboarding 3 Credits**

Introduction to the keyboard for beginning keyboard users or for students wishing to review the keyboard by touch. Formerly OT 024.

**BUS 025 Keyboard Skill building 1 - 3 Credits**

Provides opportunity to increase keyboarding speed and accuracy. Course includes assessment and/or correction of technique plus the use of software programs designed to work on individual accuracy and speed weaknesses. Ability to key by touch required to enroll. Formerly OT 025.

**BUS& 101 Intro to Business [SS] 5 Credits**

This course provides an overview of business, focusing on the world of business today within the context of our global society. Basic principles and concepts include: business models, entrepreneurship, functional areas of business, management, organizational structure, human resources, marketing, information systems, finance, ethics and social responsibility, as well as emerging business topics. Key themes woven throughout the course include exploration of career options and development of business problem-solving skills. Formerly BA 101, Introduction to Business.

**BUS 102 Customer Service 5 Credits**

Examines concepts of service management and customer relations skills. Topics covered include; understanding customer service levels, designing appropriate service delivery methods, evaluating customer satisfaction, creating effective customer experiences, identifying cultural differences, and understanding eCommerce transactional technologies. Emphasizes the importance of trust and privacy in customer relationships, including privacy policies and use of personal data. Formerly BA 102.

**BUS 112 Business Mathematics 5 Credits**

Develops competency in common business calculations for use in financial decision-making including: percentages, trade and cash discounts, pricing, simple and compound interest, discounting, annuities, and sinking funds. Calculations performed on calculator and formulas developed for use in spreadsheet software. Recommended: MATH 40. Formerly BA 112.
BUS 113 Financial Management  5 Credits
Develops competency in common business calculations for use in financial decision-making including; understanding financial statements, general transactions, balance sheet, income statement, and cash flow for businesses. In addition, students will apply financial decisions to their own business plan. Students will be in a cohort group and course will be tightly integrated with other Entrepreneurial course work required for the certificate. Equivalent course to BUS 112; student may not earn credit for both BUS 112 and 113.

BUS 157 Human Relations in Business  5 Credits
Assess and develop human relations skills through a skill building approach with an emphasis on self-esteem and maintaining positive attitudes. Topics include understanding human relations, behavior, and performance; diversity in personality and learning styles; perception; attitudes; values; communication skills; motivation; leadership; transactional analysis; assertiveness and conflict resolution; power, politics, and ethics; teams; problem-solving and decision-making; change; productivity and participative management. Recommended: READ 088. Formerly BA 157.

BUS 115 Medical Transcription I  5 Credits
Fundamental course in transcribing medical documents from sound files using word processing software and foot pedal. Instruction on developing listening skills by applying correct grammar, punctuation, and format to medical documents. Designed specifically for medical majors. Formerly OT 115. Prerequisite: BUS 125 and BUS 280 or OT 125 and OT 280.

BUS 116 Medical Transcription II  5 Credits
Advanced course in transcribing medical documents from sound files using word processing software and foot pedal. Students develop skills by learning and applying correct number format, capitalization, punctuation, and abbreviations in the medical documents. Formerly BUS 116. Prerequisite: BUS 115 or OT 115. Recommended: BUS 136 and BUS 125 or OT 125.

BUS 125 Word Processing Applications  5 Credits
Document processing using MS Word taught in conjunction with formatting theory for business documents. Continued development of keyboarding speed and accuracy is provided. Ability to key by touch at a minimum of 30 WPM is required to enroll. Formerly OT 125.

BUS 126 Advanced Word Processing Applications  5 Credits
Introduces and develops advanced formatting and word processing functions for the creation of business documents. Continued development of keyboarding speed and accuracy as well as proofreading and editing skills is provided. Formerly OT 126. Prerequisite: OT 125 or BUS 125.

BUS 136 Business Communications I  5 Credits
A comprehensive review of correct language usage and structure for business writing including: grammar, punctuation, business vocabulary, capitalization, and frequently misspelled words. Recommended: ENGL 087. Formerly BA 136.

BUS 137 Business Communications II  5 Credits
Introduces the correct structure and writing technique for a variety of business documents including electronic and oral communication in today's business world. Prerequisite: BUS 136, ENGL & 101 or instructor permission. Formerly BA 137.

BUS 151 Microsoft Excel  5 Credits
Develop business-related spreadsheet skills, including the ability to prepare, format, maintain and enhance an Excel worksheet for common business needs. Integrate formulas, functions and tables, manage multiple worksheets and workbooks, utilize filtering, conditional formatting, sorting and other advanced features to understand how to make important business decisions. Formerly OT 151.
BUS 201 Business Law I  
5 Credits
Introduction to law with an analysis of its origin and development and its interaction with business, including: legal procedures, contractual capacity, negotiable instruments, constitutional authority, business tort, product liability, bankruptcy, security regulations, anti-trust, Uniform Commercial Code, and principles of consumer protection. Formerly BA 251, Intro to Business Law I and BA 252, Intro to Business Law II.

BUS 210 Principles of Marketing  
5 Credits
Examine the business activities of marketing: product, place, price, and promotion. Understand the role of marketing in the economy and the process used to make effective business decisions. Emphasis on global business, including eCommerce as it relates to marketing strategy. Formerly BA 210.

BUS 215 eMarketing  
5 Credits
Provides an in-depth understanding of the principles and practices of using the Internet to market goods and services. Includes ethical, social, cultural, and legal issues surrounding eMarketing. Students will have an opportunity to develop and present a comprehensive eMarketing plan for a business. Prerequisite: BUS 210 or BUS 212.

BUS 217 Computer Software Applications  
5 Credits
Application of various software currently used in home and work environments. Learn how to determine the appropriate software to complete a given task and how to integrate the use of several software programs to complete a given task efficiently. Emphasis on the application of software principles in word processing, spreadsheets, databases, presentations, and file management. The second of two courses that aid in the preparation for the MOS certification test. Students pursuing a career involving computer use are advised to take this course. Prerequisite: CS 110. Formerly BA 217.

BUS 218 Desktop Calculator  
5 Credits
Develops job competency on desktop calculators using the ten-key touch method and special features of machine to solve common business problems with speed, accuracy, and efficiency. Formerly OT 218.

BUS 222 Records and Database Management  
5 Credits
Students expand their knowledge of database software learned in CS 110. This class focuses on the operation and maintenance of a computer database. It also identifies the principles and practices of effective information management for an automated records system. There is an emphasis on features and capabilities of automated database information management systems and the need to understand record life cycle from creation to disposition within the structure of any given organization. This course also addresses the development of security control systems for information management. Formerly OT 222. Prerequisite: CS 110.

BUS 224 Microsoft PowerPoint/Desktop Publishing  
3 Credits
Designed for the business professional who will use presentation and desktop publishing software. Students will learn beginning to advanced features of PowerPoint and desktop publishing programs including: creating a presentation; applying and modifying text and graphics; using special effects; editing presentations; and publishing documents. Specific focus will be on creating effective messages for various audiences.

BUS 226 Microsoft Outlook  
2 Credits
Designed for the business professional who will use personal information management software. Students will learn to properly utilize email, scheduling, contact lists, task lists, journals, tracking, notes, reminders, and integration with other Microsoft software.

BUS 228 Legal Terminology  
5 Credits
Designed to give students a background in basic legal terminology. The student who successfully completes this course will understand the “language” of legal professions in a contextual application of the terminology. Formerly OT 228.

BUS 231 Medical Office Procedures  
5 Credits
Explores the flow of information in a medical office. MediSoft, Office Hours, and MS Word software programs are utilized to process information and produce typical medical office documents, financial records, and insurance claims. Formerly OT 231. Prerequisite or co-enrollment in CS 110.

BUS 232 Medical Insurance Procedures  
5 Credits
Understanding of the medical insurance programs in today’s healthcare system. Students will apply knowledge learned to abstract information from medical records and complete universal claim forms that meet billing requirements of private, state and federal insurance programs. Communication with insurance companies, tracking reimbursements, and collection methods are covered. Formerly OT 232. Recommended: BUS 234.

BUS 234 Medical Coding  
5 Credits
Fundamental course in assigning medical procedure (CPT), diagnosis (ICD-10-CM) and HCPCS codes for use in insurance billing and medical record keeping. Designed for medical coders, medical assistants, billing specialists and health information professionals. Formerly OT 234. Prerequisite: OT 280. Recommended: READ 088 or higher.

BUS 270 Hospitality Operations  
5 Credits
This course provides information on every facet and department of a hotel, cruise ship, or restaurant. Students will study property development and management, marketing, operations, accounting and controls, and human resources. Industry trends are discussed and analyzed from a management perspective.

BUS 273 Legal Issues in Hospitality  
5 Credits
This course focuses on prevention and knowledge of the law as a way to sustain and develop a successful hospitality industry, whether it is a hotel, a restaurant, an airline, a travel business or any other hospitality service. This course will provide future hospitality industry personnel with the legal knowledge needed to enhance the customer’s experience and to prevent lengthy, troublesome and costly litigation.

BUS 280 Medical Terminology  
5 Credits
Designed for the medical or medical business professional who will use medical terminology in a medical or business office setting. Students will learn medical terminology for the medical field. Students study terminology of major body systems in addition to common suffixes, prefixes and word roots.

BUS 287 Business Capstone  
5 Credits
Provides the student an opportunity to synthesize the knowledge gained through their degree coursework in the form of a final project. Based on
a case study or business example, students will plan, draft, write, and present a comprehensive business project plan, including overview, goals, outcomes, timelines for implementation, and SWOT analysis. Recommended that students take in their last quarter of coursework. Prerequisite: BUS 210 or BUS 212, BUS 137, and BUS 215. Formerly BA 287.

BUS 291 Cooperative Work Experience 2 - 10 Credits
Cooperative Education provides an opportunity for students to combine classroom theory with practical work experience. Experience gained in the workplace is directly related to the student’s field of study or career goals. This formal training period is agreed upon by the student, employer, and instructor. Co-requisite: BUS 292. Formerly BA 291.

BUS 292 Business Leadership Seminar II 3 Credits
Designed to enhance the practical experiences of students during their cooperative learning experience. Feedback and discussion on pertinent work issues including: ethics, office politics, delegation, asking for help, networking, and identifying future career goals. Co-requisite BUS 291 or instructor permission. Formerly BA 292.

BUS 297 Special Projects 1 - 5 Credits
Project-oriented experiences in the area or applications not covered in the standard business curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience. Formerly BA 297.

Cardio-Pulmonary Resuscitation (CPR)

CPR 045 Heartsaver CPR (Basic CPR) .3 Credit
Provides instruction in CPR based on standards established by the American Heart Association. Instruction is provided in CPR basic skills and relief of foreign-body airway obstruction for the adult. This is basic CPR training offered for the general public and does not meet AHA healthcare provider requirements.

CPR 051 Basic Life Support (BLS) for Healthcare Providers .4 Credit
Designed for healthcare providers and provides CPR instruction based on standards established by the American Heart Association. Instruction is provided in: CPR skills for victims of all ages, use of airway adjuncts, the AED, and relief of foreign body airway obstruction. This course is intended for individuals who provide health care to patients in a wide variety of settings.

CPR 052 BLS/CPR Instructor Training .8 Credit
Provides the necessary knowledge and skills to facilitate BLS training adhering to the standards of the American Heart Association. The student must possess a current AHA Healthcare Provider card to enroll.

CPR 055 BLS/CPR Instructor Update .6 Credit
Provides the necessary knowledge review and skills evaluation to renew BLS/CPR Instructor status. This course will follow guidelines and standards established by the American Heart Association. Student must have a BLS/CPR Instructor card issued within the last two years to enroll.

Carpentry

CARP 100 Carpentry Basics I 1 - 18 Credits
Introduction to basic carpentry, featuring classroom as well as on-site instruction. On-site experiences will emphasize procedures of basic building construction, as well as de-construction and remodeling. Topics include building materials, proper and safe use of tools and machines, building maintenance and safety.

CARP 101 Carpentry Basics II 1 - 18 Credits
Hands on, fast track course designed for those interested in carpentry basics. Field experience will cover a wide range of projects in remodeling, weatherization and new construction an emphasis on energy efficiency. Prerequisite: Instructor permission.

CARP 181 Introduction to Carpentry 1 - 20 Credits
Introduction to the construction industry and principles of residential building construction. On-site work that includes excavation, footings, foundations, wall framing, trusses, sheathing and tool safety. Prerequisite: Instructor permission.

CARP 182 On-Site Work: Exterior Finish 1 - 20 Credits
Continue to build upon skills in framing methods, roof framing, siding, roofing materials, and insulation installation. Students will gain knowledge in learning how to work with blueprints that are used in construction. Topics range from building materials, the proper and safe use of tools and machines, and the major processes of building construction. On-site work including: exterior finish, roofing, insulation, sheetrock, taping, and texture. Prerequisite: CARP 181 or instructor permission.

CARP 183 On-Site Work: Interior Finish 1 - 20 Credits
On-site work including: installation of door frames, doors, interior wall finish, window and door trim, installation of cabinets and flooring. Prerequisite: CARP 182 or instructor permission.

CARP 191 Cooperative Work Experience 1 - 18 Credits
Opportunity to work in jobs directly related to the construction industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission. Co-requisite: CARP 192.

CARP 192 Cooperative Seminar 1 - 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Co-requisite: CARP 191.

CARP 199 Special Topics 1 - 5 Credits
Study and train to meet established local needs in the carpentry industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

CARP 284 Advanced Work in Layout 1 - 20 Credits
Advanced work in layout of building, roof framing, and use of level and transit will be covered. Estimating materials for site, study of concrete types and their importance in the trade, and types of fasteners and their uses. Prerequisite: CARP 183 or instructor permission.

CARP 285 Advanced Blueprint Reading 1 - 18 Credits
Definitions of architectural symbols; to understand plumbing, electrical, heating, ventilation, and air conditioning (HVAC) systems and applications; the layout and construction of chimney and fireplaces will be covered. Prerequisite: CARP 284 or instructor permission.

CARP 286 Advanced On-Site Work 1 - 18 Credits
Advanced work on-site including: tile work, siding, concrete layout and estimating costs. Preparation for the journeyman examination.
CHEMISTRY

This course will provide a fundamental survey of chemistry and is intended for Nursing and Allied Health majors in fulfillment of the pre-nursing (or health care related) program lab science requirements. Topics will include an introduction to inorganic, organic, and biological chemistry from a health science perspective. Formerly CHEM 101, Chemistry. Prerequisites: Appropriate placement score or grade of C or higher in MATH 074C or MATH 075; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Credit cannot be received for both CHEM& 110 and CHEM& 105. Recommended: READ 088 or higher.

CHEM& 121 Introduction to Chemistry [NS] 5 Credits
This course will provide a fundamental survey of inorganic chemistry and is intended for Nursing and Allied Health science majors in fulfillment of the pre-nursing (or health care related) program lab science requirements. Topics include atomic structure, bonding, periodicity, stoichiometry, gases, equilibrium, solution chemistry, acids, bases, buffers, and nuclear chemistry. Formerly CHEM 107, General Chemistry for Health Sciences. Prerequisites: appropriate placement score or grade of C or higher in MATH 078, MATH 078E or MATH 079; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher; high school chemistry.

CHEM& 122 Introduction to Organic Chemistry [NS] 5 Credits
This course will provide a fundamental survey of organic chemistry and is intended for Nursing and Allied Health science majors in fulfillment of the pre-nursing (or health care related) program lab science requirements. Topics include structure, function and chemistry of aliphatic and aromatic hydrocarbons, alcohols, ethers, carboxylic acids, amines, and related compounds; mechanisms, and stereochemistry. Formerly CHEM 108, Organic Chemistry for Health Sciences. Prerequisite: grade of C- or higher in CHEM& 121.

CHEM& 123 Introduction to Biochemistry [NS] 5 Credits
This course will provide a fundamental survey of biochemical principles and is intended for Nursing and Allied Health science majors in fulfillment of the pre-nursing (or health care related) program lab science requirements. Topics include structure, function and chemistry for biomolecules, enzymatic catalysis, metabolic pathways, genetic expression, and biotechnology. Formerly CHEM 109, Biochemistry for Health Sciences. Prerequisite: grade of C- or higher in CHEM& 122.

CHEM& 139 General Chemistry Prep [NS] 5 Credits
This course will survey key chemical concepts in inorganic chemistry and is intended for science majors who have not had chemistry in high school or need the chemical and mathematical preparation for the General Chemistry sequence in fulfillment of the general education lab science requirements. Topics include atomic structure, bonding, periodicity, stoichiometry, gases, thermodynamics, solution chemistry, acids, bases, and intermolecular forces. Co-requisite: MATH 079 or MATH 080. Prerequisites: appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher. This course does not satisfy the chemistry requirement for the nursing degree.

CHEM& 161 General Chemistry I w/Lab [NS] 5 Credits
This course will provide a detailed examination of the properties of matter and is intended for science majors in fulfillment of the AD Degree...
Demonstrate learning in non-composition courses. The Successful Student Essay module prepares students to write techniques and strategies to build learning skills that cross subject areas. The Modularized course is designed to help students develop multiple intelligences, memory and brain development, learning styles for academic success, with a focus on strengthening the student's successful transition to college. Students are given information regarding the various attitudes, behaviors, and choices essential for academic success, with a focus on strengthening the student's repertoire of positive learning strategies. Topics include: learning styles, concentration, self-awareness, financial literacy, and personal responsibility. Upon completion, students will demonstrate a clear understanding of the strategies required to meet their life goals. Co-requisite: Enrollment in at least one pre-college college-level course. Formerly PSY 100.

CE 110 Learning Strategies for College 2 - 3 Credits
Provides an overview of learning and motivation theories and methods that promote student success in the classroom. Empowers students to become active, responsible, and successful learners. Topics and techniques include: memory and learning, note taking, exam preparation and test anxiety, time management, goals clarification, learning style, concentration, self-awareness, financial literacy, and personal responsibility. Upon completion, students will demonstrate a clear understanding of the strategies required to meet their life goals. Co-requisite: Enrollment in at least one pre-college college-level course. Formerly PSY 100.

CE 114 Long-term Financial Planning and Continuing Education 1 Credit
Course will provide the student with skills required for successful long-term financial planning. Students will become familiar with savings habits, influences on credit scores, capital planning, and other financial factors that will affect the individual in the long run. Students will learn the importance of retirement planning and the possibility of continuing education for self or potential children. Prerequisite: Must be fully enrolled in TRIO program and instructor permission.

CE 115 Personal and Family Budgeting 1 Credit
Course covers budgeting and financial planning at the micro/personal level. It will teach students how to identify shortcomings in income vs. expenses, how to allocate available funds for self-sustainability, familiarize the individual with cost-cutting strategies, and teach credit, credit card, and checking account management. Prerequisite: Fully enrolled in TRIO program and instructor permission.

CE 120 Financial Literacy and College Costs 2 Credits
Students will study the foundations of personal financial management, learning how to develop a personal financial plan and manage money. Topics include budgeting, debt, credit scores, banking, major purchases (such as a car or a house), insurance, retirement planning, taxes, student loan management, and asset building. Students will also learn about the cost of college, the price gaps between 2-year and 4-year public/private post-secondary institutions, rising cost of tuition, college cost planning, the importance of submitting the FAFSA (Free Application for Federal Student Aid) in a timely manner, how and where to search for diverse funding options, deadlines, and application procedures for funding options, and options for repayment of federal and private student loans. Recommended: TRIO participant.

CE 100 College Experience 1 - 3 Credits
Designed to help students develop strategies to adjust to the college experience.

CE 101 Intermediate College Experience 1 Credit
Designed to equip students with the skills necessary to make a successful transition to college. Students are given information regarding the various attitudes, behaviors, and choices essential for academic success, with a focus on strengthening the student's repertoire of positive learning strategies. Topics include: learning styles and multiple intelligences, memory and brain development, learning techniques, personal finance, graduation requirements and planning for high school completion, goals, motivation and positive habit formation. Prerequisite: Instructor permission.

CE 105 The Successful Student 1 - 3 Credits
The modularized course is designed to help students develop techniques and strategies to build learning skills that cross subject areas. The Successful Student Essay module prepares students to write basic organized essays used to answer essay exam questions and to demonstrate learning in non-composition courses. The Successful Student Essay module prepares students to be successful when taking hybrid and fully online courses in Canvas. Finally, The Successful Math Student module helps students learn math study skills to be successful in all math courses at WWCC. NOTE: Credits are awarded based on the number of modules completed in the term.

CE 111 Personal and Family Budgeting 1 Credit
Course covers budgeting and financial planning at the micro/personal level. It will teach students how to identify shortcomings in income vs. expenses, how to allocate available funds for self-sustainability, familiarize the individual with cost-cutting strategies, and teach credit, credit card, and checking account management. Prerequisite: Fully enrolled in TRIO program and instructor permission.

CE 120 Financial Literacy and College Costs 2 Credits
Students will study the foundations of personal financial management, learning how to develop a personal financial plan and manage money. Topics include budgeting, debt, credit scores, banking, major purchases (such as a car or a house), insurance, retirement planning, taxes, student loan management, and asset building. Students will also learn about the cost of college, the price gaps between 2-year and 4-year public/private post-secondary institutions, rising cost of tuition, college cost planning, the importance of submitting the FAFSA (Free Application for Federal Student Aid) in a timely manner, how and where to search for diverse funding options, deadlines, and application procedures for funding options, and options for repayment of federal and private student loans. Recommended: TRIO participant.
and applying body plastic filler and fiberglass repair will also be covered.

**ABT 163 Auto Body Refinishing** 1 - 21 Credits

Spray painting equipment and facilities, spraying techniques, surface preparation, undercoat materials and applications, spot painting and blending, complete painting and color theory, matching fundamentals and techniques will be covered.

**ABT 191 Cooperative Work Experience** 1 - 5 Credits

This course provides students the opportunity to work in jobs directly related to the auto body industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

**ABT 192 Cooperative Seminar** 2 Credits

Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also acquire effective learning skills for workplace and educational success. Co-requisite: ABT 191.

**ABT 199 Special Topics** 1 - 10 Credits

Students will study and train to meet established local needs in the auto body repair industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

**ABT 264 Unibody Rebuilding** 1 - 21 Credits

Students will perform unibody and frame repair, the replacement of structural components, and body panel alignment.

**ABT 265 Electrical Mechanical** 1 - 21 Credits

Students will perform repair of suspension and steering systems, brake systems, air conditioning systems, cooling systems, and drive trains. Fundamentals of electricity, reading of wiring diagrams, chassis wiring and repairs, repairing power windows, power seats, other accessory units, and restraint systems, and four wheel alignment and corrections will be covered.

**ABT 266 Damage Estimating and Shop Operation** 1 - 21 Credits

Introduction to procedure and sequence of writing collision damage estimates. Familiarization with body shop management. Introduction to material (physical) damage, insurance policies, and adjusting. Identification and repair procedures for plastic repair.

**ABT 267 Advanced Auto Body Technology** 1 - 21 Credits

Provides advanced training for students who have completed the AAAS Degree in Auto Body Repair Technology and desire specialized training in a specific area. Prerequisite: Instructor permission.

**ABT 297 Special Projects** 1 - 21 Credits

Project-oriented experiences in the area or applications not covered in the standard auto body curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

**ABT 299 Leadership** 1 Credit

Encourage students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities. Students will acquire information, experience diverse points of view, construct knowledge and practice a variety of interpersonal and social skills, such as communicating, goal setting, decision making, team building, and managing stress.

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**COMMERCIAL TRUCK DRIVING**

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**TRK 095 Flagger Training** 0.8 Credit

Planning, traffic control, stopping distances, signs and sign placement, channelization and channelization devices, tapers, and rules of contact will be addressed. Course satisfies the state requirements to function as a flagger in the State of Washington.

**TRK 101 CDL Training** 1 - 12 Credits

Designed to accommodate for students’ work and/or class schedules. Provides instruction for individuals requiring the commercial driver’s license. Provides training to gain Class A CDL and various endorsements. Prerequisites: The prospective student must: have a valid state license with NO current driving privilege suspension in any state; demonstrate physical qualifications by passing a D.O.T. physical examination and drug screening as required by FMCSR part 391; meet current hiring standards as set by the trucking industry; be 18 years of age or older; and have instructor permission.

**TRK 110 Truck Driver Training** 12 Credits

Entry-level lecture training for long haul truck driving jobs and commercial driving license testing. Topics include basics of trucking industry and trucking equipment: inspection of equipment, mechanical components, brake adjustment, preventative maintenance, servicing, defensive driving techniques, cargo loading, securing load, documentation, map reading, DOT log books, trip planning, accident and fire prevention, reporting, hazardous material transportation and documentation. Prerequisites: The prospective student must: have a valid state license with NO current driving privilege suspension in any state; demonstrate physical qualifications by passing a D.O.T. physical examination and drug screening as required by FMCSR part 391; meet current hiring standards as set by the trucking industry; be 18 years old; and have instructor permission.

**TRK 120 Truck Driver Training Lab** 1 - 10 Credits

Laboratory training and experience for entry-level long haul truck drivers and commercial driving license testing. Behind-the-wheel practice includes backing techniques, proper cornering, up and down hill maneuvers, space and speed management, coupling/uncoupling, and city and highway driving maneuvers. Students need completed drivers file, commercial learner permit, and must earn 80% or above on TRK 110 course theory assessment(s) to advance to TRK 120. Co-requisite: TRK 110.

**TRK 125 Bus Endorsement Training** 1 Credit

Laboratory training and experience for entry-level passenger and school bus drivers and Commercial Driver’s License testing. Provides training to gain the passenger (P1) School Bus Endorsement. Prerequisite: Instructor permission.

**TRK 191 Cooperative Work Experience** 1 - 18 Credits

Advanced on-the-job training for entry-level long-haul truck driving jobs. Truck drivers in the advanced certificate program are on the road 50 to 70 hours (approximately half of which is driving time, and half of which is navigating time). Behind the wheel practice includes backing techniques, proper cornering, up and down hill maneuvers, space and speed management, coupling/uncoupling, city and highway driving maneuvers. Training on cargo loading, securement and documentation, map reading, DOT logbooks, trip planning, accident and fire prevention
and reporting, hazardous material transportation and documentation. Prerequisites: TRK 110 and 120.

TRK 199 Special Topics  1 - 10 Credits
Study and train to meet established local needs in the commercial truck industry, supplemental to courses currently offered.

TRK 297 Special Projects  1 - 18 Credits
Project-oriented experiences in the area or applications not covered in the standard commercial truck driving curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

Communication Studies

CMST 102 Interpersonal Communication [C]  3 Credits
Theory and practice of interpersonal communication; understanding self and others while working to improve effective communication in one-on-one interactions. Formerly SPCH 102.

CMST 201 Intercultural Communication [C, D]  5 Credits
Theory and practice of intercultural communication; understanding culture and cultural differences, both internationally and domestically, while working to develop the skills necessary to improve effective communication and relationships across cultures. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly SPCH 201.

CMST& 220 Public Speaking [C]  5 Credits
Developing competency in planning, preparing, presenting, and evaluating basic speeches (including impromptus, extemporaneous, informative, persuasive, special occasion and group presentations) with emphasis on critical and orderly thinking; using appropriate language, support and motivational appeals; handling speech anxiety; and assessing audiences. Formerly SPCH 101, Fundamentals of Speech.

Computer Science

CS 100 Introduction to Microcomputers  5 Credits
Introductory hands-on computer course intended for non-majors. Provides the beginning computer user an elementary understanding of computer hardware, the operating system, word processing, spreadsheet, email and correct file management. This is the same course as CS 101. Students cannot earn credit for both CS 100 & CS 101. Recommended: Keyboarding skills.

CS 101 Modular Introduction to Microcomputers  1 - 5 Credits
Introductory hands-on computer course intended for non-majors. Provides the beginning computer user an elementary understanding of computer hardware, the operating system, word processing, spreadsheet, email and correct file management. This is the same course as CS 100. Students cannot earn credit for both CS 100 & CS 101. Recommended: Keyboarding skills.

CS 104 Campus Computer Survival  2.0 Credits
The introductory hands-on computer course is intended for, but not limited to new students at WWCC. It will provide the beginning student/computer user with an elementary understanding of computer use on our campus. This course will include: how to create degree audits, understanding degree requirements and transferability, how to purchase a computer and hardware, how to differentiate operating systems and software suites, protecting your data, how to set up and use school e-mail, how to use Canvas, and how to use the file management tools on the school's network.

CS 105 Intermediate Computer Concepts  5 Credits
Provides computer user with an intermediate understanding of computer hardware, the operating system, software (including word processing, spreadsheets, database, file management, terminology, history, usage and ethics). Recommended: CS 100 (course intended for students who need additional training before CS 110).

CS 110 Introduction to Computers and Applications  5 Credits
Application of software currently used in home and work environments. Emphasizes proficiency in using the basic functions in word processing, spreadsheets, databases, presentations, the Internet, and Microsoft Windows. Recommended: Grade of B or higher in CS 100 and keyboarding skills. Student may not earn credit for both CS 110 and AGRI 108.

CS 115 Introduction to Computer & Information Technology  5 Credits
Provides an in-depth study of computer technology including concepts, terminology, history, usage, ethics, hardware, and software. Keyboarding beneficial. Recommended: CS 100 with a grade of B or higher.

CS 120 Networking Using Internet Technologies  5 Credits
Explore communications using Internet technologies, both wired and wireless media. Topics include the variety of access devices such as cell phones, PDAs, laptops and desktop computers. Focus will be on access, personal security, browsing, file sharing, e-mail, and HTML (XML). Construction of a basic web page using HTML will close out course. Learn how ftp and http help move information.

CS 121 Problem Solving with Programming  5 Credits
Introduction to structured problem solving and computer programming. Topics include logic, programming structure, data types, and problem solving skills. A visual environment will be used to practice programming concepts.

CS 125 Operating Systems  5 Credits
A comparative analysis of several computer operating systems with a concentration on those used in microprocessors, including server and client operating systems. Introduction to the internal workings of Microsoft Windows, Linux/Unix, and Macintosh operating systems. Recommended: CS 115.

CS 130 PC Support and Maintenance I  5 Credits
Students will learn to add and remove components, build new systems, troubleshoot and repair hardware, and identify software issues. Prerequisite: CS 115.

CS& 131 Computer Science I C++ [Q]  5 Credits
Introduction to computer science principles and concepts including algorithm, data structures, and C++ programming. Formerly CS 131. Prerequisite: Appropriate placement score or grade of C or higher in MATH 078, MATH 078E, or MATH 079. Recommended: CS 121.

CS 140 JavaScript Specialist  5 Credits
This course prepares a student for the JavaScript Specialist Certification Exam. Topics include Use JavaScript statements to control program flow, the use of JavaScript Document Object Model (DOM). Using JavaScript language objects and create expressions, using JavaScript to develop

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CS 225 Digital Design from a Gaming Perspective  5 Credits
Observe popular commercial game title and attempt to identify the factors that facilitate elements that are interesting from a learning perspective. Focusing on the digital construction of game backgrounds. Students will create their own game as a final project.

CS 226 Web Design Specialist I  5 Credits
The Web Design Specialist course is an introduction to Web page design and development. Addresses issues concerning design and publishing Web sites. Including Web Site Development Essentials (such as the site development process, customer expectations, and ethical and legal issues in Web development), Web Design Elements (such as aesthetics, the site user's experience, navigation, usability and accessibility).

CS 227 Web Design Specialist II  5 Credits
The Web Design Specialist II course teaches basic Web technologies (such as basic Hypertext Markup Language [HTML], Extensible HTML [XHTML]) also students will work with popular production tools such as Microsoft Expression Web, and Adobe Dreamweaver.

CS 228 Website Design Specialist III  5 Credits
Designed to give proficiency in designing website utilizing: website templates, forms, rollovers, and basic animations and database-driven pages.

CS 229 Dynamic Website Design with PHP MySQL  5 Credits
Provides knowledge and real-world applications about building interactive web sites. Students will learn how to build e-commerce interactive websites. Languages will include but will not be limited to: PHP, JSP and ASP.NET.

CS 230 Visual Basic Programming  5 Credits
Introduction to programming in Microsoft Visual Basic. Includes forms and controls, properties events and methods, menus, control statements and data structures, control arrays, and file processing. Recommended: CS 121.

CS 231 Application Development  5 Credits
Study of advanced word processing procedures and techniques using a case-study, project-based approach.

CS 235 Introduction to Database Design and Theory  5 Credits
In-depth study of database theory and concepts including database modeling, database design, normalization, and data integrity and security. Includes a survey of one or more modern DBMS and its underlying query language. Recommended: CS 110.

CS 240 Application Integration using VBA  5 Credits
Focuses on the functions of MS Office applications, integrating uses with Visual Basic for Applications.

CS 241 Programming II (JAVA/C++)  5 Credits
Introduction and implementation of data structures including queues, stacks, trees and linked lists, using the Java or C++ programming language. Topics include iterative and recursive uses in sorting and searching routines.

CS 242 Advanced Software Development  5 Credits
Use and investigate new software used by industry. Special attention will be given to software applications and operation. Students will develop and present a final project by developing a software systems
analysis, creating an end product, with documented output, or system training and training materials. Students will also research relevant related specific topics and debate uses of different applications and computing issues.

CS 245 Advanced Database Development 5 Credits
Advanced study of database construction and operation. Topics include filtering, customized menus, and an introduction to programming. Recommended: CS 121.

CS 246 SQL and Relational Database Programming 5 Credits
Database design concepts are applied in programming environment. Focuses on learning and applying the SQL programming language to efficiently define, access, update and retrieve information from a database in a server based environment.

CS 250 Site Development Associate HTML V 5 Credits
The Site Development Associate course teaches students essential Web page development skills. This course teaches students to develop Web sites using HTML5 and CSS. Students learn to write code manually, as well as use graphical user interface (GUI) authoring tools. They also insert images, create hyperlinks, and add tables, forms, video and audio to Web pages, as well as use HTML5 Application Programming Interfaces (APIs) to extend the functionality of Web pages. Other topics include validating HTML code, recognizing the importance of search engine optimization (SEO), using style sheets extensively to format Web page content, and implementing fundamental design concepts. Throughout the course, students learn how Web sites are developed as managed projects. They also identify e-commerce solutions and relate Web site development to business goals.

CS 260 Unix/Linux Operating Systems 5 Credits
Introduction to multi-user and multi-processing operating systems through a study of the Linux/UNIX operating system as implemented on the microcomputer. Recommended: CS 125.

CS 261 PC Technician Lab 1 - 10 Credits
This course prepares students to take the CompTIA A+ and Microsoft Certified Professional exams. In conjunction with CS 125 and CS 30 this course prepares students for the Microsoft Certified System Engineer (MSC) exam. Students will learn to add and remove components, build new systems, troubleshoot and repair hardware, and identify software issues. Prerequisite: Instructor permission, CS 115. Recommended: CS 125 and CS 130.

CS 265 CCNA 1 5 Credits
Provides an in-depth description of the IP network-addressing scheme, including sub-netting, and the design of IP addressing schemes for enterprise-wide networks. Wiring techniques are also covered. This is the first course in the CCNA sequence.

CS 266 CCNA 2 5 Credits
Introduction to the configuration of Cisco routers using the proprietary IOS operating system. This is the second course in the CCNA sequence.

CS 267 CCNA 3 5 Credits
In-depth coverage of the configuration and troubleshooting of Cisco routers in enterprise-wide networks. This is the third course in the CCNA sequence.

CS 268 CCNA 4 5 Credits
The second part of a two-course series on the configuration and troubleshooting of Cisco routers in enterprise-wide networks.

CS 275 Windows Client 5 Credits
Overview of the past, present and future Microsoft Operating Systems, including the latest operating systems. Students will learn to install and customize the Windows environment. Other topics include file management, how to use hidden utilities, memory management to speed performance, registry configuration, partial and full back up of operating system and files, and a look at 3rd party tools to maximize the windows experience. Students will receive their own licensed copy of XP Professional and Vista to use at home. Recommended: CS 110.

CS 276 Windows Server 5 Credits
Introduction to the management of a Windows Server. Topics include installation and use of management tools (including Dynamic Host Configuration Protocol, Windows Internet Name Service, and Remote Access Service), NWLink transport protocol, and integration into a NetWare network.

CS 277 Fund of Network Security 5 Credits
Explores blocking attacks on computer network systems. Study of the white hat hackers compared to the black hat crackers. Topics include viruses, Trojan programs and copyright infringements, bandwidth problems, and networking issues.

CS 278 Windows Server Infrastructure 5 Credits
Windows Server network infrastructure. Intended for systems administrator and systems engineer candidates who are responsible for implementing and managing server networking technologies. These tasks include implementing routing; implementing and managing Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), and Windows Internet Name Service (WINS); securing Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; configuring a network access infrastructure by configuring the connections for remote access clients, and managing and monitoring network access.

CS 280 Novell SUSE Server 5 Credits
Provides experience in designing and building a local area network. Includes installation of the NOS (SUSE Linux), user accounts groups, security, application software, printers, menus, and accounting.

CS 289 Systems Analysis and Design (Critical Thinking) 5 Credits
Apply problem-solving, system analysis, and rapid application development techniques to design appropriate hardware/software solutions to meet various end user requirements. Recommended: CS 121.

CS 291 Cooperative Work Experience II 1 - 5 Credits
Opportunity to work in jobs directly related to the computer technology industry. This formal training period is agreed upon by the student, employer, and instructor.

CS 292 Cooperative Seminar II 1 - 3 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships.

CS 297 Special Projects 1 - 5 Credits
Project-oriented experiences in the area or applications not covered in the standard computer technology curriculum. Prerequisite: Instructor permission, based on evaluation of student's education and work experience.
Encourage students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities. Students will acquire information, experience diverse points of view, construct knowledge and practice a variety of interpersonal and social skills, such as communicating, goal-setting, decision-making, team-building, and managing stress.

COSMETOLOGY

COSM 111 Principles and Procedures of Cosmetology I 1 - 11 Credits
Introduction and overview of all aspects of cosmetology. Topics include bacteriology, sanitation, sterilization, draping, basic haircuts and trimming, shampoos, rinses, finger waves, pin curls, rollers, manicuring, facials, movements, permanent waves and hair color. Emphasizes safety and first aid in all instruction. Prerequisite: Instructor permission.

BARB 111 Principles and Procedures of Barbering I 1 - 11 Credits
Introduction and overview of all aspects of barbering. Topics include bacteriology, sanitation, sterilization, draping, shampooing, scissor cuts, razor cuts, clipper cuts, facial shaving, beard and mustache design, hair styling, hair structure, and safety.

COSM 112 Practical Application I 1 - 11 Credits
Introduction to the basic services of cosmetology. Practice in basic shampoos, rinses, haircuts, trimming, finger wave, roller, pin curl, manicuring, basic permanent wave, four different types of perms, introduction to color, and safety/sanitation. Prerequisite: Instructor permission.

BARB 112 Practical Application I 1 - 11 Credits
Introduction to the basic services of barbering. Practice in basic shampoos, haircuts, trimming facial hair, hair styling, facial shaving, artificial hair, safety, and sanitation. Instructor permission is required.

COSM 121 Principles and Procedures of Cosmetology II 1 - 11 Credits
Introduction to basic services of cosmetology. Topics include introduction to hair coloring and lightening, scalp treatments and hair analysis, diseases and disorders of skin and scalp, skin care, trimming of facial hair (including beard and mustache, eyebrow, ear and nose hair trim), dry styling, and first aid. Emphasizes safety and sanitation measures in all instruction. Prerequisite: COSM 111.

BARB 121 Principles and Procedures of Barbering II 1 - 11 Credits
Continued learning of all aspects of barbering. Topics include bacteriology, sanitation, sterilization, draping, anatomy, shampooing, scissor cuts, razor cuts, clipper cuts, facial shaving, beard and mustache design, hair styling, hair structure, artificial hair, and safety. Prerequisite: BARB 111.

COSM 122 Practical Application II 1 - 11 Credits
Continued practice in basic cosmetology skills on mannequins and models. Topics include hair color, lash and brow tint, bleaching, scalp treatments, thermal styling, skin care (facials), dry styling, permanent waving, temporary removal of superfluous hair, razor cutting, safety, and review. After reaching Level 2 in services and Level 3 in safety/sanitation, the student may begin basic operations under close supervision of an instructor in the lab area provided for patrons. Prerequisite: COSM 112.

BARB 122 Practical Application II 1 - 11 Credits
Continued practice of the basic services of barbering, while taking clients on the lab floor. Practice in shampoos, haircuts, trimming facial hair, hair styling, facial shaving, artificial hair, safety, and sanitation. Prerequisite: BARB 112.

COSM 131 Intermediate Principles and Procedures I 1 - 11 Credits
Intermediate instruction in hair coloring (dimensional), nail diseases/disorders, nail repair, styling aids, safety and sanitation, hair lightening and bleaching, blow drying, chemical relaxing, with an emphasis on safety and sanitation to be included in all instruction. Prerequisite: COSM 121.

BARB 131 Principles and Procedures of Barbering III 1 - 11 Credits
Continued learning of advanced aspects of barbering. Topics include bacteriology, sanitation, sterilization, draping, anatomy, shampooing, scissor cuts, razor cuts, clipper cuts, facial shaving, beard and mustache design, hair styling, hair structure, artificial hair, and safety. Prerequisite: BARB 121.

COSM 132 Practical Application III 1 - 11 Credits
Continued work to complete the required levels of performance, hour and quarter requirements, and safety/sanitation measures. Prerequisite: COSM 122.

BARB 132 Practical Application III 1 - 11 Credits
Continued practice of the advanced services of barbering, while taking clients on the lab floor. Practice in shampoos, haircuts, trimming facial hair, hair styling, facial shaving, artificial hair, safety, and sanitation. Prerequisite: BARB 122.

COSM 199 Special Topics 1 - 10 Credits
Study and train to meet established local needs in the cosmetology industry, supplemental to courses currently offered. Prerequisite: Instructor permission

COSM 241 Intermediate Principles and Procedures II 1 - 11 Credits
In-depth study of the hair structure, diseases and disorders, skin care compresses, safety, bones, nerves and muscles of face and scalp, pedicures, and exam review book. Prerequisite: COSM 131.

COSM 242 Practical Application IV 1 - 11 Credits
Continue to work in the program to complete five regular quarters, one summer quarter, and job performances safely at Level III and Level IV as required by WWCC. Prerequisite: COSM 132.

COSM 251 Advanced Principles and Procedures I 1 - 11 Credits
Advanced work in the cosmetology program. Topics include skin care -including disease & disorders, artificial hair, chemical relaxing, hair pressing, safety, superfluous hair removal, pH value - the basic chemistry, and complete review, including safety and sanitation. Prerequisite: COSM 241.

COSM 252 Practical Application V 1 - 11 Credits
Continue to independently and safely practice cosmetology methods at Level IV. This course is designed to allow students complete the remainder of the degree requirement of 1600 hours and five quarters plus one summer quarter, as required by state law and WWCC respectively. Prerequisite: COSM 242.
CRIMINAL JUSTICE

COSM 270 Practical Application VI
1 - 11 Credits
Work in the clinic area to complete the required number of hours and levels of services, safety, sanitation, and skills as required by state law and WWCC. Prerequisite: COSM 252.

BARB 270 Practical Application IV
1 - 11 Credits
Work on the clinic floor to complete the required number of hours by the state of Washington. Continued work on service requirements while becoming job ready. With the completion of requirements and instructor’s permission, remaining hours may be completed on a job internship. Prerequisite BARB 131 and BARB 132.

COSM 281 Cadet Instructor Training
1 - 20 Credits
Training in management and laboratory supervision covering the application of teaching techniques in practical classroom and laboratory services, dispensary inventory and maintenance, and reception area management. Emphasis on sanitation of tools, equipment, and work areas as well as safe practices in storage, mixing, and use of chemicals. Must have a minimum two years of successful work experience and hold a current Cosmetology License in the State of Washington. Prerequisite: Instructor permission.

COSM 297 Special Projects
1 - 18 Credits
Project-oriented experiences in the area or applications not covered in the standard cosmetology curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

COSM 299 Leadership and Job Seeking Skills
4 Credits
Encourage students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities. Students will gain knowledge and skills needed to be effective, successful job applicants within the Cosmetology and Barbering industries. Students will acquire information, experience diverse points of view, construct knowledge and practice a variety of interpersonal and social skills, such as communicating, goal-setting, decision-making, team-building, conflict resolution, and managing stress.

Criminal Justice

C&J 110 Criminal Law [SS]
5 Credits
Introduction to the ever-evolving world of criminal law in the United States. Describes the origin and structure of criminal law. This course covers topics ranging from the victim’s rights, criminal defenses, criminal prosecution and definitions of crime guidelines. Defines the difference between misdemeanors and felonies. Formerly CJ 103, Intro to Criminal Law. Recommended: READ 088.

C&J 112 Criminology [SS]
5 Credits
The study of deviant behavior as it relates to the definition of crime: crime statistics, theories of crime causation, crime typologies. Introduction to the impact of crime, limits of criminal law, and society’s reaction to criminal behavior. Recommended: READ 088. Formerly CJ 106, Criminology.

CJ 204 Constitutional Law
5 Credits
Study of the Constitution of the United States and its provisions and amendments. Topics include various decisions of the Court involving constitutional application of due process relating to arrests, searches, seizures, confessions, and prisoner rights. Recommended: READ 088 or higher.

C&J 240 Forensic Science [SS]
5 Credits
Survey of fundamental techniques as they apply to specific criminal investigations. Examines the basic principles of the law of criminal evidence with emphasis on the role of the investigator in collecting, preserving, and introducing evidence in court. Formerly CJ 205. Co-requisite: C&J 101. Recommended: READ 088.

Culinary Arts

CA 110 ServSafe
3 Credits
Introduction to food production policies that will focus on current regulations, best practices and science-based information. Topics include Hazard Analysis of Critical Control Points (HACCP) procedures, kitchen safety, and facility sanitation. Students will take the National Restaurant Association ServSafe Examination upon completion of the course. Prerequisite: Instructor permission.

CA 111 Storeroom Operations
3 Credits
Provides an introduction to operations of storerooms. Students will learn how to inventory, order and receive products for foodservice operations. They will be taught basic culinary math principles and identify various products used in production of food. Prerequisite: Instructor Permission.

CA 112 Introduction to the Culinary Arts
10 Credits
Provides an introduction to the hospitality and culinary arts profession through the history, terminology and current career options. Classical knife skills are practiced and produced along with basic butchery of meats and seafood. Learn the techniques of classical and contemporary soups, stocks, mother sauces and their derivatives. Roux based sauces, emulsions, purees, stock preparations and a variety of soups. Prerequisite: Instructor permission.

CA 120 Culinary Arts Methods
9 Credits
Develop basic skills and apply the principles of food safety and sanitation, workplace safety, food preparation, and cooking methodologies in a kitchen lab setting. Produce food products through various moist and dry heat cooking methods. Prerequisite: CA 112.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

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CA 121 American Regional Cuisine  4 Credits  Practice techniques for appetizers, salads, desserts, breadings, batters, smoked, roasted and fried foods in the context of regional American specialties. Regions include Coastal areas of the continental US, the Caribbean, Hawaii and the Pacific Northwest. Students will explore regional variations, food ingredients and the impact of culture, geography and ethnicity on regional cooking styles. Prerequisite: CA 120.

CA 122 Food, Farmers, and Culture  4 Credits  Explores the relationship between food and culture. It examines the questions of what, when and where we eat in the context of the cultural systems which answer them. Work within our own greenhouse on production of food products, understanding seasonal growing patterns within the Northwest. Examination of culinary arts in context with the global food supply. Explores food sustainability issues, ethics, ecology, farming techniques, slow food, organics and their impact on food choices and selection by working chefs within the foodservice industry.

CA 130 Introduction to Baking  6 Credits  Introduction to modern baking and pastry arts. It will provide the theoretical and technical foundation for the entire program, covering kitchen safety and sanitation, knives and equipment, and weights and measures. Students will be taught the proper use of basic ingredients and mixing methods while preparing simple yeast breads, quick breads, cookies, pies and tarts.

CA 131 Advanced Baking and Pastry  5 Credits  Building on information and skills developed in Introduction to Baking, this course will provide students with a thorough understanding of advanced baking techniques. Artisan breads, including sour dough, baguettes, and ciabatta will be covered, as well as proper preparation of Danish, Croissant, puff dough, petit fours and strudel. Prerequisite: CA 130.

CA 132 Plated Desserts  2 Credits  Examination of various methods for the design and plating of individual desserts. Students will learn techniques to enhance plate presentations, combine plating elements and balance flavors to reveal contemporary approaches to dessert service. Prerequisite: CA 131.

CA 133 Food and Wine/Beverage  4 Credits  Introduction to the wine industry and grape varieties. Focus is on understanding the flavor components of different wines/beverages and their compatibility with various food offerings. Students will learn about tasting through an examination of different olive oils and vinegars. Students will practice menu development and food pairing in class exercises. This class is open to students under the age of 21 and students who do not drink alcoholic beverages.

CA 191 Cooperative Work Experience I  1 - 15 Credits  Opportunity to work in jobs directly related to the culinary arts industry. This formal training period is agreed upon by the student, employer and instructor. Prerequisite: Instructor permission. Co-requisite: CA 192.

CA 192 Cooperative Seminar I  2 Credits  Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Co-requisite: CA 191. Instructor permission required.

CA 240 French and Mediterranean Cooking  4 Credits  Learn and practice techniques for appetizers, salads, soufflés, pasta, complex sauces, sauté, frying, roasting, broiling, poaching and grilling in context with classical French and Mediterranean specialties. Regions include France, Italy, Spain, Middle East and North Africa. Prerequisite: CA 120.

CA 241 Asian Cooking  4 Credits  Learn techniques and cooking methods for a variety of dishes from regions throughout Asia. Students will explore both traditional and contemporary applications for various ethnic dishes from these regions. Prerequisite: CA 120.

CA 242 Nutritional Cooking  4 Credits  Learn healthy techniques and cooking methods for a variety of dishes from regions throughout the world. Develop an understanding of the food pyramid, the values of calories from various sources and be able to run nutritional analysis on recipes. Prerequisite: CA 120.

CA 243 Food and Beverage Management  3 Credits  Designed to familiarize students with operational, marketing and managerial aspects of food and beverage management as well as their consequent managerial, marketing and cost control implications with emphasis on decision-making.

CA 250 Garde Manger  9 Credits  Learn techniques of cold and hot food preparation in buffet and catering applications, including appetizers, canapés, pate, sausages, terrines, buffet salads, buffet design, lay-out and execution and menu planning. Various curing, brining and smoking techniques in production of bacon and other cured meat products.

CA 251 Latin American Cooking  2 Credits  Practice techniques for appetizers, salads, desserts, breadings, batters, smoked, roasted and fried foods in the context of regional Mexico and other Central American countries, exploring regional variations, food ingredients and the impact of culture, geography and ethnicity on regional cooking styles. Prerequisite: CA 120.

CA 252 Culinary Trends and Concepts  2 Credits  Practice techniques of sous vide, molecular astronomy and food for photography. Prerequisite: CA 120.

CA 260 Menu Development  3 Credits  Analysis of menu development for food service operations will be discussed. Focus on menu development, descriptions, layout, design and pricing with regard to sales mix and station balance. Students will also create and critique menus for the dining room with emphasis on concept, clarity, cost, price and efficiency. Prerequisite: CA 112. Co-requisite: CA 261 & CA 262.

CA 261 A la Carte Cooking  8 Credits  Develop basic skills and apply the principles of a la carte cooking for the restaurant. Students will create the menu, order food products to budget, prepare par levels of products to support menu of functioning restaurant. They will work through each station in the kitchen through the course. Prerequisite: CA 120. Co-requisite: CA 260 & CA 262.
CA 262 Service Management  4 Credits  Provides an introduction to basic table service principles which includes table settings, order taking, serving methods and serving sequences. Students will learn how to control inventory, merchandise products and services, and manage costs while assuring high quality service to all customers. Co-requisite: CA 260 & CA 261.

CA 292 Cooperative Seminar II  2 Credits  Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Instructor permission required.

DANCE 102 Jazz and Funk Dance [PE]  1 Credit  This class is taught as a beginning and intermediate level dance course with no previous experience required. Class emphasis will be focused on understanding correct jazz terminology, movement, body placement, muscle development, and flexibility. Techniques will include hip hop, contemporary and theatre jazz.

DANCE 103 Swing Dance [PE]  1 Credit  Swing dance (commonly known as the jitterbug or the shag) is an energetic couples’ style of social dance, made popular by the swing music of the 1940’s. No previous experience or partner is needed.

DANCE 105 Dance Appreciation [H]  3 Credits  An introduction to classical and contemporary concert dance forms in the twentieth and twenty-first centuries through the study of film, reading, discussion, and simple movement practices. No dance experience necessary.

DANCE 110 Jazz II [PE]  2 Credits  Designed for intermediate dancer. Previous beginning jazz or ballet is required.

DANCE 111 Social/Ballroom Dancing [PE]  1 Credit  Introduction to several different dance styles including the Foxtrot, Cha Cha, Swing, Waltz, and Rhumba.

DANCE 112 Western/Line Dance [PE]  1 Credit  This course explores the latest trends and yesterday’s classics in this high-energy class. Students will learn popular line dances from today and old favorites from the past.

DANCE 160 Contact Improv/Modern Dance I [PE]  2 Credits  The student will learn basic elements of contact improvisation and modern dance. Components of contact improvisation will consist of simple partner exercises including weight sharing, falling, and rolling, use of momentum, and rolling points of contact in a safe, supportive environment paced for the individual. Emphasis on alignment and range of motion, creative/expressive movement, and an appreciation of dance as an art form. Added emphasis will be given to performance quality with more difficult sequencing in both modern and contact improvisational techniques in a safe, supportive environment, paced for the individual. Prerequisite: DANCE 161, or instructor permission.

DANCE 162 Contact Improv/Modern Dance III [PE]  2 Credits  This course builds on foundational experiences in modern dance and contact improvisation with an ongoing emphasis on alignment and range of motion, creative/expressive movement, and an appreciation of dance as an art form. Basic classroom structure will increase in difficulty in sequencing and center work. Students will expand partner work to include some group work and basic lifting and flying techniques in a safe, supportive environment, paced for the individual. Prerequisite: DANCE 160, or instructor permission.

DANCE 164 Multi-Arts Performance I [PE]  2 Credits  Modern dance techniques with rehearsal and performance of student and faculty repertory, with a dance production.

DANCE 165 Dance Production I [PE]  2 Credits  Modern techniques with rehearsal and performance of student and faculty repertory, with a dance production.

DANCE 166 Dance Production III [PE]  2 Credits  Modern techniques with Modern Jazz Combinations. Previous dance experience required.

DANCE 167 Multi-Arts Performance II [PE]  2 Credits  Exploration of dance as a performing art through participation. Class work includes improvisation, dance composition, learning of performance skills, repertory, and critical analysis. Students will explore the process of creating dance based on the elements of time, space, and energy/movement quality. Choreographic devices and compositional structures will be explored. Students will be encouraged to develop their own creative voice, and to critically evaluate their own and their classmates’ works. Students will perform both faculty and student works as well as that of guest artists when available. When possible, students will participate in a collaborative multi-arts performance with students form another class in Art, Creative Writing, Drama, Music, or other fields.

DANCE 168 Multi-Arts Performance III [PE]  2 Credits  Exploration of dance as a performing art through participation. Class work includes improvisation, dance composition, learning of performance skills, repertory, and critical analysis. Students will explore the process of creating dance based on the elements of time, space, and energy/movement quality. Choreographic devices and compositional structures will be explored. Students will be encouraged to develop their own creative voice, and to critically evaluate their own and their classmates’ works. Students will perform both faculty and student works as well as that of guest artists when available. When possible, students will participate in a collaborative multi-arts performance with students from another class in Art, Creative Writing, Drama, Music, or other fields. Prerequisite: DANCE 164.

DANCE 169 Technical Aspects of Dance Production [PE]  2 Credits  Technical components of a dance production to include costuming, lighting and set design, stage and house managing, sound, publicity, and makeup are explored.

DANCE 170 Latin and Salsa Dance [PE]  1 Credit  Beginning level dance that focuses on the fundamental combinations and advanced level steps of Latin dances. Some of the Latin dances...
Diesel Technology

DT 151 Shop Fundamentals/Forklift Training 1 - 9 Credits
Designed to introduce, perfect, and evaluate basic safety and shop skills necessary for successful completion of the Diesel Mechanics program. Consists of instruction and shop performance exercises in safety; hand and machine tool operation, use, and maintenance; hardware identification; and other basic shop skills. Forklift driver certification is also taught. Students must be seeking a certificate or degree in Diesel Equipment Mechanics. Prerequisite: Instructor Permission.

DT 162 Machinery Repair I 10 Credits
Controlled laboratory experiences with static and live projects enhance instruction in engines, power trains, electrical and air conditioning. Involves application of theory and skills associated with academic and skill instruction. This class will emphasize ASE/NATEF competency completion. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

DT 163 Machinery Repair II 8 Credits
Controlled laboratory experiences with static and live projects enhance instruction in engines, power trains, electrical and air conditioning. Involves application of theory and skills associated with academic and skill instruction. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

DT 180 Suspension and Alignment 1 - 5 Credits
Study of suspensions as found on medium and heavy duty vehicles. Alignment of axles and wheels is also covered. Topics include alignment principles and terminology, spring suspensions, air suspensions, beam suspensions, tire wear identification, and wheel safety. This class will emphasize ASE/NATEF competency completion. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

DT 181 Engines I 14 Credits
In-depth study of diesel engines, including theory of operation, testing and rebuilding. Students must be seeking a certificate or degree in Diesel Equipment Mechanics. Prerequisite: Instructor permission.

DT 183 Electronics I 5 Credits
Theory, troubleshooting, and repair of electrical systems are covered. Topics include charging, starting, ignition, and accessory electrical systems. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

DT 185 Drive Trains 1 - 5 Credits
Study of the various components found in the power train system. Topics include theory, operation, troubleshooting, and repair of clutches, transmissions, torque converters, drive lines, differentials, and power take-off devices. This class will emphasize ASE/NATEF competency completion. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

DT 186 Advanced Mechanics 1 - 10 Credits
Study of specialized machinery. Study and skill gained through working on specialized equipment such as farm equipment, logging equipment, trucks, and heavy equipment. This class will emphasize ASE/NATEF competency completion. Prerequisite: Instructor permission.

DT 187 Heating and Air Conditioning 5 Credits
Heating and air conditioning on medium and heavy duty vehicles. Topics include theory, components, refrigerants, servicing and troubleshooting. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

DT 189 Preventive Maintenance 1 - 5 Credits
Study of preventive maintenance on medium and heavy duty vehicles. Topics include truck classifications, P.M. programs, out of service criteria, wheels and rims, frame and cross-members, trailer maintenance, and coupling devices. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

DT 191 Cooperative Work Experience 1 - 21 Credits
Opportunity to work in jobs directly related to the diesel mechanics industry. This formal training period is agreed upon by the student, employer, and instructor. This class will emphasize ASE/NATEF competency completion. Prerequisite: Instructor permission.

DT 192 Cooperative Seminar 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Co-requisite: DT 191.

DT 199 Special Topics 1 - 10 Credits
Study and train to meet established local needs in the diesel mechanics industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

DT 266 Advanced Equipment Repair I 10 Credits
On-campus job shop experience. Students work on equipment with a student service manager and under the supervision of an instructor.
Student must have completed at least two quarters of Diesel Equipment Mechanics and be seeking a certificate or degree in Diesel Equipment Mechanics.

**DT 267 Advanced Equipment Repair II** 10 Credits
On-campus job shop experience. This class will emphasize ASE/NATEF competency completion. Students work on equipment with a student service manager and under the supervision of an instructor. Student must have completed at least two quarters of Diesel Equipment Mechanics and be seeking a certificate or degree in Diesel Equipment Mechanics.

**DT 268 Advanced Equipment Repair III** 1 - 20 Credits
On-campus job shop experience. Must have completed at least two quarters of Diesel Equipment Mechanics and be seeking a certificate or degree in Diesel Equipment Mechanics.

**DT 280 Brakes and Air Systems** 1 - 5 Credits
An in-depth study of air and hydraulic brake systems as found on medium and heavy duty vehicles. Topics include air and hydraulic systems, air drum brakes, air disc brakes, hydraulic drum brakes, hydraulic disc brakes, air system schematics, air valves and controls, air compressors and driers, troubleshooting and repair of brake systems. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

**DT 281 Engines Advanced** 1 - 5 Credits
A detailed study and analysis of mechanical and electronic diesel injection systems. This class will emphasize ASE/NATEF competency completion. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

**DT 283 Electronics II** 1 - 5 Credits
A study in medium and heavy duty vehicle electrical systems. Topics include electronic signals, microprocessors, integrated circuits, connector and terminal identification and repair, and multiplex systems. This class will emphasize ASE/NATEF competency completion. Students must be seeking a degree or certificate in Diesel Equipment Mechanics.

**DT 284 Hydraulics** 1 - 5 Credits
A study of hydraulic systems as found on mobile equipment. Course includes theory, operation, troubleshooting and service of pumps, cylinders, valves, motors, controls and accessories found on mobile hydraulic systems. Schematics and system design are also discussed. Students must be seeking a certificate or degree in Diesel Equipment Mechanics.

**DT 292 Leadership Seminar** 2 Credits
This course explores issues related to the cooperative work experience focusing on effective workplace relationships and applying leadership skills to promote personal development. Provide professional improvement through techniques such as effective communication, conflict resolution, team building, employee engagement, and decision making.

**DT 297 Special Projects** 1 - 15 Credits
Project-oriented experiences in the area or applications not covered in the standard diesel mechanics curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

**DRMA& 101 Introduction to Theatre [H]** 5 Credits
Introduction to the study of theatre. Students will watch film and live performances of theatrical productions, read representative dramatic literature, and learn the history, theory, and practice of the theatrical arts - playwrights, acting, design and directing. By reading, viewing, and discussing, students will enhance their appreciation of the nature and place of theatre in contemporary culture. Formerly THEA 101, Theatre Appreciation.

**DRMA 151 Beginning Acting I [HP]** 3 Credits
Introduction to acting techniques and beginning characterization through improvisation. Student required to furnish personal rehearsal clothes. Formerly THEA 151.

**DRMA 152 Beginning Acting II [HP]** 3 Credits
Introduction to script analysis, scene study, and audition/monologue preparation. Students will further explore acting technique. Instruction in physical and vocal technique and a unit in theatrical makeup application are included. Work in improvisation continues. The student will complete the course with a public performance of a monologue and scene at the end of the quarter. Prerequisite: DRMA 151 or instructor permission. Formerly THEA 152.

**DRMA 153 Beginning Acting III [HP]** 3 Credits
For advanced beginners. Continuing scene study and monologue work. Students will be challenged with more difficult material and will further explore acting technique with an emphasis on physical and vocal technique. The student will complete the course with a public performance of a monologue and scene at the end of the quarter. Prerequisite: DRMA 152 or instructor permission. Formerly THEA 153.

**DRMA 188 Children’s Theatre** 1 - 5 Credits
Designed for students aged nine years and older, to provide them an opportunity to rehearse and perform a full-length play for the public. Formerly THEA 188.

**DRMA 190 Play Production I** 1 - 5 Credits
Applied study in acting, stage lighting and costume construction using current productions as lab situations. Prerequisite: Instructor permission. Formerly THEA 190.

**DRMA 191 Play Production II** 1 - 5 Credits
Applied study in acting, stage lighting and costume construction using current productions as lab situations. Prerequisite: Instructor permission. Formerly THEA 191.

**DRMA 192 Play Production III** 1 - 5 Credits
Applied study in acting, stage lighting and costume construction using current productions as lab situations. Prerequisite: Instructor permission. Formerly THEA 192.

**DRMA 225 Representative Plays [H]** 5 Credits
A study of plays representative of historical periods from the ancient Greeks to modern times as an introduction to the literature and arts of the theater. Formerly THEA 225.

**DRMA 251 Intermediate Acting I [HP]** 3 Credits
This is the first quarter of second year acting for the serious drama student. A more creative response will be required in individual
sessions and in mandatory plays. Prerequisite: DRMA 153 or instructor permission. Formerly THEA 251.

**DRMA 252 Intermediate Acting II [HP] 3 Credits**
Designed for the more advanced drama student. A series of audition pieces suitable for use in auditioning for the professional theater will be prepared. These will cover at least four different types of pieces; that is, comic, serious, musical, classical, etc. At the end of the quarter the student will present two contrasting pieces as a program. Prerequisite: DRMA 251 or instructor permission. Formerly THEA 252.

**DRMA 253 Intermediate Acting III [HP] 3 Credits**
In the third quarter of the second year of acting courses, the students will apply the techniques they have learned. Comprehensive analysis of character roles will be presented in scene work. Prerequisite: DRMA 252 or instructor permission. Formerly THEA 253.

**DRMA 281 Beginning Playwriting [D, H] 5 Credits**
Focuses on the composition, drafting, revising, and performing of original play scripts. Besides studying, applying, and performing dramatic structure in student generated scripts, students will also develop critical thinking skills through the analysis of plays selected from the history of world drama. This class will also explore the diverse voices, issues, and cultures of theatre history. Recommended: ENGL 101, DRMA 101, DRMA 151, or CMST 220.

**DRMA 290 Play Production IV [HP] 1 - 5 Credits**
Second year of applied study in acting, stage lighting, scenery and costume construction using current productions as lab situations. Prerequisite: Instructor permission. Formerly DRMA 290.

**DRMA 291 Play Production V [HP] 1 - 5 Credits**
Second year of applied study in acting, stage lighting, scenery and costume construction using current productions as lab situations. Prerequisite: Instructor permission. Formerly DRMA 291.

**DRMA 292 Play Production VI [HP] 1 - 5 Credits**
Second year of applied study in acting, stage lighting, scenery and costume construction using current productions as lab situations. Prerequisite: Instructor permission. Formerly DRMA 292.

**DRMA 298 Special Topics 1 Credit**
Project-oriented experiences in the area or applications not covered in the standard theatre arts curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience. Formerly DRMA 298.

**DRMA 299 Special Projects 1 - 5 Credits**
For students interested in working on projects in design, acting, directing, stage management, playwriting, etc. Prerequisite: Instructor permission. Formerly DRMA 299.

**ECED& 100 Child Care Basics 3 Credits**
Designed to meet licensing requirements for early learning lead teachers and family home child care providers, STARS 30 hour basics course recognized in the MERIT system. Topics: child growth/development, cultural competency, community resources, guidance, health/safety/ nutrition and professional practice. Recommended: READ 088. Formerly ECE 148.

**ECED& 105 Intro Early Child Ed 5 Credits**

**ECED& 107 Health/Safety/Nutrition 5 Credits**
Develop knowledge and skills to ensure good health, nutrition, and safety of children in group care and education programs. Recognize the signs of abuse and neglect, responsibilities for mandated reporting, and available community resources. Formerly ECE 234. Recommended: READ 088.

**ECED& 120 Practicum-Nurturing Rel 2 Credits**
In an early learning setting apply best practice for engaging in nurturing relationships with children. Focus on keeping children healthy and safe while promoting growth and development. Recommended: READ 088. Instructor permission required.

**ECED& 132 Infants/Toddlers Care 3 Credits**
Examine the unique developmental needs of infants and toddlers. Study the role of the caregiver, relationships with families, developmentally appropriate practices, nurturing environments for infants and toddlers, and culturally relevant care. Formerly ECE 240. Recommended: READ 088.

**ECED& 134 Family Child Care 3 Credits**
Learn the basics of home/family child care program management. Topics include: licensing requirements; business management; relationship building; health, safety, & nutrition; guiding behavior and; promoting growth & development. Recommended: READ 088

**ECED& 139 Admin Early Lrng Prog 3 Credits**
Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and care programs. Explore techniques and resources available for Washington State licensing and NAEYC standard compliance. Recommended: READ 088. Formerly ECE 275.

**ECE 144 Early Childhood Education Seminar .5 - 2 Credits**
This course includes STARS and CDA seminars. Topics will vary by quarter.

**ECE 150 Math and Science for Early Childhood 5 Credits**
Focus on math and science for preschool and primary grade children. Students will learn how to create developmentally appropriate curriculum that will support young children in acquiring concepts and skills essential to basic understanding of math and science. Classroom activities will be introduced and concepts studied through inquiry based learning, note taking and discussion sessions. Recommended: READ 088

**ECED& 160 Curriculum Development 5 Credits**
Investigate learning theory, program planning, and tools for curriculum development promoting language, fine/gross motor, social-emotional, cognitive and creative skills and growth in your children (birth-age 8). Recommend: READ 088. Formerly ECE 231.

**ECED& 170 Environments-Young Child 3 Credits**
Design, evaluate, and improve indoor and outdoor environments which ensure quality learning, nurturing experiences, and optimize the development of young children. Recommend: READ 088. Formerly ECE 136
ECED& 180 Lang/ Literacy Develop 3 Credits
Develop teaching strategies for language acquisition and literacy skill development at each developmental stage (birth-age 8) through the four interrelated areas of speaking, listening, writing, and reading. Formerly ECE 137. Recommend: READ 088.

ECED& 190 Observation/Assessment 3 Credits
Collect and record observation of and assessment data in order to plan for and support the child, the family, the group and the community. Practice reflection techniques, summarizing conclusions and communicating findings. Recommend: READ 088. Formerly ECE 175.

ECE 191 Cooperative Work Experience 1 - 3 Credits
Provides hands-on experience in the early childhood field. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission. Recommended: READ 088.

ECE 232 Curriculum Development II 5 Credits
Develop competence in the use of various types of literature, criteria for selecting children's books, and methods to provide literary experiences with young children. Introduction to creative art experiences for young children. Introduction to activities that assist in development of a young child's muscle coordination, awareness of body image and movement, and physical development. Experience literature, art, music and movement from various cultures. Recommend: READ 088

ECE 239 Teaching Young Children - Capstone 3 Credits
This course is designed as a capstone for the Early Childhood Education program. Students will explore concepts of developmentally appropriate practice and professional ethics. They will develop practical job-seeking skills in the field of early childhood education. Students will integrate and apply their knowledge of young children and developmentally appropriate practices by designing an early childhood program. Prerequisite: Instructor permission.

ECE 255 Children at Risk 1 - 3 Credits
Caring for children from families affected by substance abuse. Topics include values clarification, family characteristics, families in treatment, empowerment. Recommended: READ 088. Student may not earn credit for both ECE 255 and ED 255.

ECE 291 Cooperative Work Experience II 1 - 3 Credits
Opportunity to participate in hands-on training in the early childhood field. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission. Recommended: READ 088.

ECPE 030 Parent/Child Movement and Creative Dance I 1 Credit
Parents will expand their skills and understanding of how babies move, move to learn, communicate, and interact with their environment through observation and interaction so that they will gain confidence to integrate the activities into daily home life. Informal discussion will include the physical development and relationships of the infant and family.

ECPE 031 Parent/Child Movement and Creative Dance II 1 Credit
Parents with children ages 4 months - pre-walking will expand their skills and understanding of how babies move, move to learn, communicate, and interact with their environment through observation and interaction so that they will gain confidence to integrate the activities into daily home life. Informal discussion will include the physical development and relationships of the infant and family.

ECPE 032 Parent/Child Movement and Creative Dance III 1 Credit
Parents with children ages 4 months - pre-walking will expand their skills and understanding of how babies move, move to learn, communicate, and interact with their environment through observation and interaction so that they will gain confidence to integrate the activities into daily home life. Informal discussion will include the physical development and relationships of the infant and family.

ECPE 040 Baby and You I 2 Credits
Observation and classroom experience for parents and infants birth to 12 months. Development of the infant and the changing family relationships are studied. Parents attend class with their infant.

ECPE 041 Baby and You II 2 Credits
Observation and classroom experience for parents and infants birth to 12 months. Development of the infant and the changing family relationships are studied. Parents attend class with their infant.

ECPE 042 Baby and You III 2 Credits
Observation and classroom experience for parents and infants birth to 12 months. Development of the infant and the changing family relationships are studied. Parents attend class with their infant.

ECPE 050 Parent Toddler Relationships 2 Credits
Group observation and participation experience for parents of one year-olds to study and discuss relevant parenting topics. Discussions are enhanced through the use of current literature, videos, and guest speakers. Observing and interacting with children age 12-24 months provide the laboratory experience.

ECPE 051 Parent Toddler Relationships 2 Credits
Group observation and participation experience for parents of one year-old children to study and discuss relevant parenting topics. Discussions are enhanced through the use of current literature, videos and guest speakers. Observing and interacting with children age 12-24 months provide the laboratory experience.

ECPE 052 Parent Toddler Relationships 2 Credits
Group observation and participation experience for parents to study and discuss relevant parenting topics. Discussions are enhanced through the use of current literature, videos and guest speakers. Observing and interacting with children age 12-24 months provide the laboratory experience.

ECPE 053 TOT SPOT 1 - 3 Credits
This parent education course provides an opportunity to discuss and study relevant parenting topics. Discussions are enhanced through the use of current literature, filmsstrips, videos, and guest speakers from the community. Observing and interacting with children provide the laboratory experience.

ECPE 060 Parent Toddler Relationships 2 Credits
This parent education course provides an opportunity to discuss and study relevant parenting topics for parents of two year old children. Discussions are enhanced through the use of current literature, filmsstrips, videos, and guest speakers from the community. Observing and interacting with children provide the laboratory experience.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

203
ECPE 061 Parent Toddler Relationships  
2 Credits
Group observation and participation experience for parents to study and discuss relevant parenting topics. Discussions are enhanced through the use of current literature, videos, and guest speakers. Observing and interacting with children 24-36 months old to provide the laboratory experience.

ECPE 062 Parent Toddler Relationships  
2 Credits
Group observation and participation experience for parents to study and discuss relevant parenting topics. Discussions are enhanced through the use of current literature, videos, and guest speakers. Observing and interacting with children age 24-36 months provide the laboratory experience.

ECPE 070 Parent Toddler Relationships  
2 Credits
Group observation and participation experience for parents of three year olds to study and discuss relevant parenting topics. Discussions are enhanced through the use of current literature, videos, and guest speakers. Observing and interfacing with children three years old provide the laboratory experience.

ECPE 071 Parent Toddler Relationships  
2 Credits
Group observation and participation experience for parents of three year old children to study and discuss relevant parenting topics. Discussions are enhanced through the use of current literature, videos, and guest speakers. Observing and interfacing with children age 24-36 months provide the laboratory experience.

ECPE 100 Parent Cooperative Preschool  
1.0 - 3 Credits
Parents of children ages three to five years enroll in a parent education course which meets one evening per month. Parents register their child for a preschool group. Each preschool group charges tuition to cover operational costs of the group. Each parent participates in a weekly lab session with children to practice learning from parent education course.

ECPE 101 Parent Cooperative Preschool  
1 - 3 Credits
Parents of children ages three to five years enroll in a parent education course which meets one evening per month. Parents register their child for a preschool group. Each preschool group charges tuition to cover operational costs of the group. Each parent participates in a weekly lab session with children to practice learning from parent education course.

ECPE 102 Parent Cooperative Preschool  
1 - 3 Credits
Parents of children ages three to five years enroll in a parent education course which meets one evening per month. Parents register their child for a preschool group. Each preschool group charges tuition to cover operational costs of the group. Each parent participates in a weekly lab session with children to practice learning from parent education course.

ECPE 140 Parent Education and Involvement  
1 - 5 Credits
Parenting classes for students who are parents of children from birth to age five or from age six to twelve. This course will include video modules and group discussion about positive ways to parent young children.

ECON 200 Survey of Economics [SS]  
5 Credits
Introduction to microeconomics as applied to production, consumption, and marketing issues in the business and production sectors of the economy. Topics include supply/demand theory, consumer choice theory, production theory, and costs of production. Student may not earn credit for both ECON 201 and AGRI 201. Formerly ECON 202, Fundamentals of Microeconomics.

ECON 201 Microeconomics [SS]  
5 Credits
Introduction to microeconomics as applied to production, consumption, and marketing issues in the business and production sectors of the economy. Topics include supply/demand theory, consumer choice theory, production theory, and costs of production. Student may not earn credit for both ECON 201 and AGRI 201. Formerly ECON 202, Fundamentals of Microeconomics.

ECON 202 Macroeconomics [SS]  
5 Credits
Theory and policy related to organization and operation of a market economy. Topics include supply and demand theory, government spending and taxation, money and banking, analysis of employment, inflation, aggregate output and economic growth, and fiscal and monetary policy tools. Formerly ECON 201, Fundamentals of Macroeconomics.

EDUC 111 Teaching and Learning Lab  
1 - 3 Credits
Designed for future teachers and those pursuing a degree in education related field. Students will volunteer in a school setting to satisfy entry requirements of Teacher Education Program at four-year institutions. Students must volunteer 30 hours per credit. Prerequisite: EDUC 202 or instructor permission. Recommended: READ 088.

EDUC 115 Child Development  
5 Credits
Build a functional understanding of the foundation of child development, prenatal to early adolescence. Observe and document physical, social, emotional, and cognitive development of children reflective of cross cultural and global perspectives. Recommended: READ 088. Formerly EDUC 114, Child Development.

EDUC 130 Guiding Behavior  
3 Credits
Examine the principles and theories promoting social competence in your children and creating safe learning environments. Develop skills promoting effective interactions, providing positive individual guidance, and enhancing group experiences. Recommended: READ 088. Formerly ECE 170.

EDUC 136 School Age Care  
3 Credits
Develop skills to provide developmentally appropriate and culturally relevant activities and care, specifically: preparing the environment, implementing curriculum, building relationships, guiding academic / social skill development, and community outreach. * School-Age Care Professionals work with children ages 5-12 in a variety of settings including before and after school care available in family child care homes and profit or non-profit settings sponsored by community based organizations or agencies such as YMCA and YWCA, public schools, community centers and faith-based programs. In all of these programs it is the responsibility of the School-Age Professional to support the needs of individual children/youth and provide developmentally age appropriate and culturally relevant activities. READ 088. Formerly ECE 242.

EDUC 150 Child/Family/Community  
3 Credits
Integrate the family and community contexts in which a child develops. Explore cultures and demographics of families in society, community resources, strategies for involving families in the education of their child, and tools for effective communication. Formerly ECE 219. Recommended: READ 088.

EDUC 201 Teaching and Learning Lab  
1 - 3 Credits
Designed for future teachers and those pursuing a degree in education related field. Students will volunteer in a school setting to satisfy entry requirements of Teacher Education Program at four-year institutions. Students must volunteer 30 hours per credit. Prerequisite: EDUC 202 or instructor permission. Recommended: READ 088.

EDUC 202 Macroeconomics [SS]  
5 Credits
Theory and policy related to organization and operation of a market economy. Topics include supply and demand theory, government spending and taxation, money and banking, analysis of employment, inflation, aggregate output and economic growth, and fiscal and monetary policy tools. Formerly ECON 201, Fundamentals of Macroeconomics.

ECON 201 Microeconomics [SS]  
5 Credits
Introduction to microeconomics as applied to production, consumption, and marketing issues in the business and production sectors of the economy. Topics include supply/demand theory, consumer choice theory, production theory, and costs of production. Student may not earn credit for both ECON 201 and AGRI 201. Formerly ECON 202, Fundamentals of Microeconomics.

ECON 202 Macroeconomics [SS]  
5 Credits
Theory and policy related to organization and operation of a market economy. Topics include supply and demand theory, government spending and taxation, money and banking, analysis of employment, inflation, aggregate output and economic growth, and fiscal and monetary policy tools. Formerly ECON 201, Fundamentals of Macroeconomics.

EDUC 111 Teaching and Learning Lab  
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Designed for future teachers and those pursuing a degree in education related field. Students will volunteer in a school setting to satisfy entry requirements of Teacher Education Program at four-year institutions. Students must volunteer 30 hours per credit. Prerequisite: EDUC 202 or instructor permission. Recommended: READ 088.

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high value chemicals are produced.

transportation fuels, clean water, food and beverage products, and/or such as boilers, heat exchangers, distillation, and cooling systems

Focus on the critical thermodynamics of unit operations (non-electrical),

EST 105 Applied Thermodynamics of Unit Operations  3 Credits

demand by multiple industries with employment in the region.

strong skill set in plant and facility operations and maintenance that is in

industrial food and beverage processors, pulp and paper mills, and power

advanced biofuel plants, municipal wastewater treatment plants,

and/or high value chemicals and products. Safe, skilled, and motivated

into electricity, heat, transportation fuels, clean water, food products,

properties and laws of physics which are applicable to the electrical

refrigeration industries. Students will also be taught the core competencies of the HVACR industry.

EST 101 Refrigeration Basics II  4 Credits

This course explores the basics of calibrating trade instruments and environmental management of refrigerants and refrigeration oils. Labs will include window air conditioners, PTAC and PTHP operation, recovery, evacuation and charging techniques in the lab. Use of digital temperature meters and a gauge manifold will be used to determine operating parameters. Students will learn the operations of a digital multi meter (DMM) and be able to identify and use all aspects of those meters in the troubleshooting of components and systems. Students will learn electrical related components, read and draw schematics, and wiring related to the NEC. Students will take the Federal EPA-068 Technician Refrigerant Certification Exam. Prerequisite: EST 100 or instructor permission.

EST 103 Introduction to Wind Energy  3 Credits

Covers fundamentals of wind energy focusing on wind production practices for all sizes of turbines, power distribution, and net metering. Recommended: READ 088 or higher, CS 100.

EST 104 Introduction to Plant Operations  2 Credits

Plant Operators and Technicians work for facilities that convert biomass into electricity, heat, transportation fuels, clean water, food products, and/or high value chemicals and products. Safe, skilled, and motivated technicians and operators are in demand for first generation and advanced biofuel plants, municipal wastewater treatment plants, industrial food and beverage processors, pulp and paper mills, and power utilities. This course introduces a training program which will provide a strong skill set in plant and facility operations and maintenance that is in demand by multiple industries with employment in the region.

EST 105 Applied Thermodynamics of Unit Operations  3 Credits

Focus on the critical thermodynamics of unit operations (non-electrical), such as boilers, heat exchangers, distillation, and cooling systems that are located at all processing facilities where heat and power, transportation fuels, clean water, food and beverage products, and/or high value chemicals are produced.
testing of circuits and system components, circuit protectors, use of test instruments, and applicable code requirements. Prerequisite: Grade of C or better in EST 131; or instructor permission.

EST 131 Principles of Electricity Theory 5 Credits
Introduction to electrical theory and terminology, electrical safety, direct current (DC), electrical energy sources, conductors, resistance, circuit types, Ohm’s law, circuit calculations and measuring instruments, magnetism, alternating current (AC) single and three phase generation and circuits, and introduction to the National Electrical Code.

EST 132 Principles of Electricity AC Application 5 Credits
Provides a practical application of alternating current (AC) generation and operational circuits. Typical wiring practices of single and three phase wiring of plugs, receptacles, lighting, panel, disconnects, conduit, capacitors, power and control transformers, DC generators, AC alternators, an introduction to DC and AC motors. Prerequisite: Grade of C or higher in EST 131 or instructor permission.

EST 133 Introduction to Controls 5 Credits
Electrical safety and introduces control principles, operation, symbols & electrical diagrams, wiring, adjustment, and testing procedures for pressure, temperature, level and flow controls used in application of operational and safety controls of all industries. Manual, electric-mechanical, mechanical-electric and electronic controls will be covered. Prerequisite: EST 131, or grade of C or higher in EST 132, or instructor permission.

EST 134 Electrical Raceways 3 Credits
Provides training in electrical raceways types, tools and procedures used in the electrical industry. Gain a working knowledge of appropriate tools and procedures in bending and installing various types of raceways in compliance with the NEC® and electrical safety.

EST 144 Industrial Safety in the Workplace 3 Credits
Industry OSHA-10 Safety Certified Training. Workforce Safety Modules for personal and equipment safety. Along with practical teaching on how to be safe in an industrial environment will be taught.

EST 145 Industrial Safety & Material Handling 5 Credits
Industry OSHA-10 Safety Certified Training and Workforce Safety Modules for personal and equipment safety in an industrial environment. Techniques for safely lifting and moving loads of various shapes, sizes, and types will be provided. Also covered is tooing, hand and radio signals, safety around equipment, and equipment operation.

EST 150 Electric Motors and Motor Maintenance 3 Credits
This course teaches electrical and motor safety, motor applications and characteristics, installation, operation, performance, maintenance, and repair of all AC and DC series motors. Wiring for wye and delta applications is also covered. Electronically Commutated Motors (ECM) will be included in the instruction. NEMA and NEC codes will be applied for motor installation, operations, and maintenance. Other topics will include nameplate data, torque, efficiency, connections, reversing rotation, and instruments used for motor maintenance and testing. Prerequisite: EST 131 or grade of C or higher in EST 132; or instructor permission.

EST 159 Hydraulics and Pneumatics 3 Credits
Explores the basic principles of hydraulic and pneumatic systems, industry terminology, mechanical symbols, system components, energy and personal safety, completing calculations, review of operations and maintenance. Recommended: EST 100.

EST 165 Rigging, Equipment Operation & Material Handling 4 Credits
Designed to teach the techniques of safely lifting and moving loads of various shapes, sizes, and types. Also covered is tooling, hand and radio signals, safety around equipment, and equipment operation including forklifts, scissor lifts, and aerial man lifts.

EST 175 Tower Rescue and Climbing Competency 1.2 Credits
Provides students with the knowledge and skill sets needed to be able to ascend a wind turbine tower, work on the unit, descend the unit, and perform self-rescue and partner rescue in emergency conditions. This is a two day course which exceeds the minimum requirements set by OSHA and NIOSH for the tower erection industry. Prerequisite: Must be enrolled in the Wind Energy Technology program.

EST 191 Cooperative Work Experience 10 Credits
Opportunity to work in jobs directly related to the energy systems industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

EST 192 Human Relations Seminar 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success.

EST 199 Special Topics 1 - 10 Credits
Study and train to meet established local needs in the energy systems technology industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

EST 200 Ductwork Design and Fabrication 4 Credits
Demonstrate a heat loss/gain calculation to determine proper load for a residence, students will perform equipment sizing and selection, use duct calculator to design supply and return ductwork. Air distribution and air balance, duct component fabrication and installation, duct sealing duct PTSA duct testing will be covered to give student understanding and application for energy savings using green technology. Prerequisite: Instructor permission.

EST 201 Plant Operations: Process Improvement 3 Credits
The first portion of the course will focus on setting up projects. The first portion of the course will focus on setting up projects. The section portion focuses on process improvement to help understand that every employee at a plant (i.e., processing or manufacturing facility) has the ability and duty to help improve day-to-day operations. The third portion will focus on specific tools to improve the total quality of a process, including safety, monitoring, emergency response, and procedure writing. Recommended: EST 191 and EST 299, Leadership Seminar for Co-op or equivalent.

EST 202 Bio-Chemical Conversion 5 Credits
The conversion of agricultural/forestry materials (biomass), organics (food and yard wastes, and dairy manure), and other solid wastes (from landfills or wastewater treatment plants) into value-added products is of significant interest today. Technologies that harness microbes to convert these materials can be deployed in many different industries to produce...
clean water, biogas and biomethane, renewable fuels and chemicals, heat, electricity, and soil amendment products. After some measure of pre-treatment, the lignocellulosic fabric of woody biomass is liberated into easier to use sugar units. For thousands of years, microbes have been fed sugars to produce fermented beverages and food products, and more recently, pharmaceuticals. We will review the structure of lignocellulosic biomass. The course will feature labs to produce, monitor, and analyze the fermentation and anaerobic digestion processes and their products. Recommended: WTM 190, AGPR 121, and EST 201.

**EST 203 Applied Controls and Operations** 5 Credits
This course will have three learning modules to control and operate: an electric steam boiler, a biodiesel processor, and a soap processor (and/or a biomass gasifier to produce electricity. The purpose of this class is to gain hands-on experience operating three types of processes from start-up to shutdown and clean-up, including monitoring and quality assurance/quality control. Prerequisite: EST 105 and/or EST 202. Recommended: EST 105 and EST 201.

**EST 204 Resource Recovery Operations** 3 Credits
EST 204 builds off of EST 201, EST 202, and WTM 205 by focusing on the use of waste products to produce energy. Many landfills and wastewater treatment facilities are re-purposing themselves as net producers of clean water and renewable energy. They now consider their plants to be Renewable Resource Recovery Operations that utilize low-cost feedstocks to generate power, heat, and fuels to lower their operating costs and/or generate revenue. Prerequisites: EST 201, EST 202, and WTM 205. Co-requisite: EST 203.

**EST 220 Ammonia Refrigeration Systems** 3 Credits
Introduction to operation, maintenance, and repair of industrial refrigeration and ammonia systems. Application of refrigeration and electrical knowledge acquired from previous courses to understanding operation and maintenance of industrial refrigeration with emphasis on Ammonia (R717) and safety.

**EST 225 Commercial Air Conditioning Systems** 4 Credits
This course explores commercial air conditioning systems. Topics will include high-pressure, low-pressure, and absorption chillers. Cooling towers, pumps, package rooftop units, variable refrigerant flow, and variable air volume systems will also be covered. Training will focus on the operation, maintenance and troubleshooting of these systems and components. Prerequisite: EST 201 or instructor permission.

**EST 234 Survey of Technical Equipment for Processing (STEP)** 1 - 4 Credits
Students will gain familiarity with equipment, processes, and labs used in the Bio-products and allied industries. Course is largely hands-on in nature as students gain experience on a variety of training equipment. Two eight-hour sessions per week for four weeks.

**EST 235 Introduction to Solar PV and Applications** 3 Credits
The fundamental concepts required for safe, code-compliant design and installation of photovoltaic (PV) systems will be covered with a focus on grid-direct solar electric systems. The core concepts necessary to work with all PV systems, including system components, site analysis, PV module criteria, mounting solutions, safety, and commissioning will be taught. Prerequisite: EST 132

**EST 240 Intro to Basic Electronics** 5 Credits
Introduction to solid-state theory and basic electronic components. Students will study solid-state theory, operation, and testing of solid-state components and devices to include diodes, thermostors, transducers, photocells, transistor, SCR, Diac, Triac, SS relays, photoelectric and proximity controls. Prerequisite: EST 131 and grade of C or higher in EST 132, or instructor permission.

**EST 250 Introduction to PLC and DDC Control** 5 Credits
Introduction to programmable logic controllers (PLC) for industrial control and direct digital controls (DDC) for building automation. Students will gain an understanding of terminology, components, programming, interfacing and operation of PLC controls, and be introduced to DDC components, functions and operation in building automation and energy management. Prerequisite: EST 133 or instructor permission. Recommend: CS 100.

**EST 252 Principles of Power Generation and Distribution** 5 Credits
Introduction to the common components and applications of electrical generation and distribution systems. The operation and maintenance of those systems will also be covered. Prerequisite: EST 132 or instructor permission.

**EST 255 Advanced PLC’s and Integrated Architecture** 5 Credits
The advanced PLC and Integrated Architecture course teaches programmable controllers by describing PLC orientation, operations, and programming languages. It covers basic PLC programming, PLC memory organization, PLC programming software and PLC program analysis. This course also introduces PLC troubleshooting by discussing levels of PLC troubleshooting, power supply troubleshooting, input troubleshooting and output troubleshooting. Skills also discussed include PLC Systems troubleshooting, event sequencing, application development, program control instructions, and math and data move instructions. Integrated architecture is the convergence of Control and Information for plant-wide optimization and builder performance. Integrated architecture delivers plant wide optimization, machine builder performance, and sustainable production and serves as a foundation to help you improve productivity with better asset utilization and system performance, promote globalization with easy access to actionable, plant-wide information, support sustainability with extended product life cycles and better asset utilization, and cultivate innovation with increased system flexibility and technical risk mitigation. Prerequisite: EST 133.

**EST 260 Introduction to the National Electrical Code** 2 Credits
Course introduces student to the National Electrical Code (NEC), and the Washington Administrative Code (WAC), and Revised Code of Washington (RCW) as it relates to the electrical industry to familiarize students with legal code and electrical safety. May be taken as a preparation of industry technicians preparing to take the certification exam.

**EST 263 Electric Heat, Heat Pumps, and Solar Heat** 4 Credits
This course covers electric heat and heat pump technology for air-to-air, geothermal water-to-air, and water-to-water heat pumps, and solar heating. Students will learn installation, electrical components, operation, maintenance, service, and repair of electric heat, heat pumps. An introduction to solar hydronic heating systems will also be included. Applicable Codes NEC, UMC, IMC will be discussed. Students will take the national electric heat and heat pump certification exams. Prerequisite: EST 120 or instructor permission.
EST 264 Fossil Fuel Heating and Boiler Systems  
This course provides training for the installation, operation, maintenance, and repair of fossil fuel fired heating systems. Hydronic boilers for residential, light commercial, and steam boilers for commercial and industrial operations will be covered. Safety, operational sequence, maintenance, and troubleshooting of these systems will be taught. Applicable national electrical code, international mechanical code, the national fuel-gas code for operation, installation, and service will be included. Fuel piping and venting is also covered. Students are required to take national certification ER exams for gas heat, combustion analysis, and fuel efficiency. Prerequisite: EST 100 or instructor permission.

EST 265 Commercial Refrigeration I  
This course explores design and operational requirements of low and medium temperature commercial refrigeration systems. It provides a basic understanding of typical commercial and supermarket refrigeration systems with emphasis on operation and system analysis to determine faults. National certification exam will be given. Prerequisite: EST 110 or instructor permission.

EST 266 Commercial Refrigeration II  
This course trains students in the installation, operation, and maintenance of commercial ice machines, specialty refrigeration applications. Topics will include transport, truck, marine, air-cargo, rail, flash-freezing, cascade, extra-low and cryogenic refrigeration systems. Emphasis will be on typical operating conditions and troubleshooting procedures of these types of systems. Students will take the national employment ready certification [ERC] exam for light commercial refrigeration. Prerequisites: EST 110 and EST 265, or instructor permission.

EST 267 Commercial Refrigeration III  
This course covers the design and operation of flash-freezing, cascade, extra-low and cryogenic refrigeration systems. Emphasis will be on typical operating conditions and troubleshooting procedures of these types of systems. Students will take the national employment ready certification [ERC] exam for light commercial refrigeration. Prerequisites: EST 110 and EST 265, or instructor permission.

EST 268 Advanced Refrigeration  
This course provides advanced training in the design and operation of large commercial refrigeration systems. Topics will include transport, truck, marine, air-cargo, rail, flash-freezing, cascade, extra-low and cryogenic refrigeration systems. Emphasis will be on typical operating conditions and troubleshooting procedures of these types of systems. Students will take the national employment ready certification [ERC] exam for light commercial refrigeration. Prerequisites: EST 110 and EST 265, or instructor permission.

EST 269 Advanced Refrigeration II  
This course covers the design and operation of flash-freezing, cascade, extra-low and cryogenic refrigeration systems. Emphasis will be on typical operating conditions and troubleshooting procedures of these types of systems. Students will take the national employment ready certification [ERC] exam for light commercial refrigeration. Prerequisites: EST 110 and EST 265, or instructor permission.

EST 270 Wind Power Plant Operations and Advanced Mechanical Systems  
This course is an introduction to various fundamentals of the Wind Power Plant Operations, including daily routines, process and paperwork, management styles, and customer service skills. It will also cover wind turbine troubleshooting, and advanced/large mechanical systems repair.

EST 271 Wind Turbine Operations and Advanced Mechanical Systems  
This course provides advanced training in the design and operation of wind power plants. Topics will include wind turbine design, operation, maintenance, and troubleshooting. Emphasis will be on typical operating conditions and troubleshooting procedures of these types of systems. Students will take the national employment ready certification [ERC] exam for wind power plant operations. Prerequisites: EST 110 and EST 265, or instructor permission.

EST 272 Wind Turbine Operations and Advanced Mechanical Systems II  
This course covers the design and operation of advanced wind power systems. Topics will include wind turbine design, operation, maintenance, and troubleshooting. Emphasis will be on typical operating conditions and troubleshooting procedures of these types of systems. Students will take the national employment ready certification [ERC] exam for wind power plant operations. Prerequisites: EST 110 and EST 265, or instructor permission.

EST 273 Robinsons - Mechatronics  
Robots and Mechatronics is designed to teach programming, interface and material handling, quality control, and production control using robotics. These skills will transfer into integrated technologies across a balance of areas, including mechanical, electrical, electronics, fluid power, and machine programming. The ability to integrate industrial robots into a control process creates great training opportunity for students. Prerequisite: EST 133, Introduction to Controls. Recommended: EST 250, Introduction to PLC and DDC Control.

EST 275 Advanced Instrumentation and SCADA  
Electrical safety and advanced control principles are covered in this course with a strong emphasis on instrumentation, input/output calibration, wiring, and PID loop control. We explore testing procedures for pressure, temperature, level, and flow instrumentation used in the process and manufacturing industries. This course also covers troubleshooting of industrial control scenarios through a Supervisory Control and Data Acquisition (SCADA) control center. Prerequisite: EST 106 and EST 133, or instructor permission.

EST 291 Cooperative Training  
Opportunity to gain work experience in an Energy related role as agreed upon by the employer, student and instructor. Students will utilize skills and knowledge learned in previous quarters. Prerequisite: Instructor permission.

EST 292 Leadership Seminar  
Explore issues related to the cooperative work experience focusing on effective workplace relationships and applying leadership skills to promote personal development. Provide professional improvement through techniques such as effective communication, conflict resolution, team building, employee engagement and decision making.

EST 297 Special Projects  
Project-oriented experiences in the area or applications not covered in the standard energy systems technology curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

EST 299 Leadership Seminar for Cooperative Work Experience  
Explore issues related to the cooperative work experience focusing on effective workplace relationships and applying leadership skills to promote personal and professional development. Provides professional improvement through techniques such as effective communication, conflict resolution, team building, employee engagement, and decision making. Includes iterative problem solving exercises and an assessment of learning gains at the mid-point of workforce training. Co-requisite: EST 191.

ENT 112 Blueprint Reading  
Introduction to basic construction plan interpretation. Emphasis is on symbol usage, line types, dimensioning, section views, auxiliary views, and integration of construction plans from various trades.

ENT 121 Computer Aided Drafting and Design  
Introduction to computer-aided drafting and design using AutoCAD software with emphasis on two-dimensional fundamentals in the solution of graphic problems and development of engineering drawings. Course includes the production of engineering graphics and documents. Prerequisite: ENGR& 111 or instructor permission. Formerly CET 151, Computer Aided Drafting.

ENT 122 Advanced Computer Aided Design & 3-D Modeling  
Introduction to advanced applications of computer aided drafting and design of three-dimensional graphics and engineering drawings using Civil 3D software. Course includes the production of engineering graphics and documents. Formerly CET 152. Prerequisite: ENT 121 or instructor permission.

ENT 150 Introduction to GIS  
Introduction to the fundamentals of GIS and GPS. Emphasis is on the fundamentals of cartography, geography, map projections, coordinate systems, attributes, data formats, and analysis of data both statistically and spatially using ESRI ArcGIS for Desktop software. Formerly CET 250.

ENT 151 Advanced GIS  
Instruction in advanced topics of GIS. Emphasis includes geo-spatial analysis, creation and use of geo-databases, geo-coding, geo-
ENGR& 104 Intro to Design  5 Credits
Introduction to specific fields of engineering including aspects of its training and functional practices. Research reports, oral presentations, group activities, and video presentations of engineering feats are included. Formerly CET 103.

ENGR& 111 Engineering Graphics 1  3 Credits
Introduction to basic engineering graphic concepts, plan interpretation, and computer drafting skills. Emphasis is on isometric and orthographic drawings, line types, dimensioning, section views, auxiliary views, construction plans interpretation, and AutoCAD software usage. Formerly CET 141, Engineering Graphics.

ENGR 202 Design of Logic Circuits  6 Credits
Introduction to skills and theoretical knowledge needed to design, simulate, and build combinational logic and basic sequential circuits. Using industry-relevant CAD tools and design technologies, students will learn through homework and projects to design and implement a collection of combinational and sequential circuits. Prerequisites: MATH& 141 with a grade of C or higher and either CS 121, CS& 131, or CS& 141, or instructor permission.

ENGR& 204 Electrical Circuits  5 Credits
Introduction to basic circuits and system concepts. Development of mathematical models of components including resistors, sources, capacitors, inductors and operational amplifiers. Solutions of first and second order linear differential equations associated with basic circuit forms. Steady state sinusoid excitation and phasors. Prerequisites: PHYS& 223, MATH& 152, and either CS 121, CS 131, or CS 141. Instructor permission required. Co-requisite: ENGR 205.

ENGR 205 Electrical Circuits Lab  2 Credits
Laboratory in conjunction with ENGR& 204. Prerequisite: PHYS& 223, MATH& 152, and either CS 121, CS 131, or CS 141. Instructor permission required.

ENGR& 214 Statics  5 Credits
Instruction in the fundamental principles of the mechanics of rigid bodies. Emphasis is on forces in a plane, forces in space, statics of rigid bodies, rigid bodies in three dimensions, centroids, friction and moments of inertia. Prerequisite: MATH& 152, or instructor permission. Student may not earn credit for both ENT 221 and ENGR& 214. Formerly CET 220, Engineering Mechanics - Statics.

ENGR& 215 Dynamics  5 Credits
A calculus-based study of kinetics and kinematics including: rectilinear, curvilinear, and relative motion, equations of motion, work and energy, impulse and momentum, rotational motion, and angular momentum. Rectilinear and curvilinear motion in two dimensions is considered, in both rectangular and polar coordinates. Prerequisites: ENGR& 214 and MATH& 152 with a grade of C or higher.

ENGR& 225 Mechanics of Materials  5 Credits
Instruction in the fundamental principles of internal stress, strain, deflection, and deformation of structural members. Emphasis is on stress-strain relationships, Mohr’s circle, load, shear, and bending moment diagrams, beam and column analysis and design. Prerequisite: ENGR& 214 with a grade of C- or higher, or instructor permission. Students may not earn credit for both ENGR& 225 and ENT 222. Formerly CET 222, Engineering Mechanics-Strength of Materials.

ENGR 240 Applied Numerical Methods  5 Credits
Introduction to the following methods: elements of error analysis, real roots of an equation, polynomial approximation by finite difference and least square methods, interpolation, quadrature, numerical solution of ordinary differential equations, and numerical solutions of systems of linear equations. The student should expect to program a computer in addition to using a graphing calculator. Prerequisite: MATH& 153 with a grade of 2.0 or higher, or instructor permission.

ENGL 087 Writing Essentials  5 Credits
This course focuses on the composition of well-developed sentences, paragraphs, short essays, and the writing process. Students will develop critical thinking through the use of expository, narrative, critical, analytical, and persuasive writing techniques. Instructors will use the WWCC writing rubric to evaluate competencies and
ENGL 097 Basic Expository Writing 5 Credits
This course focuses on the composition of well-developed sentences, paragraphs, essays, and the writing process. Students will develop critical thinking skills through the use of expository, narrative, critical, analytical, and persuasive writing techniques. Instructors use the WWCC writing rubric to evaluate competencies and ensure developmental progression. Prerequisite: Appropriate placement score.

ENGL 101 English Composition I [C] 5 Credits
Focuses on the development of structural and stylistic writing skills with concentration on expository, critical, analytical, and persuasive essay techniques. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097. Formerly ENG 101, English Composition I.

ENGL 101H English Composition I-Honors [C] 5 Credits
Focuses on the unique process of writing an academic research paper that addresses the concerns of a research community. Prerequisite: Grade of C or higher in ENGL 101. Formerly ENG 101H, English Composition I-Honors.

ENGL 102 English Composition II [C] 5 Credits
Focuses on the composition of well-developed sentences, paragraphs, essays, and the writing process. Students will develop critical thinking skills through the use of expository, narrative, critical, analytical, and persuasive writing techniques. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097. Formerly ENG 102, English Composition II.

ENGL 111 Intro to Literature [H] 5 Credits
Examines poetry, fiction, drama, and non-fiction. Formerly LIT 140, Intro to Literature.

ENGL 112 Intro to Fiction [H] 5 Credits
Examines short fiction from the 19th century to the present, drawn from a variety of countries and cultures. Formerly LIT 141, Intro to Fiction.

ENGL 113 Intro to Poetry [H] 5 Credits
Emphasizes the interpretation and appreciation of poetry in its various forms. Concentration is on narrative and lyric forms and an introduction to a wide variety of established poets. Formerly LIT 142, Intro to Poetry.

ENGL 115 Arthurian Literature [H] 3 Credits
Examines selected Arthurian legends found in literature, film, music and art from the middle ages to the modern period. Formerly LIT 111.

ENGL 118 Baseball Literature and American Culture [H] 5 Credits
Examines the short stories, poetry, novels, and non-fiction that focus on our national pastime in order to determine how authors perceive the game as reflective of larger issues in American life and the human condition. Recommended: READ 088 or higher.

ENGL 144 Introduction to Film [H] 5 Credits
Examines selected films with emphasis on story, character, and criticism. Formerly LIT 144.

ENGL 147 Comics as Literature [D, H] 5 Credits
Examines a variety of forms of drawn literature, including comics, graphic novels, autobiography, as well as less traditional narratives. Primary focus of the course is on critical acclaimed graphic novels. Formerly LIT 147.

ENGL& 210 Myth and Folklore [D, H] 5 Credits
Examines the myths and folktales of the world with an emphasis on literature and culture. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly LIT 210.

ENGL 212 American Literature [D, H] 5 Credits
Focuses on the study of major American authors. Formerly LIT 212.

ENGL& 236 Creative Writing I 5 Credits
Explores the many ways imaginative literature takes shape and offers specific strategies and assignments to generate and polish original poems and stories. Formerly ENG 120, Creative Writing. Prerequisite: Compass placement in college-level English of successful completion of ENGL& 097.

ENGL 245 American Literature [D, H] 5 Credits
Examines influential American literary voices and styles from settlement times through the present. Formerly LIT 245.

ENGL 246 Literature of the British Isles [H] 5 Credits
An introduction to some of the English texts that launched the West’s rich literary traditions, starting over 1000 years ago and covering up to the mid-20th century. Sampling essays, poems, historical texts, stories, memoirs, speeches, plays, and a novel; the course features a wide variety of works from authors representing the British Isles including England, Scotland, Ireland, and Wales.

ENGL 251 Voices of Women in Literature [D, H] 5 Credits
Surveys selected women writers across time and cultures with a focus on women as authors and characters. Time period covered ranges from the 18th to the 21st century. Student may not earn credit for both ENGL 251 and GWST 251. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly LIT 251. Recommended: READ 088 or higher.

ENGL 257 Literature of the Inland Northwest [H] 5 Credits
Examines the historical and contemporary literature of the Inland Northwest in fiction, poetry, personal memoir, and letters from various cultures. Formerly LIT 257.

ENGL 261 Native American Literature [H] 3 Credits
Studies traditions, cultures, myths, roles, and problems facing Native Americans through essay, narrative, story, oratory, poetry, film, and song. Recommended: READ 088 or higher. Formerly LIT 261.

ENGL 265 World Literature [D, H] 5 Credits
Examines some of the world's great literary traditions, both ancient and modern, featuring poetry, story, and drama. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly LIT 265.

ENGL 270 Detective and Spy Literature [H] 5 Credits
Examines selected thriller literature from 1840 to the present. Formerly LIT 270.

ENGL 271 Science Fiction and Fantasy Literature [H] 5 Credits
Examines science fiction and fantasy genres with an emphasis on their emergence as significant literature. Formerly LIT 271.
ENGL 277 The Bible as Literature [H] 5 Credits
The Literature of the Bible is a five-credit course designed to introduce both beginning and experienced readers of the Bible to the artistry of its stories and poetry. Neither a religious nor historical approach is applied towards the biblical text; instead, the Bible is approached from a literary standpoint. Formerly LIT 277.

Enology and Viticulture

EV 100 Forklift Operator Training 1 Credit
Designed to meet the new OSHA requirements for lift truck operator training and certification. Safe lifting/chaining and moving of loads will be demonstrated and discussed.

EV 101 Establishing a Vinifera Vineyard 4 Credits
Designed as an introduction to the processes of establishing a vineyard. Emphasis on site selection, vine varieties, soil preparation, planting methods, vineyard layout, and equipment requirements. Prerequisite: Successful completion of EV 107, Viticulture Practicum I.

EV 102 Maintaining a Vinifera Vineyard 1 - 5 Credits
Provides the skills necessary for maintaining the vineyard from the point of dormancy through the harvest. Emphasizes crop monitoring techniques, pruning methods, bloom, vine manipulation, determining vine health, as well as the relationship that exists between the grower and the vintner. Prerequisite: Successful completion of EV 101.

EV 103 Advanced Vineyard Management 1 - 5 Credits
Designed for viticulture students or growers who wish to acquire hands-on experience in vineyard management. This will be a combination of in-class lecture, followed by field work. Students will be responsible for maintaining an assignment vineyard block, under the supervision of the course instructor. Emphasis will be placed on proper canopy management, vine water status, soil water content, and vineyard irrigation. Prerequisite: Successful completion of EV 102 with a grade of C or higher, or instructor permission.

EV 106 Intro to Enology & Viticulture for Wine Business 3 Credits
A survey of viticultural and winemaking practices employed in wine production during harvest. Emphasis on harvest winemaking operations includes: crush, press, fermentation, maceration, and barrel use. Vineyard harvest operation includes: maturity sampling, bird netting and fall harvest. Basic sensory analysis of wines will be performed to begin the process of palate training. Prerequisite: Instructor permission.

EV 107 Introduction to Viticulture and Enology 5 Credits
A survey of the different viticultural and winemaking practices employed in wine production during harvest. Emphasis on vineyard harvest operations including: maturity sampling, bird netting and fall harvest. Involves the vintage productions of wines sold at College Cellars. Basic sensory analysis of wines will be performed to begin the process of palate training. Prerequisite: Instructor permission.

EV 108 Wine Industry Marketplace 3 Credits
Provides insights and experiences necessary to become not only a successful job applicant, but an informed and knowledgeable wine industry participant. Introduce you to the wine industry value chain, major players, industry associations and resources, industry statistics and current events. We will investigate the employers’ perspective as well as strategic job seeking, networking, and interview tactics. Using this information, students will be able to match their personal and professional skills to opportunities in the industry, whether starting their own industry enterprise or seeking employment at an existing business.

EV 131 Essentials of Winery Compliance 2 Credits
An introduction to winery compliance covering application processes, recordkeeping and reporting requirements for the Washington State Liquor Control Board (WSLCB), the Alcohol and Tobacco Tax and Trade Bureau (TTB), and the Washington State Department of Revenue (DOR).

EV 140 Writing for the Winery 2 Credits
Entails exchanges of ideas about what exists, what could exist and what could be done better in written materials for winery marketing publications. Sessions will include a mix of writing assignments, follow-up critiques, guest speakers with professional wine writing experience and a field trip to a winery. ENGL& 101 recommended.

EV 141 Introduction to Wine Marketing 3 Credits
This course provides an introduction to the challenges of marketing wine in today’s competitive arena. The course will explore: business plans for wineries, market research, the marketing mix, brand integrity, and distribution as it pertains to the marketing of wine.

EV 142 Applied Wine Marketing 3 Credits
Provides a general overview of wine marketing strategies and tactics for marketers selling wine directly to consumers, as well as an exploration of challenges and opportunities for reaching sales goals for winery direct business. Emphasis on the tasting room experience, wine club management, event marketing, e-commerce activity, and social media.

EV 175 Vineyard and Winery Spanish 1 - 3 Credits
Designed for English speakers who work with winery and vineyard employees whose first language is Spanish. Covers basic pronunciation and verb conjugations while emphasizing vocabulary and expressions specific to the vineyard and winery.

EV 180 Wines of the World 1 Credit
An introduction to the wine producing regions of the world including history, viticultural practices, and winemaking styles. Includes sensory evaluation of representative wines. Must be at least 21 years old to enroll.

EV 189 Sensory Analysis of Wine 3 Credits
Sensory analysis specific to wine production with a focus on the effect of appearance on taste perception, as well as olfactory and taste transduction mechanisms. The class will focus on specific wine varietals, use of oak in winemaking, secondary fermentation, characteristics and individual wine component threshold identification. The purpose of the course is to help students to train their palates to make informed decision making during wine production. Prerequisite: EV 107. Recommended: EV 203.

EV 193 Winery Operations Management 3 Credits
A multi-dimensional course on winery management and operations. Course includes (but not limited to) annual planning and budgets, labor relations and supervision including workplace health and safety issues, supply and product control, and best management practices for energy use. Disposal of liquid and solid winery waste and storage and distribution systems will also be covered. Prerequisite: EV 107 Intro to Viticulture and Enology and successful completion of OCSUP 105 or higher.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
EV 196 Viticulture Practicum I  1 Credit
Provides students with hands-on learning experiences while assigned to a selected vinifera vineyard manager. Must be enrolled in the Viticulture program.

EV 197 Viticulture Practicum II  1 Credit
This is the second quarter of viticulture practicum which provides the student with hands-on learning experiences while assigned to a selected vinifera vineyard manager. Prerequisite: Successful completion of EV 196.

EV 198 Viticulture Practicum III  1 Credit
This is the third quarter of viticulture practicum which provides students with hands-on learning experiences while assigned to a selected vinifera vineyard manager. Prerequisite: Successful completion of EV 197. Must be enrolled in the Viticulture program.

EV 199 Special Topics  1 - 6 Credits
Study and train to meet established local needs in the enology and viticulture industry, supplemental to courses currently offered. Prerequisites: Current enrollment in the Enology program and instructor permission.

EV 203 Science of Winemaking I  3 Credits
This is an advanced enology course open only to students enrolled in the Enology and Viticulture program. Topics include winemaking principles such as fruit selection, pre-harvest analyses, fruit processing, juice additions, alcoholic and malo-lactic fermentations, as well as wine hygiene and safety. Prerequisites: Instructor permission. Successful completion of AGPR 120 or CHEM& 110, OCSUP 105 or above, and EV 102.

EV 204 Science of Winemaking II  5 Credits
Emphasizes the chemistry of winemaking, wine analysis and quality control. Students will learn wine composition, wine analytical techniques, and the relevance of these analyses to winemaking decisions. Students will also gain knowledge of wine filtration and post-fermentation wine stewardship. Prerequisites: Successful completion of EV 203.

EV 205 Science of Winemaking III  5 Credits
Focus on stabilization and clarification of both white and red wines on the way to bottling. It will include both heat and cold stability as well as filtration and fining techniques of wine. The culmination of the course will be when wines which students started in EV 107 are blended, filtered, fined and bottled. Excursions to other wineries as well as guest speakers are included. Prerequisites: Successful completion of EV 204.

EV 286 Winemaking Practicum I  3 - 12 Credits
Students experience hands-on learning while working at a selected winery and receiving supervision from a professional vintner. Prerequisites: Completion of EV 203 with a grade of C- or higher or instructor permission.

EV 287 Winemaking Practicum II  1 - 3 Credits
Offers hands-on learning while working at a selected winery and receiving supervision from a professional vintner. Must be enrolled in the Enology program. Prerequisites: Grade C or higher in EV 286 or instructor permission.

EV 288 Winemaking Practicum III  1 Credit
Students experience hands-on learning while working at a selected winery and receiving supervision from a professional vintner. Must be enrolled in the Enology program. Prerequisite: Successful completion of EV 287 or instructor permission.

EV 297 Special Projects  1 - 10 Credits
Project-oriented experiences in the area or applications not covered in the standard enology and viticulture curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

EV 299 Professional Wine Leadership  1 Credit
Students will develop an awareness of the leadership skills necessary to be successful in winery tasting rooms. Students will explore the history of the Walla Walla wine region, and understand how to apply that knowledge and appropriate customer service skills to enhance the customer experience within the wine industry. A current MAST permit is required as a part of the course.

ENVIRONMENTAL STUDIES

ENVS& 101 Introduction to Environmental Science [NS]  5 Credits
Provides a study of natural and modified systems and their interactions with humans and other living organisms. Students will gain scientific understanding of natural environments and the effects of human modification upon the natural world. Topics include: climate, soil, water resources, riparian areas, hazardous waste, and pollution of air, food, water, and agriculture. Students will learn about assessment procedures and riparian habitat improvements used by local government agencies. Lab work required. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088. Student may not earn credit for both ENVS& 101 and AGPR 101. Formerly ESCI 101, Introduction to Environmental Sciences.

ENVS 150 Issues in Environmental Science - Honors Seminar  2 Credits
An introduction to a specific area of interest in environmental science. The basic concepts of that particular area of environmental science will be covered, in addition to discussion of related current events and specific issues of local interest. Field experience will be part of the curriculum. Prerequisite: Instructor permission. Students must be enrolled in WWCC Honors Program.

Farrier Science

FRR 162 Small Business Management for Farriers  2 Credits
Introduction to management tools for small business. Includes knowledge of financial statements, business planning and budgeting, inventory control, financing and marketing.

FRR 191 Cooperative Work Experience  1 - 18 Credits
Opportunity to work in jobs directly related to the farrier industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

FRR 192 Cooperative Seminar  2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for

**FRR 194 Basic Shoeing** 1 - 18 Credits
Introduction to basic horse shoeing and forge work. Includes basic anatomy, basic balance, and basic shoeing.

**FRR 195 Intermediate Shoeing** 1 - 18 Credits
Hands-on shoeing and forge work experience with live horses. The student learns how to trim a horse's hooves, make or shape shoes, and apply them. Prerequisite: FRR 194.

**FRR 197 Advanced Shoeing** 1 - 18 Credits
Hands-on shoeing experience with live horses. Learn how to trim a horse's hooves, make or shape shoes, and apply them. Prerequisite: FRR 195.

**FRR 199 Special Topics** 1 - 15 Credits
Study and train to meet established local needs in the farrier industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

**FRR 245 Advanced Hoof Preparation and Shoeing** 1 - 16 Credits
Hands-on shoeing experience with live horses for students beyond the intermediate level. Learn how to improve forging and shoeing abilities. Prerequisite: FRR 197.

**FRR 255 Advanced Forging - Handmade Shoe Unit** 1 - 16 Credits
Hands-on shoeing experience with live horses for students beyond the intermediate level. The student applies handmade shoes with clips. Prerequisite: FRR 245 or instructor permission.

**FRR 283 Therapeutic Shoeing** 1 - 16 Credits
Hands-on shoeing experience with live horses for students beyond the intermediate level. Learn how to make and apply all types of therapeutic and hand forged shoes. Prerequisite: FRR 255 or instructor permission.

**FRR 292 Leadership Seminar** 2 Credits
This course explores issues related to the cooperative work experience focusing on effective workplace relationships and applying leadership skills to promote personal development. Provide professional improvement through techniques such as effective communication, conflict resolution, team building, employee engagement, and decision making.

**FRR 297 Special Projects** 1 - 16 Credits
Project-oriented experiences in the area or applications not covered in the standard farrier curriculum. Prerequisite: Instructor permission, based on evaluation of student's education and work experience.

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**FCA 100 Introduction to Firefighting** 1 Credit
Provides an overview of the fire service and the role of the firefighter. Several aspects of a career with the Fire Service will be explored beginning with the origins of the modern American fire service, the complexity of the organization, and an introduction to the activities involved in fire protection. Prerequisite: Acceptance into the Fire Science program. This class is offered only in fall of the first year Fire Science program.

**FCA 111 Fundamentals of Firefighting** 9 Credits
Provides an introduction to firefighting fundamentals according to National Fire Protection Association (NFPA) standards and includes a practicum element. Topics include personal protective equipment, search and rescue techniques, health and safety, fire behavior, incident command systems, ladders and ventilation, and hazardous materials.

**FCA 115 Advanced Firefighting** 9 Credits
This course is taught according to the standards of the National Fire Protection Association (NFPA) and is the final segment in the FCA 111 and FCA 115 series. The course expands on the topics covered in FCA 111 Fundamentals of Firefighting and will include hydraulics, sprinkler systems, fire prevention education, investigation, and multi-company operations. Upon completion of this segment, the student will be able to take the test for Level 1 Firefighter conducted by the WA State Fire Protection Bureau. Those who successfully complete the test will receive a certificate from the International Fire Service Accreditation Congress (IFSAC) that is recognized in 35 states and 19 countries. Prerequisite: FCA 111 or instructor permission.

**FCA 120 Fire Investigation** 3 Credits
Basic study of fire scene investigation procedures and techniques used to determine the origin and cause of fire. Topics include accurate determination of the origin and cause of fire, systematic approach to fire scene examination, chemistry of fire, accidental and incendiary fire causes, scene sketching, scene photography, note taking, and Washington State Criminal statutes. Additionally basic scene security, major fire scene control, report writing, interviewing, and courtroom demeanor for the firefighter and investigator will be discussed. Prerequisite: FCA 115 or instructor permission.

**FCA 130 Hydraulics** 3 Credits
Consistent with the competencies identified in National Fire Protection Association (NFPA) standards with primary emphasis on the duties and responsibilities of a pump operator. This is accomplished by learning the operating principles, theories, and construction of the apparatus, the maintenance, pumping, operating the pump, and the study of circulating hydraulics. Prerequisite: FCA 115. Recommended: MATH 75C.

**FCA 137 Fire Protection Systems** 3 Credits
Study of fire protection and detection systems with a focus on the introduction of sprinkler system operation, maintenance, and inspection. Includes basic system designs including wet, dry, deluge, and pre-action; various sprinkler heads; system parts including connections and valves; and system operation including water supply. Maintenance and inspection of sprinkler systems and fire department support are discussed. Additional topics include occupancies requiring non-water type systems, examination of carbon dioxide systems, halogenated systems, wet/dry chemical systems, and standpipe systems along with the fire department standpipe systems. Additionally, the course explores fire extinguishers, fire detection and alarm systems. Prerequisite: FCA 100 or instructor permission.

**FCA 152 Building Construction** 3 Credits
Overview of building construction engineering principles, fire and life safety concerns, hazardous materials/techniques, and related design factors. Significant course time concentrates on the hazards of various methods, techniques, components, and materials found in building construction. Special attention to lightweight construction techniques.
as well as strategic and tactical considerations for contemporary building design. Utilization of building construction knowledge for pre-planning fire potential is emphasized. Prerequisite: FCA 115 or instructor permission.

**FCA 155 Fire Instructor I** 3 Credits
The study, analysis, application and evaluation of teaching/instructional methodology. Presentation of educational information and skills to fellow Fire Science students and the general public is emphasized. Course is consistent with competencies identified by the NFPA 1041 Standard. Prerequisite: Acceptance to the Fire Science program.

**FCA 160 Fire Tactics I** 3 Credits
Addresses training in the planning, implementation, and evaluation of basic fire tactics at the responding officer level. Principle elements include pre-fire planning, size-up, fire simulation, fire behavior, organizational structures, tactics, strategy, resource requirements, and allocation of resources. Prerequisite: FCA 115 or instructor permission.

**FCA 170 Hazmat Operations** 3.0 Credits
Preparation for the IFSAC HAZMAT Operations level examination. Focus will be on Personal Protective Equipment, Health and Physical Hazards, Properties and Behavior, Hazardous Materials Identification, Incident Management and Priorities, Mitigation, Decontamination and Defensive Control Functions. The course meets the requirements of OSHA 1910.120 and NFPA 472 Awareness and Operations level core competencies.

**FCA 177 Wild Land Fire Management** 3 Credits
Designed for firefighters that are confronted with a wild land fire situation and will focus on developing entry level wild land firefighting skills, emphasizing firefighter safety. The course complies with the PNWCG S-130/S-190 course requirements for entry level wild land firefighting. Prerequisite: FCA 111 or equivalent training.

**FCA 190 Uniform Fire Codes and Inspections** 4 Credits
Study of the Uniform Fire Code as it applies to fire prevention inspections at the fire company level. Includes the Fire Code’s relationship to the Uniform Building Code and other recognized standards. Special attention is given to the establishment and maintenance of model codes, the inspection process, and developing an understanding of the administrative section of the Uniform Fire Codes and the Uniform Building Codes. Discussion of public relations and alternate methods and materials give the course a realistic approach to field applications. Prerequisite: FCA 111 or instructor permission.

**FCA 299 Leadership** 3 Credits
Introduces the Fire Science student to leadership and influencing skills among emergency personnel. It will explain why effective leadership begins with personal insight and development, describe various leadership models, explore the value of trust in an organization, how to acquire personal influence, and how leaders create a work environment fostering leadership in others. In addition, the students will discuss the decision-making process especially in a crisis. Prerequisite: FCA 115 or instructor permission.

**French**

**FRCH& 122 French II [H]** 5 Credits
Second quarter of a first-year college-level French course that provides students with the basic tools of vocabulary, grammar, and pronunciation, along with opportunities to develop proficiency in listening, speaking, reading, and writing, while being exposed to the richness and diversity of the French-speaking world. Formerly FREN 102, French II.

**FRCH& 123 French III [H]** 5 Credits
Third quarter of a first-year college-level French course that provides students with the basic tools of vocabulary, grammar, and pronunciation, along with opportunities to develop proficiency in listening, speaking, reading, and writing, while being exposed to the richness and diversity of the French-speaking world. Prerequisite: FRCH& 122 or instructor permission. Formerly FREN 103, French III.

**Gender and Women's Studies**

**GWST 107 Gender Perceptions in American Film [D, H]** 5 Credits
This class uses American films from a variety of genres and decades as primary texts to study representations and ideas of masculinity and femininity. Students will be asked to think critically about where their ideas about gender come from and how these ideas are perpetuated and reinforced in media. Student may not receive credit for both GWST 107 and HUM 107.

**GWST 124 Women Artists in History [D, H]** 5 Credits
An exploration of women artists, both historical and contemporary, and the issues, themes, and media that pertain to their experiences as women in art. Women as art patrons, writers, and as subject matter are also considered. Formerly WST 124, Women in Art. Student may not earn credit for both GWST 124 and ART 124. Recommended: READ 088 or higher.

**GWST 139 Psychology of Women [SS]** 5 Credits
Explore the historical, cultural, and biological development of growing up female. Also examined are the social and psychological perspectives of female identity, traditional and non-traditional roles, values, sexuality and orientation, dependency, emotions, physical and mental health issues, victimization and the changing perception of femininity and masculinity. Formerly WST 139. Student may not earn credit for both PSYC 139 and GWST 139. Recommended: READ 088 or higher.

**GWST 180 Human Sexuality [D, SS]** 5 Credits
Study of sexual facts, attitudes, morals, and behavior. Examination of how society impacts our sexual values and behavior, as well as exploration of diverse experiences of others. Course will cover basic biology, as well as a focus on psychosocial issues related to and impacting sexual behaviors. Course for adults—lectures and films may contain explicit language, nudity, and graphic material. Student may not earn credit for both PSYC 180 and GWST 180. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly WST 113. Formerly WST 139. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097. Recommended: READ 088 or higher.
GWST 200 Introduction to Gender and Women's Studies [D, H, SS] 5 Credits
Analysis of the construction and enforcement of gender differences and inequalities, studied from a multidisciplinary and multicultural perspective. Emphasis on the intersection of ethnicity, nationality, class, and gender in women's lives, and how these intersecting constructs impact women's past, present, and future contributions. Course taken prior to fall 2010 also accepted for diversity requirement. Recommended: READ 088 or higher.

GWST 215 Women in U.S. History [D, SS] 5 Credits
Survey of the significant contributions of women to the growth and development of the United States from the early Native American societies to the present. Examine pioneering individuals and organizations, relevant legal, social, moral, political, economic, and religious issues concerning women in American society. Student may not earn credit for both GWST 215 and HIST& 215. Course taken prior to fall 2010 also accepted for diversity requirement. Recommended: READ 088 or higher. Formerly WST 280. Formerly WST 215.

GWST 220 Gender and Society [D, SS] 5 Credits
Gender is a central feature of social life. Enhances students' recognition of the pervasiveness and complexities of a sex and gender “system,” predominately focusing on our own society. Gender is explored on three levels (individual identity, gender roles, and institutional level) to include as a system of social relationships in which gender interacts with and influences institutional structures; as what people “do” in social interactions; and as an attribute by individuals for self. Student may not earn credit for both GWST 220 and SOC 220. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly WST 220. Recommended: READ 088 or higher.

GWST 251 Voices of Women in Literature [D, H] 5 Credits
Survey of selected women writers across time and cultures with a focus on women as authors and characters. Considers how gender may affect perspectives on such basic ideas as home, work, community, strength, power, courage, empathy and many others. Time period covered ranges from the 18th to the 21st century. Student may not earn credit for both WST 251 and ENGL 251. Formerly WST 251. Recommended: READ 088 or higher.

GEOG& 102 World Regional Geography [SS] 5 Credits
This course explores the physical and human geography of principal world regions with special emphasis on the flows that have fostered globalization across time and space.

GEOG 105 Physical Geography [NS] 5 Credits
The earth is a dynamic system that provides the exact combination of interrelated components to support life as we know it at this time. Introduces all aspects of earth systems, identifying physical phenomena and stressing their distribution and relationships. It will place a special emphasis on human-environmental relationships. Lab work required. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088.

GEOG& 207 Economic Geography [SS] 5 Credits
Introduces students to the changing locations and spatial patterns of economic activity, such as production in agriculture, manufacturing, retail trade, and services; the geographic dynamics of technical change, employment, business organization, resource use, and divisions of labor; principles of trade and transportation; urbanization; regional economic development; and globalization. Recommended READ 088 or higher.

GEOG 210 Introduction to Weather [NS] 5 Credits
An introductory course in climatology, the study of Earth's present, past, and future climate. Examine natural and anthropogenic (human-caused) climate change on various timescales (from tens of years to hundreds of millions of years). Included are the effects of atmospheric greenhouse gases, tectonic climate forcing, orbital cycle variations, deep ocean circulation, and biological feedbacks. This course does not include a lab. Prerequisite: Appropriate placement score or grade of C or higher in MATH 079 or MATH 78E, or MATH 079; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher; word processing and spreadsheet skills.

GEOG 211 Introduction to Climate and Climate Change [NS] 5 Credits
Examine the nature of the atmosphere including: the study of weather elements, weather systems, climate, and the impact weather has on humans and vice versa. Provides an introduction to meteorology and the tools involved in the study of weather and climate. Lab work required. Prerequisites: Appropriate placement score or grade of C or higher in MATH 079, MATH 78E, or MATH 079; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher; word processing and spreadsheet skills.

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work required. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088. Formerly GEOL 120, Environmental Earth Science.

GEOL 115 Survey of Earth Science [NS]  5 Credits
Introductory topics from Geology, Meteorology, Oceanography and Astronomy as these disciplines relate to the origin and dynamic evolution of Planet Earth. Lab work required. Course includes 2 hours of lab work per week. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088.

GEOL& 208 Geology of Pacific NW [NS]  5 Credits
Examines the geology and geologic history of the Pacific Northwest. Topics include volcanoes, earthquakes, plate tectonics, rocks and minerals, faults and folds, mountain building, and glaciations. Lab work required. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088. Formerly GEOL 210, Pacific Northwest Geology.

High School Completion

HSC 034 Current World Problems  1 - 5 Credits
The course explores a variety of cultural, social, economic and environmental issues in a contemporary world context. Students will examine contemporary human rights issues around the world. Global links are a central theme, as we evaluate how issues elsewhere manifest at home.

HSC 035 Geography and World Affairs  1 - 5 Credits
A study of basic world geography and contemporary national and international issues

HSC 036 American Government  1 - 5 Credits
Students will study the purposes, organization and function of government, including the laws and political systems specific to the United States. The course pays special attention to the key ideals and principals of the United States, including the Constitution and Bill of Rights. All topics will be viewed through the lens of civic involvement and responsibility.

HSC 037 U.S. History II  1 - 5 Credits
This is a survey course covering the history and culture of the United States from 1898 to the present. An emphasis is placed on the establishment of our democratic form of government based on responsibilities of good citizenship, what happened in the United States these last 100+ years and to appreciate how 20th century Americans lived and experienced the great events.

HSC 039 Pacific Northwest History  1 - 35 Credits
Geography, Native tribes and their cultures, explorers, pioneer settlement, government, economy and ecology of the Pacific Northwest states of Washington, Oregon, and Idaho from earliest times to the present.

HSC 040 Physical Science I  1 - 5 Credits
This course provides an introduction to the physical sciences, including topics from the fields of physics, astronomy, and geology. Emphasis will be on understanding the Scientific Method in preparation for advanced to college-level science courses.

HSC 041 Biology IA  1 - 5 Credits
Biology I is the first of two courses covering the life science of biology, including a study of evolution, homeostasis (internal environment), nutrition, fitness, energy, and the cell. This course prepares students to pass the end-of-course biology test required for WA State graduation.

HSC 042 Biology IB  1 - 5 Credits
Biology II is the second of two courses covering the life science of biology, including energy and ecosystems; reproduction, genetics, and inheritance; development and growth; and interaction and interdependence among organisms. This course will prepare students to pass the end-of-course biology exam required for WA State high school graduation.

HSC 044 College Prep Chemistry  1 - 5 Credits
A study of the composition, structure, and properties of matter, and the way matter changes.

HSC 060 Algebra IA  1 - 5 Credits
The first half of a modern high school algebra sequence with a focus in seven major topics: transition from arithmetic to algebra, solving equations & inequalities, probability and statistics, proportional reasoning, linear equations and functions.

HSC 061 Algebra IB  1 - 5 Credits
This course fulfills the second half of a modern high school algebra sequence with a focus in seven major topics: transition from arithmetic to algebra, solving equations and inequalities, probability and statistics, proportional reasoning, linear equations and functions, systems of linear equations and inequalities, and operations on polynomials.

HSC 062 Algebra IC  1 - 5 Credits
This class will focus on a review of Algebra IA and IB. Students will communicate understanding through state constructed practical based questions. This course prepares students to pass the End of Course assessment. The students have the opportunity to create a Collection of Evidence as an alternate demonstration of their proficiency to the State.

HSC 063 Geometry IA  1 - 5 Credits
This course fulfills the first half in the fundamentals of plane geometry, covering the vocabulary and concept of geometry through the use of formal proof and algebra. Completion of the geometry sequence prepares students for higher level mathematics courses and for those science courses requiring a working knowledge of geometry.

HSC 064 Geometry IB  1 - 5 Credits
Course fulfills the second half in fundamentals of plane geometry, covering the vocabulary and concept of geometry through the use of formal proof and algebra and coordinate geometry. Completion of the geometry sequence prepares students for higher level mathematics courses and for those science courses requiring a working knowledge of geometry.

HSC 065 Geometry IC  1 - 5 Credits
This class will focus on a review of Geometry IA and IB. Students will communicate understanding through state-constructed practical-based questions. This course prepares students to pass the End of Course assessment. The students have the opportunity to create a Collection of
Evidence as an alternate demonstration of their proficiency to the State.

HSC 066 Business Math IA 1 - 5 Credits
Business Math helps students achieve success by incorporating Algebra I, Algebra II, and Geometry topics into practical business and personal finance contexts. Students see algebra at work within the most critical areas of finance. Students learn about investments, credit, automobile expenses, insurance, income tax, household budgeting, and more while gaining confidence in working with common algebraic functions.

HSC 067 Business Math 1B 1 - 5 Credits
Financial Algebra helps students achieve success by incorporating Algebra I, Algebra II, and Geometry topics into practical business and personal finance contexts. Students see Algebra at work within the most critical areas of finance. Students learn about investments, credit, automobile expenses, insurance, income tax, household budgeting, and more while gaining confidence in working with common algebraic functions. This is the second in the two-part series.

HSC 070 Algebra 2A 1 - 5 Credits
This course is designed for students who plan to continue a study of mathematics in high school or college. The course focus is on functions and their graphs using transformations, exponential and logarithmic functions, series and sequence data analysis and the study of conic sections. Prerequisite: Successful completion of a full credit of high school Algebra.

HSC 071 Algebra 2B 1 - 5 Credits
This course is designed for students who plan to continue a study of mathematics in high school or college. The course focus is on functions and their graphs using transformations, exponential and logarithmic functions, series and sequence data analysis and the study of conic sections. Prerequisite: Successful completion of high school Algebra 2A or equivalent.

HSC 072 Algebra 2C 1 - 5 Credits
This course is designed for students who plan to continue a study of mathematics in high school or college. The course focus is on functions and their graphs using transformations, exponential and logarithmic functions, series and sequence data analysis and the study of conic sections. Prerequisite: Successful completion of high school Algebra 2B or equivalent.

HSC 080 Reading Fundamentals 1 - 5 Credits
This course offers skill development in reading with a variety of reading comprehension strategies in a range of fiction and nonfiction works. Students will practice making text to self, text to world, and text to text connections. An emphasis will be placed on summarizing and analyzing using textual evidence. This course prepares students for taking the Washington State High School Proficiency Exam (HSPE), required for graduation.

HSC 081 Reading Fundamentals II 1 - 5 Credits
This course continues to lay the foundation required for high school English credit. Students will develop skills related to the reading of increasingly complex informational and literary texts with an emphasis placed on close critical reading. Students will also develop skills in argumentative, informative, and narrative writing in response to readings. Recommended: HSC 080.

HSC 082 High School Literature 1 - 5 Credits
In this reading skill development class, students will explore literature across thousands of years and many cultures. This course will use a thematic approach to comparing and contrasting literature over a wide range of time periods and cultures. By exploring a single theme, over time, culture and genre, students will explore how grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).

HSC 085 Writing Fundamentals 1 - 5 Credits
Students will work on skill development in writing. Using the writing process, students will practice expository and persuasive writing aimed at a variety of audiences. Students will prepare for success on the High School Proficiency Examination (HSPE) writing examination required for high school graduation in Washington State. To do so, students will use resources developed by the Washington State Office of State Superintendent of Instruction (OSPI), including portions of a four week curriculum designed for HSPE test takers.

HSC 086 Health Topics in English Language Arts 1 - 5 Credits
This course continues to lay the foundation required for high school English credit but focuses on the aspects of health, including personal health, injury prevention, community health, nutrition and fitness, personal development, family living, and alcohol, tobacco, and drugs. Students will develop skills related to the reading of increasingly complex informational and literary texts with an emphasis placed on close critical reading. Students will also develop skills in argumentative, informative, and narrative writing in response to the writings.

HSC 087 Writing With Evidence 1 - 5 Credits
Using the writing process, students will focus on writing with evidence to ensure that students engage in research and inquiry to investigate topics, and to analyze, integrate, and present information. This course will meet high school English credit requirements and prepare students for Washington state standardized testing expectations.

HSC 088 High School to College Transition 1 - 5 Credits
This course allows students to develop and demonstrate On Course© strategies to adjust to the college environment, to develop a better understanding of the learning process, and to acquire essential academic survival skills as students transition from the high school to the college environment. Students will also research and create a High School and Beyond Plan and begin career exploration as part of the Washington State high school graduation requirements. Prerequisite: Enrollment in Alternative Education Program.

HSC 089 Senior Capstone 1 - 3 Credits
Senior Capstone assists students enrolled in the Alternative Education Program or High School Completion Program in completing both the ‘High School and Beyond Plan’ and the ‘Culminating Project’, state-mandated high school graduation requirements. The course encourages students to think analytically, logically and creatively and to integrate experience and knowledge to solve problems, giving students a chance to explore a career or post-high school graduation plans in which they have a great interest, and offers student an opportunity to apply their learning in a "real world" way.

HSC 090 High School to College Transition 1 - 5 Credits
This course allows students to develop and demonstrate On Course© strategies to adjust to the college environment, to develop a better understanding of the learning process, and to acquire essential academic survival skills as students transition from the high school to the college environment. Students will also research and create a High School and Beyond Plan and begin career exploration as part of the Washington State high school graduation requirements. Prerequisite: Enrollment in Alternative Education Program.

HSC 098 Health Topics in English Language Arts 1 - 5 Credits
This course continues to lay the foundation required for high school English credit but focuses on the aspects of health, including personal health, injury prevention, community health, nutrition and fitness, personal development, family living, and alcohol, tobacco, and drugs. Students will develop skills related to the reading of increasingly complex informational and literary texts with an emphasis placed on close critical reading. Students will also develop skills in argumentative, informative, and narrative writing in response to the writings.

HSC 092 Walking/Health 1 - 5 Credits
Students will enhance physical fitness and develop lifelong skills through walking. Students will learn to use a heart rate monitor and will explore the importance of cardiovascular health.
## History

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 105</td>
<td>Roots of World Issues [D, SS]</td>
<td>5</td>
<td>This course provides an in-depth examination of some of the origins of the world's most pressing issues. It examines a representative and carefully selected sample of world issues from a global perspective. Issues are selected for relevance, their global priority, and how well they reflect the following categories of issues: environmental, economic, social, cultural, and geopolitical. Recommended: READ 088.</td>
</tr>
<tr>
<td>HIST 120</td>
<td>American Presidency [SS]</td>
<td>5</td>
<td>A historical and analytical examination of the Executive Branch of the United States government. Primary areas of emphasis include: leadership styles of each President, evolutionary changes in the power of the office, and the consequences of each on the country. Recommended: READ 088 or higher. Student may not earn credit for both HIST 120 and POLS 120.</td>
</tr>
<tr>
<td>HIST &amp; 126</td>
<td>World Civilization I [H, SS]</td>
<td>5</td>
<td>Introduction to world history from a global perspective, spanning the origins of civilization through the classical world of Greece and Rome. Specifically addresses the evolving character of civilization as well as humankind’s search for meaning in the face of historic change. Recommended: READ 088.</td>
</tr>
<tr>
<td>HIST &amp; 127</td>
<td>World Civilization II [H, SS]</td>
<td>5</td>
<td>Introduction to world history from a global perspective, spanning the 5th-century Byzantine Empire to Europe's late 18th century &quot;Age of Revolution.&quot; HIST &amp; 127 specifically tracks the evolution of global societies into nations, a critical step in the formation of the political character of the modern world. Recommended: READ 088.</td>
</tr>
<tr>
<td>HIST &amp; 128</td>
<td>World Civilization III [H, SS]</td>
<td>5</td>
<td>Introduction to the history of world cultures from a global perspective, covering the last two centuries of world history, from roughly 1800 to present. Course content highlights the relationship between the &quot;core&quot; of developed, industrialized countries and their evolving relationship with the undeveloped regions of the global &quot;periphery.&quot; Recommended: READ 088.</td>
</tr>
<tr>
<td>HIST &amp; 146</td>
<td>US History I [SS]</td>
<td>5</td>
<td>Survey of the significant individuals and events that have shaped the growth and development of the United States. Particular attention will be given to the political, economic, religious, and cultural foundations of this development. This course covers the time period from the early Native American societies to the 1830s. Recommended: READ 088 or higher.</td>
</tr>
<tr>
<td>HIST &amp; 147</td>
<td>U.S. History II [SS]</td>
<td>5</td>
<td>Survey of the significant individuals and events that have shaped the growth and development of the United States. Particular attention will be given to the political, economic, religious, and cultural foundations of this development. This course focuses on the period from the 1830s to World War I. Recommended: READ 088 or higher.</td>
</tr>
<tr>
<td>HIST &amp; 148</td>
<td>US History III [SS]</td>
<td>5</td>
<td>Survey of the significant individuals, groups, and events that have shaped the growth and development of the United States from 1900 to the present. Particular attention will be given to the political, economic, religious, and cultural foundations of this development. Recommended: READ 088 or higher. Ill.</td>
</tr>
<tr>
<td>HIST 205</td>
<td>American Environmental History [SS]</td>
<td>5</td>
<td>Explores the natural environment and its role throughout American history with special emphasis upon the ways in which different cultural groups have perceived, used, and managed America’s natural environment from pre-colonial America to the present. Examines changing attitudes and behaviors toward nature with specific attention to conservation and preservation and the consciousness that has contributed to the American environmental movement. Recommended: READ 088 or higher.</td>
</tr>
<tr>
<td>HIST 211</td>
<td>U.S. in World Affairs I [SS]</td>
<td>5</td>
<td>Examination of American involvement in international affairs. Study includes this country’s foreign policy actions as a world power, with special attention given to both the policy makers and critics of our nation's position on significant international issues from the colonial period to the beginning of the 20th Century. Recommended: READ 088 or higher. Student may not earn credit for both HIST 211 and POLS 211.</td>
</tr>
<tr>
<td>HIST 212</td>
<td>U.S. in World Affairs II [SS]</td>
<td>5</td>
<td>Examination of American involvement in international affairs since 1898. Study includes this country’s foreign policy actions as a world power, with special attention given to both the policy makers and critics of our nation’s position on significant international issues from the Spanish-American War to the present. Recommended: READ 088 or higher. Student may not earn credit for both HIST 212 and POLS 212.</td>
</tr>
<tr>
<td>HIST &amp; 214</td>
<td>Pacific NW History [SS]</td>
<td>5</td>
<td>Survey of the growth and development of the Pacific Northwest Region from the early Native American societies to the present. The class focuses on the cultural, economic, political, and religious development of Washington, Oregon, and Idaho from jointly occupied territories to statehood. Special emphasis will be given to the consequences of contact between European/American groups and the indigenous Native societies. Recommended: READ 088 or higher.</td>
</tr>
<tr>
<td>HIST &amp; 215</td>
<td>Women in US History [D, SS]</td>
<td>5</td>
<td>Survey of the significant contributions (social/moral/legal/political/economic/religious) of women to the growth and development of the United States from the early Native American societies to the present. Student may not earn credit for both HIST &amp; 215 and GWST 215. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly HIST 280, Women in US History. Recommended: READ 088 or higher.</td>
</tr>
<tr>
<td>HIST 250</td>
<td>Introduction to Latin America [D, SS]</td>
<td>5</td>
<td>Provides an introduction to Latin America with special emphasis on pre-European, colonial, national and international developments that have shaped the region’s character from 1500 to the present. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly HIST 280. Recommended: READ 088 or higher.</td>
</tr>
<tr>
<td>HIST 299</td>
<td>Special Projects in History</td>
<td>1 - 5</td>
<td>Self-paced course that allows students the opportunity to study/research a specialized area of history under the supervision of a history instructor. Pre-requisites: One prior college-level history course and instructor permission.</td>
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</table>

### Honors

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<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HONR 101</td>
<td>Honors I</td>
<td>2</td>
<td>Faculty mentors across multiple disciplines will focus on a singular social topic to model the expectations of a cross-discipline honors program.</td>
</tr>
</tbody>
</table>

For the most current information see: [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
proposal. Students will examine the selected topic through reading, writing, and discussions. Prerequisite: Admission and good standing in the Honors program.

HONR 102 Honors II 2 Credits
Honors students will develop a portfolio that includes multiple resumes, cover letters, and scholarship applications. In addition, Honors students will work closely with faculty mentors to identify and develop a cross-curricular Honors proposal. The cross-curricular Honors proposal requires the student to develop a single project that includes either a Math or a Science component, and two additional specific disciplines: Business, Humanities, Nursing, Social Science, Math, or Science. Once the Honors Committee has approved a student’s proposal, the student will develop a timeline for completing their honors project. Prerequisite: Satisfactory completion of HONR 101 with a grade of B (3.5) or higher. Admission and good standing in the Honors program.

HONR 201 Honors Seminar I 1 - 2 Credits
This is an optional seminar that will be made available to students who meet the requirements of the honors program. The purpose of this course is to allow honors students to earn additional credits for participation in approved community-based service learning projects or directed studies related to a specific research project. Prerequisite: A minimum GPA of 3.5 (12 or more college-level credits) is required for enrollment in this course.

HONR 202 Honors Seminar II 1 Credit
The Honors Seminar will be held during the second year of the student’s enrollment in the Honors program. At the end of the quarter, students enrolled in this seminar will formally present their completed honors project to faculty, staff, the Board of Trustees, and peers during an Honors open house. Prerequisite: Completion of HONR 102 with a grade of B (3.5) or higher. Admission and good standing in the Honors program.

Human & Social Services

HSS 022 Mental Health First Aid .8 Credit
Students will learn how to assist someone experiencing a mental health related crisis. Course identifies the risk factors and warning signs for mental health and addiction concerns, strategies for how to help someone in both crisis and non-crisis situations, and where to turn for help.

HSS 101 Introduction to Human Services 5 Credits
Students will be introduced to the many facets of human services work and will explore the number of services provided by local agencies in both crisis and non-crisis situations, and where to turn for help.

HSS 102 Cultural Diversity and Client Populations 5 Credits
Students will assess the attributes and needs of diverse populations served by human services such as elderly, children and family, LGBT, homeless, substance abuse addicts, and people with disabilities. They will also practice adapting strategies and locating resources to address the needs of those populations. Students will assess their own skills and potential challenges working with different populations. Students will be exposed to a variety of cultural ideas to promote tolerance and understanding when working with diverse populations. Culture, lifestyles, religion, age, and gender will also be explored to increase awareness and related concerns.

HSS 103 Applied Skills for Human Services 5 Credits
Students will learn the specific skills and competencies required in human service professions and how to apply those skills in a variety of settings such as correctional facilities, group homes, crisis intervention, and rehabilitation centers. Focus is on clinical mental health counseling, community support, rehabilitation services, chemical dependency recovery, and motivational and evidence-based strategies for treatment and support. A range of assessment tools, methods of evaluation, and case plans will also be examined.

HSS 110 Ethics in Health and Human Services 5 Credits
Students will practice upholding ethical and professional standards within human services such as accurately and honestly documenting interactions with clients, protecting client confidentiality, and maintaining professional boundaries with clients and coworkers. Contemporary issues, trends, legal aspects, and ethics will be discussed in an integrated approach. Students will also review the roles, functions, and legal/ethical responsibilities of health and human service professionals.

HSS 141 Field Experience I 5 Credits
This introductory practicum offers students an opportunity to apply theoretical learning in selected human services settings under the direct supervision of qualified agency personnel; to be arranged through the Human Services instructor.

HSS 201 Case Management 5 Credits
Students will learn skills for developing, implementing, and monitoring effective case plans that help clients achieve self-sufficiency. Students will explore case management in a wide variety of human services organizations and with a broad spectrum of clients such as substance abuse addicts, elderly, youth, homeless, poor, offenders, and people with disabilities. The processing of cases and applications, identification of appropriate providers and facilities, and advocacy of resources will also be reviewed.

HSS 202 Co-occurring Disorders 5 Credits
Students will examine how mental illness and substance abuse interfere with an individual’s ability to function effectively, including the physical, social, psychological, and spiritual well-being. Students will learn the consequences of undiagnosed or untreated co-occurring disorders, as well as integrated treatments used by human service professionals that focus on both mental illness and addictions.

HSS 241 Field Experience II 5 Credits
Continuation of HSS 141. Students will provide services in a setting related to his/her area of interest. There will be opportunities for direct client contact to enhance skills in interviewing, observation, documentation, assessment, and intervention planning.

Humanities

HUM 107 Gender Perceptions in American Film [D, H] 5 Credits
This class uses American films from a variety of genres and decades as primary texts to study representations and ideas of masculinity and femininity. Students will be asked to think critically about where their ideas about gender come from and how these ideas are perpetuated and reinforced in media. Student may not receive credit for both HUM
HUM 109 World Arts and Culture [D, H] 5 Credits
Provides a study of literature, poetry, visual art, film, theatre, music and history in cultures around the world by comparing differences and similarities across cultures. A cross-cultural inspection of topics surrounding family, gender, race, class, and customs are critiqued through the use of art and its cultural impact through the perspectives of history, politics, philosophy, aesthetics, religion, anthropology, sociology, and literature. Completion of ENGL 097 recommended.

HUM 110 Four Perspectives [D, H] 5 Credits
Students will explore four significant perspectives in the history of ideas. Students will learn about how the world has changed in response to the ideas and life examples of Pythagoras, Galileo, the Buddha, and Jesus Christ. Readings and videos, as well as photos, poetry, paintings, music, and other art forms are used to find out about 1) the Pythagorean idea of Nature as governed by number, of deep order in the universe; 2) Galileo's contribution to the methods of modern science and experimental inquiry; 3) the basic teachings of the Buddha, especially mindfulness; 4) Christian love as a challenging, creative, and active way of life. In the Introduction section, we will orient the Four Perspectives in the history of humankind, and in the Conclusion section, we will examine common and disparate elements of the Four Perspectives.

HUM& 116 Humanities I The Road to Babylon [H] 5 Credits
A basic survey of the major artistic and cultural achievements of the ancient world, spanning the first great civilizations of the Near East and the West, with a special emphasis given to the Greek achievement. In examining classical and post-classical literature, we'll study excerpts of specific authors and highlight their individual accomplishments. From literature to art and architecture, from key technological innovations to the development of religion and philosophy, this course will provide a bird's eye perspective of human achievement in the ancient world.

HUM& 117 Humanities II Medieval World [H] 5 Credits
What do the terms “medieval” and “renaissance” mean, and how are they connected to our lives today? By the end of this course, you will be able to recognize and comprehend the characteristics of the Medieval and Renaissance Eras and to confidently think, talk, and write about them! The student should be able to evaluate the momentous transition(s) from Medieval to Renaissance culture through themes of change such as religious schism and reform (values and spirituality), family and social structures (social and political systems), the plague (medicine), the Little Ice Age (environment), and the birth of print culture (technology). In addition we will practice translating, interpreting, and critiquing culturally and linguistically diverse works in literature, philosophy, and visual and performing arts so that we may connect Medieval and Renaissance insights to western culture -- how did these eras in Europe shape the values of modern Americans?

HUM& 118 Humanities III The Modern World [H] 5 Credits
This course provides a basic survey of the major artistic, literary, and cultural achievements of the 20th and 21st centuries, with emphasis on European and American achievement. We will look at the web of influence among politics, art, literature, music, religion, psychology and philosophy to assess how our current world was shaped over the last hundred years.

HUM 299 Special Topics 1 - 5 Credits
Opportunity for students to pursue special interests and topics in the humanities. Requires working with humanities faculty to develop a project and to determine the research and presentational methods as well as outcomes to be achieved and assessed.
JD 125 John Deere Fuel and Emissions Systems 4 Credits
Theory, operation, testing, and repair methods for spark ignition and compression ignition fuel systems are explored. Topics include relationship of valve timing, ignition, and injection timing to normal combustion. Theory, operation and maintenance of emission systems are explored and demonstrated.

JD 131 Engine Testing, Repair, and Performance 10 Credits
Provides basic physical principles, operation and construction of two- and four-stroke cycle engines. Topics include disassembly, inspection, measurement, reassembly, and adjustments to engine components. Formerly JD 110, 130, and 135.

JD 190 Cooperative Work Experience I 10 - 16 Credits
Offers students an opportunity to receive on-the-job work experience in a John Deere Dealership. Students apply and utilize skills learned on campus. Co-requisite: JD 192.

JD 191 Cooperative Work Experience II 10 - 16 Credits
Opportunity to receive on-the-job work experience in a John Deere Dealership. Students apply and utilize skills learned on campus. Prerequisite: JD 190. Co-requisite: JD 193.

JD 192 Human Relations Seminar 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Formerly JD 192, Cooperative Seminar I. Co-requisite: JD 190.

JD 193 Job Advancing Skills 2 Credits
Students gain knowledge and skills needed to be effective, successful job applicants. Students increase job seeking skills and quality through analysis of the labor market, job search techniques, skills identification, applications, resume and letter writing and interview skills. Students understand what employers look for in a prospective employee, and become a more competitive job seeker. Students will learn how networking and informational interviews result in employment opportunities.

JD 199 Special Topics 1 - 10 Credits
Students study and train to meet established local needs in the John Deere industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

JD 210 John Deere Power Trains 10 Credits
Theory of power transmission from engine to traction wheels are discussed. Topics include function and operation of gears, chains, clutches, planetary gears, drive lines, differentials, and transmissions. Complete disassembly, inspection, and reassembly to specification are practiced. Offered to second year John Deere students only.

JD 215 John Deere Electronics 5 Credits
Review of electrical fundamentals, basic electronics, and electrical diagnostics. Topics include techniques of electrical and electronic circuit diagnostics and reading electrical schematics. Student must score a minimum of 80% on the Electrical Methods and Techniques assessment to be eligible for graduation from the JD Tech program.

JD 221 Ag Management Solutions 4 Credits
Provides basic knowledge and skills that enable students to market, and support solutions that feature products from Ag Management Solutions. Much of this training is designed specifically to enable the student to understand the different applications of global positioning systems and precision farming practices - students will apply problem-solving skills.

JD 225 John Deere Planting Equipment 1 Credit
Provides proper performance of John Deere planting equipment. Topics include theory, design, principles of operation, proper setup, and adjustment of all planting equipment.

JD 230 John Deere Harvesting Equipment 4 Credits
Performance of John Deere harvesting equipment will be analyzed. Topics include theory, design, principles of operation, proper set-up, and adjustment of all harvesting equipment. Emphasis on combines, hay, and forage equipment. Student may not earn credit for both JD 230 and JDAS 230.

JD 235 John Deere Hydraulics II 5 Credits
Explores principles, function, and application of electric over hydraulic circuits as found on tractors and combines. Construction, fluid flow, electrical flow, and testing of systems are explained, demonstrated, and practiced. Student must score a minimum of 80% on the Hydraulics Methods and Techniques assessment to be eligible for graduation from the JD Tech program.

JD 240 John Deere Advanced Power Trains II 4 Credits
Explores principles, function, and application of electronic controlled transmissions as found on tractors and other agriculture equipment.

JD 290 Cooperative Work Experience III 10 - 16 Credits
Offers students an opportunity to receive on-the-job work experience in a John Deere Dealership. Students apply and utilize skills learned on campus. Prerequisite: JD 191. Student may not earn credit in both JD 290 and JDAS 290.

JD 292 Leadership Seminar 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and applying leadership skills to promote personal development. Provides professional improvement through techniques such as effective communication, conflict resolution, team building, employee engagement and decision making.

JD 297 Special Projects 1 - 16 Credits
Project-oriented experiences in the area or applications not covered in the standard John Deere curriculum. Prerequisite: Instructor permission, based on evaluation of student's education and work experience.

MATH 040 Number Sense, Computation, and Math Study Skills 5 Credits
Number Sense, Computation and Math Study Skills emphasizes reinforcement of the student's arithmetic background and its application to common mathematical tasks involving integers, fractions, and decimals. There will be dual emphasis on fortification of mental calculation power with minimum reliance on digital calculation and appropriate use of technology in computing. In addition to math skill
content, students will be introduced to a variety of strategies designed to reduce math anxiety and improve student success. Prerequisite: Appropriate placement score or permission of the Mathematics Department.

**MATH 071 Pre-Algebra**  
5 Credits  
MATH 071 exposes students to proportional reasoning and the use of appropriate formulae to model and solve problems. The course emphasizes properties of equality to solve linear equations in one variable and solve a formula for a given variable. Prerequisite: Appropriate placement score or permission of the Mathematics Department. Formerly MATH 070A/072B.

**MATH 075 Elementary Algebra**  
5 Credits  
MATH 075 exposes students to positive integer exponents, operations on polynomial expressions, expressions and equations involving square roots, and linear and quadratic equations. The course focuses on graphing two-variable linear and quadratic equations and on solving problems using linear equations, quadratic equations, and systems of linear equations. Prerequisite: Grade of C or higher in MATH 071 or MATH 72B, appropriate placement score, or permission of the Mathematics Department. Formerly MATH 074C/076D.

**MATH 078 Topics in Intermediate Algebra**  
5 Credits  
MATH 078 exposes students to the concepts of negative integer exponents, functions, domain, and range, and focuses on exponential and logarithmic functions. The course emphasizes problem solving by introducing Pólya’s process. MATH 078 is designed to prepare students for select college-level mathematics courses. Prerequisite: Grade of C or higher in MATH 075 or MATH 76D, appropriate placement score, or permission of the Mathematics Department. Formerly MATH 078E.

**MATH 079 Intermediate Algebra**  
5 Credits  
MATH 079 exposes students to the concepts of rational exponents, functions, domain, and range, and focuses on exponential, logarithmic, radical, and rational functions. The course emphasizes simplifying expressions and solving equations. MATH 079 is designed to prepare students for MATH& 141. Prerequisite: Grade of C or higher in MATH 075 or MATH 76D, appropriate placement score, or permission of the Mathematics Department. Formerly MATH 078E/080F.

**MATH 080 Advanced Topics in Intermediate Algebra**  
3 Credits  
MATH 080 emphasizes the techniques used to simplify rational and radical expressions and to solve rational and radical equations. MATH 080 is designed to prepare students for MATH& 141. Prerequisite: Grade of C or higher in MATH 078 or MATH 78E, appropriate placement score, or permission of the Mathematics Department. Formerly MATH 080F.

**MATH& 107 Math in Society**  
5 Credits  
MATH& 107 Math in Society introduces students to the concepts of rational exponents, functions, domain, and range, and focuses on exponential, logarithmic, radical, and rational functions. The course emphasizes simplifying expressions and solving equations. MATH 079 is designed to prepare students for MATH& 141. Prerequisite: Grade of C or higher in MATH 078, MATH 078E, or MATH 079, appropriate placement score, or permission of the Mathematics Department. Formerly MATH 070A/072B.

**MATH& 148 Business Calculus**  
5 Credits  
MATH& 148 exposes students to mathematical systems encountered in the work of behavioral, managerial, and social science students. Topics include systems of linear equations and inequalities, matrices, linear programming, introductory probability, mathematics of finance, and elementary Markov chains. Prerequisite: Grade of C or higher in MATH 078, MATH 078E, or MATH 079, appropriate placement score, or permission of the Mathematics Department.

**MATH& 132 Mathematics for Elementary Education II**  
5 Credits  
MATH& 132 Mathematics for Elementary Education II is the second of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Designed for elementary school teachers focusing on methods of problem-solving, development and structure of number systems, and numerical algorithms applicable to elementary school mathematics. Formerly MATH 206, Math for Elementary School Teachers II. Prerequisite: Grade of C or higher in MATH 078, MATH 078E, or MATH 079, appropriate placement score, or permission of the Mathematics Department.

**MATH& 132 Mathematics for Elementary Education II**  
5 Credits  
MATH& 132 Mathematics for Elementary Education II is the second of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Designed for elementary school teachers focusing on methods of problem-solving, development and structure of number systems, and numerical algorithms applicable to elementary school mathematics. Formerly MATH 206, Math for Elementary School Teachers II. Prerequisite: Grade of C or higher in MATH& 131; or permission of the Mathematics Department.

**MATH& 148 Business Calculus**  
5 Credits  
MATH& 148 Business Calculus introduces students to the concepts of rational exponents, functions, domain, and range, and focuses on exponential, logarithmic, radical, and rational functions. The course emphasizes simplifying expressions and solving equations. MATH 079 is designed to prepare students for MATH& 141. Prerequisite: Grade of C or higher in MATH 078, MATH 078E, or MATH 079, appropriate placement score, or permission of the Mathematics Department.

**MATH& 131 Mathematics for Elementary School Teachers II**  
5 Credits  
MATH& 131 Mathematics for Elementary School Teachers II is the second of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Designed for elementary school teachers focusing on methods of problem-solving, development and structure of number systems, and numerical algorithms applicable to elementary school mathematics. Formerly MATH 206, Math for Elementary School Teachers II. Prerequisite: Grade of C or higher in MATH& 131; or permission of the Mathematics Department.

**MATH& 131 Mathematics for Elementary School Teachers II**  
5 Credits  
MATH& 131 Mathematics for Elementary School Teachers II is the second of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Designed for elementary school teachers focusing on methods of problem-solving, development and structure of number systems, and numerical algorithms applicable to elementary school mathematics. Formerly MATH 206, Math for Elementary School Teachers II. Prerequisite: Grade of C or higher in MATH& 131; or permission of the Mathematics Department.

**MATH& 142 Precalculus II**  
5 Credits  
MATH& 142 Precalculus II is the second in a series of two courses designed to give students an in-depth understanding of functions and to prepare students for calculus. Graphical analysis of concepts is emphasized through the use of technology. Prerequisite: Grade of C or higher in MATH 079, MATH 080, or MATH 080F, appropriate placement score, or permission of the Mathematics Department.

**MATH& 146 Introduction to Statistics**  
5 Credits  
MATH& 146 Introduction to Statistics introduces students to the concepts of rational exponents, functions, domain, and range, and focuses on exponential, logarithmic, radical, and rational functions. The course emphasizes simplifying expressions and solving equations. MATH 079 is designed to prepare students for MATH& 141. Prerequisite: Grade of C or higher in MATH& 141, satisfactory placement, or permission of the Mathematics Department.

**MATH& 146 Introduction to Statistics**  
5 Credits  
MATH& 146 Introduction to Statistics introduces students to the concepts of rational exponents, functions, domain, and range, and focuses on exponential, logarithmic, radical, and rational functions. The course emphasizes simplifying expressions and solving equations. MATH 079 is designed to prepare students for MATH& 141. Prerequisite: Grade of C or higher in MATH& 141, satisfactory placement, or permission of the Mathematics Department.

**FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU**
Topics include limits, derivatives, and integrals and their applications. Prerequisite: Grade of C- or higher in MATH& 141, satisfactory placement, or permission of the Mathematics Department. Formerly MATH 121, Survey of Calculus.

**MATH& 151 Calculus I [NS, Q]** 5 Credits

MATH& 151 is the first in a sequence of four calculus courses for students who are planning to major in engineering, mathematics, or the sciences. Graphical analysis of concepts is emphasized through the use of technology. Prerequisite: Grade of C- or higher in MATH& 142, satisfactory placement score, or permission of the Mathematics Department. Formerly MATH 125, Calculus with Analytic Geometry I.

**MATH& 152 Calculus II [NS, Q]** 5 Credits

MATH& 152 is the second in a sequence of four calculus courses for students who are planning to major in engineering, mathematics, or the sciences. Graphical analysis of concepts is emphasized through the use of technology. Prerequisite: Grade of C- or higher in MATH& 151, satisfactory placement, or permission of the Mathematics Department. Formerly MATH 126, Calculus with Analytic Geometry II.

**MATH& 153 Calculus III [NS, Q]** 5 Credits

MATH& 153 is the third in a sequence of four calculus courses for students who are planning to major in engineering, mathematics, or the sciences. Graphical analysis of concepts is emphasized through the use of technology. Prerequisite: Grade of C- or higher in MATH& 152, satisfactory placement, or permission of the Mathematics Department. Formerly MATH 127, Calculus with Analytic Geometry III.

**MATH 220 Linear Algebra [NS, Q]** 5 Credits

Designed for students planning studies in mathematics, engineering, computer science, and physics. Topics include systems of linear equations, matrices, determinants, eigenvalues, eigenvectors, vector spaces, linear transformations, orthogonality, and diagonalization. Prerequisite: Grade C- or higher in MATH& 153 or permission of the Mathematics Department.

**MATH 238 Differential Equations [NS, Q]** 5 Credits

First-order and higher-order differential equations, systems of linear differential equations, Laplace transforms, numerical methods, and qualitative analysis of ODE’s will be discussed. Prerequisite: Grade C- or higher in MATH& 153 or permission of the Mathematics Department.

**MATH& 254 Calculus IV [NS, Q]** 5 Credits

MATH& 254 is the fourth in a sequence of four calculus courses for students who are planning to major in engineering, mathematics, or the sciences. Graphical analysis of concepts is emphasized through the use of technology. Prerequisite: Grade of C- or higher in MATH& 153, satisfactory placement, or permission of the Mathematics Department. Formerly MATH 224, Calculus & Analytical Geometry IV.

### Medical Assisting

**MEDA 105 Health Occupations Mathematics** 5 Credits

Intensive practical math designed for individuals entering the health occupations industry. Prerequisite: Admission to the Medical Assisting Program. Recommended: MATH 071 or OCSUP 105.

**MEDA 110 Human Body Structure and Function in Health and Disease I** 5 Credits

Integration of basic structure and functions of the human body with disease processes that can affect body systems. This is the first of two human structure and function classes and includes an introduction to cellular function, as well as the anatomy and physiology of the integumentary, skeletal, muscular, neurologic, sensory, and digestive systems. Included are common diagnostic tests, treatments and possible prognoses for common disease processes that can affect each system. Prerequisite: Admission to the Medical Assisting Program.

**MEDA 114 Therapeutic Relationships** 2 Credits

Emphasizes the importance of communication in the medical setting. Students will learn to utilize well-defined professional skills to increase the effectiveness of communication between themselves and their patients. Topics discussed will include how cultural influences, biases, and prejudices may affect interactions; listening skills; verbal and non-verbal communication; roadblocks to effective communication; and interview techniques. Prerequisite: Admission to the Medical Assisting Program. Recommended: READ 088 or higher.

**MEDA 120 Human Body Structure and Function in Health and Disease II** 5 Credits

Second of two human structure and function classes for the Medical Assisting program. Included is a discussion of the anatomy and physiology of the endocrine system, hemodynamics, the heart, circulation and blood vessels, immunity and the lymphatic system, respiratory system, urinary system, and reproductive system. Common diagnostic tests/treatments, pharmacological agents, and possible prognoses for common disease processes are included. Prerequisite: MEDA 110.

**MEDA 125 Clinical Procedures** 10 Credits

Provides a foundation in basic patient exam techniques and minor procedures, and basic diagnostic laboratory techniques and procedures commonly performed in the physician’s office or clinic. The lab portion of this course provides practice in the above techniques. Prerequisite: MEDA 120.

**MEDA 140 Medical Law and Ethics** 2 Credits

Introduction to the legal and ethical side of medical settings. This course exposes the student to legal concepts, including standard of care, criminal and civil acts, contracts, negligence, ethical concepts, confidentiality, and scope of practice for health care professionals. Prerequisite: Admission to the Medical Assisting program. Recommended: READ 088 or higher.

**MEDA 144 Medical Office Administrative Procedures** 5 Credits

Explores the flow of information in a medical office. Electronic Medical Record, a scheduling program, Office Hours, and MS Word software programs are utilized to process information and produce typical medical office documents, financial records, and insurance claims. Prerequisite: Admission to the Medical Assisting program.

**MEDA 149 Medical Insurance Procedures for Medical Assisting** 5 Credits

Provides a basic introduction to accurate billing procedures in the medical office and medical coding procedures used to obtain reimbursement for medical procedures or services. Billing topics include different types of health insurance, and preparation of insurance claim form, applying third party payer guidelines and collection procedures. Coding topics will include the proper application of CPT, ICD-10-CM and HCPCS coding. Prerequisite: Admission to the Medical Assisting Program. Recommended: READ 088 or higher.
MUSC 116 College Voice I [HP]  1 - 2 Credits
College voice classes offer instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 117 is an introductory study of efficient vocal production and performance. Beginning exercises for breath management, extending the vocal range, increasing vocal resonance and volume, and singing in an expressive manner are introduced. Group singing and solos are performed to demonstrate these skills.

MUSC 117 College Voice II [HP]  1 - 2 Credits
College voice classes offer instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 118 is an introductory study of efficient vocal production and performance. Beginning exercises for breath management, extending the vocal range, increasing vocal resonance and volume, and singing in an expressive manner are introduced. Group singing and solos are performed to demonstrate these skills.

MUSC 118 College Voice III [HP]  1 - 2 Credits
College voice classes offer instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 117 is an introductory study of efficient vocal production and performance. Beginning exercises for breath management, extending the vocal range, increasing vocal resonance and volume, and singing in an expressive manner are introduced. Group singing and solos are performed to demonstrate these skills.

MUSC 110 History of American Music [H]  5 Credits
Many scholars believe the blues and jazz are America's only truly original contributions to the art music of the world. We will explore how the rich cultural diversity in America provided the fertile soil for the growth of such unique music, tracing the roots from West Africa and Western Europe to the original blues of the Mississippi Delta, to the birth of jazz in New Orleans and its evolution to today's eclectic music scene. By listening to such artists as Louis Armstrong, Billie Holiday, Duke Ellington, Miles Davis, John Coltrane, Wynton Marsalis and others, this course is designed to help the student gain a deeper and richer appreciation of the many voices that make up America's music. The more we listen, the more we hear!

MUSC 116 College Voice I [HP]  1 - 2 Credits
College voice classes offer instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 117 is an introductory study of efficient vocal production and performance. Beginning exercises for breath management, extending the vocal range, increasing vocal resonance and volume, and singing in an expressive manner are introduced. Group singing and solos are performed to demonstrate these skills. [HP]

MUSC 117 College Voice II [HP]  1 - 2 Credits
College voice classes offer instruction for students of every ability. beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 118 is an introductory study of efficient vocal production and performance. Beginning exercises for breath management, extending the vocal range, increasing vocal resonance and volume, and singing in an expressive manner are introduced. Group singing and solos are performed to demonstrate these skills. [HP]
MUSIC

MUSC& 141 Music Theory I [H] 5 Credits
The study of music logic, music theory, is intended to complement the musical intuition most vocalists and instrumentalists already have. Music is a complex and highly organized art, whether it is a Mozart concerto or a jazz improvisation. While providing a rational knowledge of music through the study of basic musical concepts and terminology, including analysis, composition, ear-training and sight singing, a study of music theory interacts with the musician's intuition, bringing a deeper understanding and appreciation of music. All students will learn to apply their knowledge to the keyboard in a basic though useful way.

MUSC& 142 Music Theory II [H] 5 Credits
The study of music logic, music theory, is intended to complement the musical intuition most musicians and instrumentalists already have. Music is a complex and highly organized art, whether it is a Mozart concerto or a jazz improvisation. While providing a rational knowledge of music through the study of basic musical concepts and terminology, including analysis, composition, ear-training and sight singing, a study of music theory interacts with the musician's intuition, bringing a deeper understanding and appreciation of music. All students will learn to apply their knowledge to the keyboard in a basic though useful way. Prerequisite: Grade of C or better in MUSC& 141 or instructor permission.

MUSC& 143 Music Theory III [H] 5 Credits
The study of music logic, music theory, is intended to complement the musical intuition most vocalists and instrumentalists already have. Music is a complex and highly organized art, whether it is a Mozart concerto or a jazz improvisation. While providing a rational knowledge of music through the study of basic musical concepts and terminology, including analysis, composition, ear-training and sight singing, a study of music theory interacts with the musician's intuition, bringing a deeper understanding and appreciation of music. All students will learn to apply their knowledge to the keyboard in a basic though useful way. Prerequisite: Grade of C or better in MUSC& 141 or instructor permission.

MUSC 151 Large Ensemble Performance I 1 Credit
Instrumental or vocal participation in a college-level organization with a regular rehearsal schedule, culminating in public concert performances. Open to all WWCC students who can perform with the required competencies. Formerly MUSC 141.

MUSC 152 Large Ensemble Performance II 1 Credit
Instrumental or vocal participation in a college-level organization with a regular rehearsal schedule, culminating in public concert performances. Open to all WWCC students who can perform with the required competencies. Formerly MUSC 142.

MUSC 153 Large Ensemble Performance III 1 Credit
Instrumental or vocal participation in a college-level organization with a regular rehearsal schedule, culminating in public concert performances. Open to all WWCC students who can perform with the required competencies. Formerly MUSC 143.

MUSC 161 Vocal Ensemble I [HP] 2 Credits
The College Vocal Ensemble offers instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from being a member of the Vocal Ensemble. Students are offered practical tools for accessing their inherent vitality, expressiveness and grace, while gaining vocal experience in an intimate choir setting. Work ethic, ensemble commitment, artistry, rehearsal technique, and expressiveness are emphasized. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department.

MUSC 162 Vocal Ensemble II [HP] 2 Credits
The College Vocal Ensemble offers instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from being a member of the Vocal Ensemble. Students are offered practical tools for accessing their inherent vitality, expressiveness and grace, while gaining vocal experience in an intimate choir setting. Work ethic, ensemble commitment, artistry, rehearsal technique, and expressiveness are emphasized. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. Formerly MUSC 162.

MUSC 163 Vocal Ensemble III [HP] 2 Credits
The College Vocal Ensemble offers instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from being a member of the Vocal Ensemble. Students are offered practical tools for accessing their inherent vitality, expressiveness and grace, while gaining vocal experience in an intimate choir setting. Work ethic, ensemble commitment, artistry, rehearsal technique, and expressiveness are emphasized. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department.

MUSC 216 College Voice IV [HP] 1 - 2 Credits
College voice classes offer instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 216 offers a more in-depth study of specific elements of efficient vocal technique and performance. These include vocal purity, the International Phonetic Alphabet (IPA) and appropriate vocal literature for each individual. Choral singers, all music majors, elementary education majors as well as students who simply want to continue to improve their singing will benefit from this class.

MUSC 217 College Voice V [HP] 1 - 2 Credits
College voice classes offer instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 217 offers a more in-depth study of specific elements of efficient vocal technique and performance. These include vocal purity, the International Phonetic Alphabet (IPA) and appropriate vocal literature for each individual. Choral singers, all music majors, elementary education majors as well as students who simply want to continue to improve their singing will benefit from this class.

MUSC 218 College Voice VI [HP] 1 - 2 Credits
College voice classes offer instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from any College Voice class. Students are offered practical tools for accessing their inherent vitality, expressiveness, and grace.
Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department. MUSC 218 offers a more in-depth study of specific elements of efficient vocal technique and performance. These include vocal purity, the International Phonetic Alphabet (IPA) and appropriate vocal literature for each individual. Choral singers, all music majors, elementary education majors as well as students who simply want to continue to improve their singing will benefit from this class.

MUSC 226 Jazz Combo IV [HP] 1 - 3 Credits
The jazz combo gives the student the opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The rehearsal schedule will include learning the standard repertoire as well as studying theory with an emphasis on improvisational skills. The combo performs regularly at concerts, school functions, and professional engagements. Prerequisite: Instructor permission.

MUSC 227 Jazz Combo V [HP] 1 - 3 Credits
The jazz combo gives the student the opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The rehearsal schedule will include learning the standard repertoire as well as studying theory with an emphasis on improvisational skills. The combo performs regularly at concerts, school functions, and professional engagements. Prerequisite: Instructor permission.

MUSC 228 Jazz Combo VI [HP] 1 - 3 Credits
The jazz combo gives the student the opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The rehearsal schedule will include learning the standard repertoire as well as studying theory with an emphasis on improvisational skills. The combo performs regularly at concerts, school functions, and professional engagements. Prerequisite: Instructor permission.

MUSC 231 Applied Music IV 1 - 2 Credits
Private music lessons with a college-approved instructor. One hour lesson per week for two credits, or one half-hour lesson per week for one credit. Ten lessons per term.

MUSC 232 Applied Music V 1 - 2 Credits
Private music lessons with a college-approved instructor. One hour lesson per week for two credits, or one half-hour lesson per week for one credit. Ten lessons per term.

MUSC 233 Applied Music VI 1 - 2 Credits
Private music lessons with a college-approved instructor. One hour lesson per week for two credits, or one half-hour lesson per week for one credit. Ten lessons per term.

MUSC& 241 Music Theory IV [H] 5 Credits
The study of music logic, music theory, is intended to complement the musical intuition most vocalists and instrumentalists already have. Music is a complex and highly organized art, whether it is a Mozart concerto or a jazz improvisation. While providing a rational knowledge of music through the study of singing, a study of music theory interacts with the musician's intuition, bringing a deeper understanding and appreciation of music. All students will learn to apply their knowledge to the keyboard in a basic though useful way. Prerequisite: Grade of C or better in MUSC& 241 or instructor permission.

MUSC& 242 Music Theory V [H] 5 Credits
The study of music logic, music theory, is intended to complement the musical intuition most vocalists and instrumentalists already have. Music is a complex and highly organized art, whether it is a Mozart concerto or a jazz improvisation. While providing a rational knowledge of music through the study of singing, a study of music theory interacts with the musician's intuition, bringing a deeper understanding and appreciation of music. All students will learn to apply their knowledge to the keyboard in a basic though useful way. Prerequisite: Grade of C or better in MUSC& 241 or instructor permission.

MUSC& 243 Music Theory VI [H] 5 Credits
The study of music logic, music theory, is intended to complement the musical intuition most vocalists and instrumentalists already have. Music is a complex and highly organized art, whether it is a Mozart concerto or a jazz improvisation. While providing a rational knowledge of music through the study of singing, a study of music theory interacts with the musician's intuition, bringing a deeper understanding and appreciation of music. All students will learn to apply their knowledge to the keyboard in a basic though useful way. Prerequisite: Grade of C or better in MUSC& 241 or instructor permission.

MUSC 251 Large Ensemble Performance IV 1 Credit
Instrumental or vocal participation in a college-level organization with a regular rehearsal schedule, culminating in public concert performances. Open to all WWCC students who can perform with the required competencies. Formerly MUSC 241.

MUSC 252 Large Ensemble Performance V 1 Credit
Instrumental or vocal participation in a college-level organization with a regular rehearsal schedule, culminating in public concert performances. Open to all WWCC students who can perform with the required competencies. Formerly MUSC 242.

MUSC 253 Large Ensemble Performance VI 1 Credit
Instrumental or vocal participation in a college-level organization with a regular rehearsal schedule, culminating in public concert performances. Open to all WWCC students who can perform with the required competencies. Formerly MUSC 243.

MUSC 261 Vocal Ensemble IV [HP] 2 Credits
The College Vocal Ensemble offers instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from being a member of the Vocal Ensemble. Students are offered practical tools for accessing their inherent vitality, expressiveness and grace, while gaining vocal experience in an intimate choir setting. Work ethic, ensemble commitment, artistry, rehearsal technique, and expressiveness are emphasized. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department.

MUSC 262 Vocal Ensemble V [HP] 2 Credits
The College Vocal Ensemble offers instruction for students of every ability. Beginners as well as students pursuing transfer music degrees will benefit from being a member of the Vocal Ensemble. Students are offered practical tools for accessing their inherent vitality, expressiveness and grace, while gaining vocal experience in an intimate choir setting. Work ethic, ensemble commitment, artistry, rehearsal technique, and expressiveness are emphasized. Performing opportunities include recitals, original operettas (Winter quarter) and collaboration with the WWCC Theatre Department.
MUSC 263 Vocal Ensemble VI [HP] 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUS 263.

MUSC 299 Special Projects 1 - 5 Credits
This course provides an opportunity for independent study with a faculty member advisor. Students may earn one to five credits.

Nursing Education

NURS 100 Fundamentals of Nursing 4 Credits
Fundamental principles of nursing care are presented. Content areas related to nursing process, safety and infection control, health promotion and maintenance, basic care and comfort, pharmacological therapies, reduction of risk potential, and physiological adaptation are presented. Care specific to adult and geriatric patients is emphasized. Prerequisite: Admission to the Nursing Program. Co-requisite: NURS 110.

NURS 101 Beginning Nursing Concepts I 5 Credits
A continuation of the principles of nursing care introduced in NURS 100. Content areas related to safe and effective care environment, health promotion and maintenance, pharmacological and parenteral therapies, and physiological adaptation for disease processes in selected body systems are presented. Care across the lifespan in acute care environments is emphasized. Prerequisite: Admission to Nursing Program; NURS 100 and 110. Co-Requisite: NURS 111.

NURS 102 Beginning Nursing Concepts II 6 Credits
A continuation of the principles of nursing care introduced in NURS 101. Content areas related to safe and effective care environment, health promotion and maintenance, pharmacological and parenteral therapies, and physiological adaptation to normal life processes or disease processes in selected body systems are presented. Care specific to the obstetrical patient and adults in the acute care environment is emphasized. Prerequisite: Admission to the Nursing Program; NURS 101 and 111. Co-requisite: NURS 112.

NURS 103 Practical Nursing 6 Credits
The focus of this course is preparation to complete the NCLEX-PN and enter practice as a PN. Prerequisites: NURS 102 and 112. Co-requisite: NURS 113.

NURS 104 LPN to ADN Transition 6 Credits
The focus of this course is assisting LPNs admitted to the second year of the nursing program to fulfill program requirements. Use of the nursing process, critical thinking, and completion of nursing skills is emphasized. Prerequisites: Admission to second year of Nursing program. Co-requisite NURS 114.

NURS 110 Fundamentals Practicum 4 Credits
This course applies theory from NURS 100. The focus is on the management of care of older adults in the long-term care environment. Prerequisite: Admission to the Nursing program. Co-requisite: NURS 100.

NURS 111 Practicum I 4 Credits
This course applies theory from NURS 101. The focus is on the management of care for all age groups in the acute care environment. Prerequisite: Admission to the Nursing Program; NURS 100 and 110. Co-requisite: NURS 101.

NURS 112 Practicum II 4 Credits
This course applies theory from NURS 102. The focus is on the management of care for all age groups in the acute care environment and labor and delivery. Prerequisites: Admission to the Nursing Program; NURS 101 and 111. Co-requisite: NURS 102.

NURS 113 Practical Nursing Practicum 6 Credits
An application of theory from NURS 103. The focus is on providing care for clients in acute care and community based settings. An additional focus is on transition to the role of Practical Nurse. Prerequisites: NURS 102 and 112. Co-requisite: NURS 103.

NURS 114 Practicum: LPN to ADN Transition 6 Credits
Focuses on enhancing skills for LPNs entering the second year of the nursing program. Care is provided in acute care facilities and community based settings. Prerequisite: Admission to second year of the Nursing program. Co-requisite: NURS 104.

NURS 140 Ethics and Policy in Healthcare I [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Student may not receive credit for both NURS 140 and PHIL 140. Prerequisite: Admission to the Nursing Program. Co-Requisites: NURS 100 and NURS 110.

NURS 142 Ethics and Policy in Healthcare II [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from NURS 140. Students may not receive credit for both NURS 142 and PHIL 142. Prerequisite: Admission to the nursing program; NURS 140. Co-requisites: NURS 102 and NURS 112.

NURS 150 Psychosocial Issues in Healthcare I and II [SS] 2 Credits
Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of healthcare. Students may not receive credit for both NURS 150 and PSYC 150. Prerequisite: Admission to the Nursing Program. Co-requisites: NURS 100 and NURS 110.

NURS 151 Psychosocial Issues in Healthcare III [SS] 1 Credit
Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of healthcare. This is a continuation of content from NURS 150. Student may not receive credit for both NURS 151 and PSYC 151. Prerequisite: Admission to Nursing Program; NURS 150. Co-requisite: NURS 101 and NURS 111.

NURS 200 Advanced Nursing Concepts I 5 Credits
A continuation of nursing principles introduced in NURS 102. Content areas related to safe and effective care environment, health promotion and maintenance, pharmacological and parenteral therapies, and physiological adaptation is presented for patients with disease processes in select body systems. Care specific to both the acute care and community healthcare environments is emphasized. Admission to the Nursing Program; NURS 102 and 112. Co-requisite: NURS 210.

NURS 201 Advanced Nursing Concepts II 5 Credits
A continuation of the nursing principles introduced in NURS 200. The focus is on providing care to clients with complex care needs related to
obstetrical conditions and disease processes in selected body systems. Prerequisites: NURS 200 and 210. Co-requisite: NURS 211.

NURS 202 Advanced Nursing Concepts III 7 Credits
A continuation of nursing principles introduced in NURS 201. Content areas related to safe and effective care environment, health promotion and maintenance, pharmacological and parenteral therapies, and physiological adaptation for patients with disease processes in selected body systems is presented. Care specific to intensive and emergency care settings is emphasized. Prerequisites: Admission to the Nursing Program; NURS 201 and 211. Co-requisite: NURS 212.

NURS 210 Practicum III 6 Credits
This course applies theory from NURS 200. The focus is on the management of care of patients in acute care, mental health, and community healthcare environments. Prerequisites: Admission to the Nursing Program; NURS 201 and 211. Co-requisite: NURS 200.

NURS 211 Practicum IV 6 Credits
This course applies theory from NURS 201. The focus is on the management of care of patients in acute care, mental health, and community healthcare environments. Prerequisites: Admission to the Nursing Program; NURS 200 and 210. Co-requisite: NURS 201.

NURS 212 Practicum V 4 Credits
This course applies theory from NURS 202. The focus is on the management of care of patients in acute care, mental health, and community healthcare environments. Each student completes a Focused Practicum experience with a nurse preceptor as a transition to practice as a registered nurse. Prerequisites: Admission to the Nursing Program; NURS 201 and 211. Co-requisite: NURS 202.

NURS 240 Ethics and Policy in Healthcare III [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from NURS 140 and NURS 142. Student may not receive credit for both NURS 240 and PHIL 240. Prerequisite: Admission to the Nursing Program; NURS 140 and NURS 142. Co-requisite: NURS 200 and NURS 210. Effective Fall 2016.

NURS 241 Ethics and Policy in Healthcare IV [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from NURS 140, 142, and 240. Student may not receive credit for both NURS 241 and PHIL 241. Prerequisite: Admission to the Nursing Program; NURS 140, 142, and 240. Co-Requisite: NURS 201 and NURS 211. Effective Winter 2017.

NURS 242 Ethics and Policy in Healthcare V [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from NURS 140, 142, 240, and 241. Student may not receive credit for both NURS 242 and PHIL 242. Prerequisite: Admission to the Nursing Program; NURS 140, 142, 240, and 241. Co-Requisite: NURS 202 and NURS 212. Effective Spring 2017.

NURS 250 Psychosocial Issues in Healthcare IV [SS] 1 Credit
Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of healthcare. This is a continuation of content from NURS 150 and NURS 151. Student may not receive credit for both NURS 250 and PSYC 250. Prerequisite: Admission to the Nursing Program; NURS 150 and NURS 151. Co-Requisite: NURS 200 and NURS 210. Effective Fall 2016.

NURS 251 Psychosocial Issues in Healthcare V [SS] 1 Credit
Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of healthcare. This is a continuation of content from NURS 150, 151 and 250. Student may not receive credit for both NURS 251 and PSYC 251. Prerequisite: Admission to the Nursing Program; NURS 150, 151 and 250. Co-Requisite: NURS 201 and NURS 211. Effective Winter 2017.

NURS 297 Special Projects 1 - 5 Credits
Project-oriented experiences in the area or applications not provided or covered in the standard nursing curriculum. Prerequisite: Instructor permission, based on evaluation of student's education and work experience.

NUTR& 101 Nutrition [NS] 5 Credits
This non-lab science course emphasizes the principles of nutrition and is primarily intended for Nursing or Allied Health majors in fulfillment of a nutrition requirement for pre-nursing or healthcare related program requirements; however, this course may also be used in fulfillment of a general education non-lab science requirement. Topics include: dietary recommendations for adults and various states of the human life cycle and the principles of nutrition as the apply to macro-nutrients and metabolic pathways. Formerly NUTR 165, General Nutrition. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher and CHEM& 110 or high school chemistry. [NS]

OCSUP 101 Human Relations 3 Credits
This course utilizes principles from the behavioral sciences to help students in establishing positive relationships among individuals in the work setting. Through readings, critical thinking, problem solving, writing, role-playing, and case studies, students will develop basic human relations skills essential to effectively function in the modern workplace. These communication skills are applicable to relations with co-workers, supervisors, subordinate workers and customers.

OCSUP 102 Oral Communication in the Workplace 3 Credits
Oral communication prepares students to communicate effectively and professionally in the workplace. Students explore fundamentals of maintaining productive interpersonal interactions in workplace settings through experiential learning activities. This course contributes to the student's workplace communication skills as the student learns to give and receive constructive criticism from others in classroom and on-line discussion and activities.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
### OCEANOGRAHY

**OCEA& 101 Introduction to Oceanography w/Lab [NS]**  5 Credits  
Fundamental principles of ocean science; the geography and geology of ocean basin; chemistry of sea water; physical dynamics of currents, waves, and tides; coastal processes; and the biology of diverse ecosystems. Lab work required. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 087 or permission of the Science Division Chair or designee. Recommended: READ 088. Formerly OCE 101, Intro to Oceanography.

### Outdoor Power Equipment

**TST 125 Paints and Painting**  3 Credits  
Focuses on equipment, materials, techniques, and practices required for painting and conditioning turf equipment.

**TST 151 Shop Fundamentals**  4 Credits  
Instruction in shop performance, management, exercises in safety, hand and machine tool operation, use and maintenance, hardware identification, and other basic shop skills necessary for the successful outdoor power equipment manager.

**TST 152 Forklift Safety Training and Certification**  1 Credit  
Designed to meet OSHA requirements for lift truck operator training and certification. Safe lifting and moving of loads will be discussed, demonstrated, and practiced. Complete the driving test and IVES with a minimum of 70% to earn certificate.

**TST 154 Basic 4-Stroke Engine Principles**  1 - 10 Credits  
A comprehensive study of the mechanics of outdoor power equipment, covering use of reference materials, proper maintenance procedures, four-cycle gasoline engine repair and diagnostics necessary for EETC technician certification.

**TST 155 Basic 2-Stroke Engine Principles**  1 - 10 Credits  
A comprehensive study of the mechanics of 2-stroke gasoline engine repair and diagnostics used in outdoor power equipment, necessary for EETC technician certification.

**TST 156 Electrical Principles**  1 - 10 Credits  
Comprehensive study of electrical systems emphasizing fundamentals, safety, component and system diagnostics and repair, and electro-hydraulic theory used in all outdoor power equipment necessary for EETC technician certification.

**TST 157 Hydraulic Principles**  1 - 10 Credits  
Comprehensive study of hydraulic fundamentals, component repair and diagnostics including hydrostatic transmissions used in outdoor power. Necessary for EETC Technician Certification.

**TST 158 Power Trains**  1 - 10 Credits  
A comprehensive study of power train fundamentals, component repair, and diagnostics including hydrostatic transmissions used in outdoor power from lawn and garden to compact utility equipment necessary for EETC Technician Certification.

**TST 159 Generator Fundamentals**  5 Credits  
Comprehensive fundamentals, teardown, troubleshooting, and testing of both brush and brushless generators.

**TST 199 Special Topics**  1 - 5 Credits  
Study and train to meet established local needs in the turf equipment industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

**TST 255 Compact Diesel Engines**  1 - 17 Credits  
In-depth study on the theory, operation, service procedures, and troubleshooting necessary to maintain modern compact diesels used in compact tractor, turf equipment, and other commercial equipment.

**TST 256 Reels and Mowing Systems**  1 - 17 Credits  
In-depth study of various reel maintenance practices, reel styles, grinding techniques, rebuilding, and troubleshooting. Study of rotary mowers, their drive systems, spindles, and blade sharpening, used in commercial golf and turf mowers.

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FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
TST 297 Special Projects 1 - 18 Credits
Project-oriented experiences in the area or applications not covered in the standard turf equipment curriculum. Prerequisite: Instructor permission, based on evaluation of student's education and work experience.

TST 299 Leadership 1 Credit
Students develop an awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities. Students will acquire information, experience diverse points of view, construct knowledge and practice a variety of interpersonal and social skills, such as communicating, goal-setting, decision-making, team-building, and managing stress.

Philosophy

PHIL 101 Introduction to Philosophy [H] 5 Credits
This course will focus on the study of basic principles in western philosophy, examining representative philosophical topics such as the existence of God, epistemology and human nature as theorized by Socrates, Plato, Aristotle, St. Thomas Aquinas, Epicurus, Descartes, Pascal, Hobbes, Locke, James, Marx and Mill. Recommended: READ 088 or higher and ENGL 097. Formerly PHIL 101, Intro to Philosophy I.

PHIL& 101H Introduction to Philosophy-Honors [H] 5 Credits
This course will focus on the study of basic principles in western philosophy, examining representative philosophical topics such as the existence of God, epistemology and human nature as theorized by Socrates, Plato, Aristotle, St. Thomas Aquinas, Epicurus, Descartes, Pascal, Hobbes, Locke, James, Marx and Mill. Formerly PHIL 101H, Intro to Philosophy I-Honors. Recommended: READ 088 or higher and ENGL 097.

PHIL 103 Asian Philosophy [D, H] 5 Credits
This course introduces central ideas, metaphors, and images of the philosophical/religious traditions of East Asia: students define, differentiate, and interpret concepts of value, self, and reality, as well as unique concepts in Eastern social and political philosophy and aesthetics in Hinduism, Jainism, Buddhism, Confucianism, Taoism, and other traditions of India, China, Korea and Japan.

PHIL& 115 Critical Thinking [D, H] 5 Credits
This course will study the attitudes, skills, and theories involved with critical thinking, including an introduction to informal and formal logic. Formerly PHIL 120, Critical Thinking.

PHIL& 117 Traditional Logic [H, Q] 5 Credits
Introduction to systematic techniques for assessing the validity of arguments: Venn Diagrams, truth tables, abbreviated truth tables, propositional calculus including rules of inference, and axioms of replacement. Prerequisite: Appropriate placement score or grade C or higher in MATH 078, MATH 078E, and MATH 079.

PHIL 131 Introduction to Ethics [H] 5 Credits
This course will focus on the study and discussion of the original writings of classic moral philosophers. The moral theories of Plato, Aristotle, Epicurus, Epicurus, Hobbes, Mill, Kant, Kierkegaard, Hallie, Midgley and Noddings will be examined, analyzed, compared and contrasted.

PHIL 140 Ethics and Policy in Healthcare I [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. Student may not receive credit for PHIL 140 and NURS 140. Prerequisite: Admission to the Nursing Program. Co-Requisites: NURS 100 and NURS 110.

PHIL 142 Ethics and Policy in Healthcare II [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from PHIL 140. Students may not receive credit for both PHIL 142 and NURS 142. Prerequisite: Admission to the nursing program; PHIL 140. Co-requisites: NURS 102 and NURS 112.

PHIL 152 Social and Political Philosophy [H] 5 Credits
This course will focus on an analysis of the various theories and selections of original writings from major western political philosophers such as Plato, Hobbes, Locke, Rousseau, Mill, Marx, and Rawls. In addition, Martha Nussbaum and key feminist political theorists such as Julia Kristeva will be discussed. Recommended: PHIL&101, READ 088 or higher and ENGL 097.

PHIL 205 Philosophy of Religion [H] 5 Credits
Examines the notions of God through topics which include the existence and nature of God, the problem of evil, issues in religious ethics, and the relationship between faith and reason, including the question of miracles. Recommended: READ 088 or higher and ENGL 097.

PHIL 240 Ethics and Policy in Healthcare III [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from PHIL 140 and PHIL 142. Student may not receive credit for both PHIL 240 and NURS 240. Prerequisite: Admission to the Nursing Program; PHIL 140 and PHIL 142. Co-requisite: NURS 200 and NURS 210. Effective Fall 2016.

PHIL 241 Ethics and Policy in Healthcare IV [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from PHIL 140, 142, and 240. Student may not receive credit for both PHIL 241 and NURS 241. Prerequisite: Admission to the Nursing Program; PHIL 140, PHIL 142, and PHIL 240. Co-Requisite: NURS 201 and NURS 211. Effective Winter 2017.

PHIL 242 Ethics and Policy in Healthcare V [H] 1 Credit
Explores values, ethics, and legal decision-making frameworks and policies used to support the well-being of people and groups within the context of the healthcare professions. This is a continuation of content from PHIL 140, 142, 240, and 241. Student may not receive credit for both PHIL 242 and NURS 242. Prerequisite: Admission to the Nursing Program; PHIL 140, 142, 240, and 241. Co-Requisite: NURS 202 and NURS 212. Effective Spring 2017.

Physical Education and Recreation

HPER 103 Cross Training Cardio I [PE] 1 Credit
A total body workout combining kickboxing, step, intervals, resistance training, Pilates, sports conditioning, dance and just about anything cardio or sculpting. Designed to help cross train your body. Abdominal training included.
This activity course will emphasize the techniques and tools and the principles of jogging and its relationship to lifetime fitness.

**HPER 124 Weight Training III [PE] 1 Credit**
This course explores the theory, knowledge and practical experience in the principles of weight training and its relationship to lifetime fitness.

**HPER 131 Skiing/Snowboarding II [PE] 1 Credit**
This course, located at Bluewood Recreation Area, will emphasize the safety, equipment, skills, and practice related to snow skiing and snowboarding. Students must attend orientation. Additional fee required.

**HPER 137 Zumba I [PE] 1 Credit**
Zumba is a fusion of Latin and International Music and Dance themes creating a dynamic, exciting and effective fitness system; both fast and slow rhythmic training will be used. Students will join the fun party-like atmosphere and will receive feedback as they monitor caloric burn. Current fitness level will be assessed and analyzed using accepted measurement techniques. Those measurement tools will be used throughout the quarter to measure fitness progress and students will be taught how to apply these tools to any form of cardio work. Students will also have an opportunity to improve dance skills.

**HPER 138 Zumba II [PE] 1 Credit**
Zumba is a fusion of Latin and International Music and Dance themes creating a dynamic, exciting and effective fitness system; both fast and slow rhythmic training will be used. Students will join the fun party-like atmosphere and will receive feedback as they monitor caloric burn. Current fitness level will be assessed and analyzed using accepted measurement techniques. Those measurement tools will be used throughout the quarter to measure fitness progress and students will be taught how to apply these tools to any form of cardio work. Students will also have an opportunity to improve dance skills.

**HPER 139 Archery I [PE] 1 Credit**
This course, designed for the beginning or intermediate archer, will expose students to the sport's history, terminology, equipment, etiquette, and skill fundamentals.

**HPER 140 Archery II [PE] 1 Credit**
This course, designed for the beginning or intermediate archer, will expose students to the sport's history, terminology, equipment, etiquette, and skill fundamentals.

**HPER 144 Walking I [PE] 1 Credit**
This course explores the theory, knowledge and practical experience in the principles of walking and its relationship to lifetime fitness.

**HPER 147 Walking II [PE] 1 Credit**
This course explores the theory, knowledge and practical experience in the principles of walking and its relationship to lifetime fitness.

**HPER 148 Walking III [PE] 1 Credit**
This course explores the theory, knowledge and practical experience in the principles of walking and its relationship to lifetime fitness.

**HPER 156 Yoga I [PE] 1 Credit**
This activity course will emphasize the techniques and tools and practices of yoga. Yoga poses, stress management methods, the lifetime fitness value of yoga, and anatomy of the body will be explored.

**HPER 157 Yoga II [PE] 1 Credit**
This activity course will emphasize the techniques and tools and...
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<tr>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>HPER 160 Basic Rodeo Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize the skills, strategies, etiquette, and safety of college rodeo.</td>
</tr>
<tr>
<td>HPER 161 Intermediate Rodeo Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports course will emphasize the skills, strategies, etiquette, and safety of college rodeo.</td>
</tr>
<tr>
<td>HPER 162 Advanced Rodeo Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>Sports activity course emphasizing skills, rules and strategies of college rodeo.</td>
</tr>
<tr>
<td>HPER 164 Online Yoga I [PE]</td>
<td>1 Credit</td>
<td>This course will explore the theory, knowledge, research, and online discussions exploring general yoga principles and lifetime fitness. The workout component will be in the concurrently enrolled HPER 167 class.</td>
</tr>
<tr>
<td>HPER 167 Online Yoga II [PE]</td>
<td>1 Credit</td>
<td>This activity course will emphasize the practice of yoga. Concurrent enrollment in HPER 166 required.</td>
</tr>
<tr>
<td>HPER 171 Basketball Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 172 Baseball/Softball Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 174 Volleyball Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 175 Soccer Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 176 Golf Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 177 Basketball Methods and Materials [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 178 Baseball/Softball Methods and Materials [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 179 Volleyball Methods and Materials [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 180 Golf Methods and Materials [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 181 Soccer Methods and Materials [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 182 Advanced Rodeo Skills and Rules [PE]</td>
<td>2 Credits</td>
<td>Sports activity course emphasizing skills, rules and strategies of college rodeo.</td>
</tr>
<tr>
<td>HPER 184 Online Yoga I [PE]</td>
<td>1 Credit</td>
<td>This course will explore the theory, knowledge, research, and online discussions exploring general yoga principles and lifetime fitness. The workout component will be in the concurrently enrolled HPER 167 class.</td>
</tr>
<tr>
<td>HPER 185 Online Yoga II [PE]</td>
<td>1 Credit</td>
<td>This activity course will emphasize the practice of yoga. Concurrent enrollment in HPER 166 required.</td>
</tr>
<tr>
<td>HPER 186 Golf Methods and Materials [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 187 Soccer Methods and Materials [PE]</td>
<td>2 Credits</td>
<td>This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.</td>
</tr>
<tr>
<td>HPER 188 Basic Fitness I [PE]</td>
<td>1 Credit</td>
<td>This course will explore the theory knowledge, research, and online discussions exploring general exercise principles and lifetime fitness. The workout component will be included in the concurrently enrolled HPER 189 class.</td>
</tr>
<tr>
<td>HPER 189 Basic Fitness II [PE]</td>
<td>1 Credit</td>
<td>This activity course will emphasize the practice of basic fitness. Concurrent enrollment in HPER 188 is required.</td>
</tr>
<tr>
<td>HPER 190 Basic Fitness III [PE]</td>
<td>1 Credit</td>
<td>This activity course will emphasize the practice of basic fitness. Prerequisite: HPER 188 and 189.</td>
</tr>
<tr>
<td>HPER 191 Core Workout [PE]</td>
<td>1 Credit</td>
<td>A beginning dance fitness course. Emphasis will be placed on the center of the body, since this is where most athletic skills generate.</td>
</tr>
<tr>
<td>HPER 246 Stress Management</td>
<td>3 Credits</td>
<td>Stress is a normal part of life. Some of the most common triggers associated with stress will be discussed. Students will learn techniques to manage these stressors in a healthful way. Both physical and mental coping skills will be explored. This course counts as an ELECTIVE toward an AA degree, NOT as an ACTIVITY COURSE.</td>
</tr>
<tr>
<td>HPER 267 Outdoor Recreation</td>
<td>5 Credits</td>
<td>This course explores the history, development, principles and trends of National Parks, outdoor recreation, facility development, liability, and recreation leadership. Active participation in many recreation activities. This course counts as an ELECTIVE toward an AA degree, NOT as an ACTIVITY COURSE.</td>
</tr>
<tr>
<td>HPER 268 Diversity in Sports [D]</td>
<td>5 Credits</td>
<td>This course will examine diversity issues in the sporting world from the 1930’s to present day. Topics will include athletes that have overcome social biases such as race, gender, religion and disability in the context of the Olympics, Special Olympics, Paralympics, NCAA and professional sports. This course counts an elective and diversity credit toward the AA degree, not as an activity course.</td>
</tr>
<tr>
<td>HPER 274 Personal and Community Health and Hygiene</td>
<td>5 Credits</td>
<td>This course will present current information to students and enable them to make intelligent decisions concerning their physical, mental, and social well-being. The importance of positive personality and self-image is also stressed as a basis for sound health decisions. This course counts as an ELECTIVE toward an AA degree, NOT as an ACTIVITY COURSE.</td>
</tr>
<tr>
<td>HPER 275 Prevention and Care of Athletic Injury</td>
<td>5 Credits</td>
<td>This course will cover basic knowledge for the prevention and recognition of athletic injuries and illnesses. Students will develop skills necessary to treat minor injuries and tape/brace prophylactically or after an injury. Class will be in lecture format with a lab component. Counts as an ELECTIVE toward an AA degree, NOT as an ACTIVITY COURSE.</td>
</tr>
</tbody>
</table>

**Physics**

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<thead>
<tr>
<th>Course Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PHYS&amp; 110 Phys Non-Sci Majors w/Lab [NS]</td>
<td>5 Credits</td>
<td>Survey course in physics for the non-science or undecided major. Emphasis on conceptual understanding rather than computation. Topics include motion, forces, the concept of work and energy, physical states of...</td>
</tr>
</tbody>
</table>
matter, principles of thermodynamics, basic electricity and magnetism, and atomic and nuclear structure. Lab work required. Appropriate placement score or grade of C or higher in MATH 074C or MATH 075; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher. Formerly PHYS 110, Conceptual Physics.

PHYS 116 General Phys III w/Lab [NS]  5 Credits
This is part three of an algebra-based physics sequence intended for non-physical science majors. Topics include mechanical properties of matter, behavior of fluids, harmonic motion and waves, basic thermodynamics, and an introduction to electricity. Lab work required. Prerequisites: Appropriate placement score or grade of C or higher in MATH 078, MATH 078E, or MATH 079; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher; basic knowledge of trigonometry. Formerly PHYS 121, College Physics I.

PHYS 199 Special Topics  1 - 5 Credits
Opportunity for students to pursue special interests and topics in physics. Requires working with physics faculty to develop a project and to determine the research and presentational methods as well as outcomes to be achieved and assessed.

PHYS 201 Engr Physics I w/Lab [NS]  5 Credits
This is part one of a calculus-based physics sequence intended for physical science and engineering majors. Topics include linear and rotational motion, forces, kinetic and potential energy, momentum, and translational and rotational equilibrium. Lab work required. Prerequisite: PHYS 114. Formerly PHYS 122, College Physics II.

PHYS 202 American Government [SS]  5 Credits
A historical and analytical examination of the Executive Branch of the United States government. Primary areas of emphasis include: leadership styles of each President, evolutionary changes in the power of the office, and the consequences of each on the country. Recommended: READ 088 or higher. Student may not earn credit for both HIST 120 and PHYS 202. Formerly PHYS 203, Physics for Science and Engineering III.

PHYS 204 Constitutional Law [SS]  5 Credits
Examination of the United States Constitution and amendments. Special attention is given to the effects of constitutional principles on civil society and the criminal justice system. Topics include: Historical overview, legal principles, due process, rights & liberties, and practical applications within the criminal justice system. Recommended: READ 088 or higher. Formerly PHYS 204.

PHYS 211 U.S. in World Affairs I [SS]  5 Credits
Examination of American involvement in international affairs. Study includes this country’s foreign policy actions as a world power, with special attention given to both the policy makers and critics of our nation’s position on significant international issues from the colonial period to the beginning of the 20th Century. Recommended: READ 088 or higher. Student may not earn credit for both PHYS 211 and HIST 211. Formerly PHYS 211.

PHYS 212 U.S. in World Affairs II [SS]  5 Credits
Examination of American involvement in international affairs since 1898. Study includes this country’s foreign policy actions as a world power, with special attention given to both the policy makers and critics of our nation’s position on significant international issues from the Spanish-American War to the present. Recommended: READ 088 or higher. Student may not earn credit for both PHYS 212 and HIST 212. Formerly PHYS 212.

PHYS 214 Agricultural and Water Policy [SS]  5 Credits
This course covers goals, methods, and results of government programs and policies in the agriculture and natural resource industries. This includes the study of international trade policies, domestic farm policies, food safety and quality issues, resource issues and how these affect agribusiness, locally, nationally and internationally. The course will also cover western water policy with an emphasis on Washington State water policy, water rights and how these policies affect natural resources and agribusiness. Recommended: One quarter economics. Student may not earn credit for both PHYS 214 and AGRI 222. Formerly PHYS 214.
## PSYCHOLOGY

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
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<tr>
<td>PSYC 111</td>
<td>Psychology of Relationships</td>
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<td>PSYC 139</td>
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<td>PSYC 140</td>
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<td>PSYC 150</td>
<td>Psychosocial Issues in Healthcare I and II</td>
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<tr>
<td>PSYC 151</td>
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<tr>
<td>PSYC 160</td>
<td>Psychology of Criminal Behavior</td>
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<td>PSYC&amp; 180</td>
<td>Human Sexuality</td>
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<td>PSYC 196</td>
<td>Psychology of Human Performance</td>
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<td>PSYC&amp; 200</td>
<td>Lifespan Psychology</td>
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<td>PSYC 205</td>
<td>Social Psychology</td>
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<td>PSYC 207</td>
<td>Psychology of Personality</td>
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<td>PSYC 219</td>
<td>Health Psychology</td>
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<td>PSYC&amp; 220</td>
<td>Abnormal Psychology</td>
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<tr>
<td>PSYC 224</td>
<td>Environmental Psychology</td>
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Introduction to the factors which influence human behavior and thinking, as well as the complexities of the relationship between body and mind. The outcome of this course should be a clearer understanding of individual behavior. Critical thinking skills and practical applications are emphasized. Recommended: READ 088 or higher. Formerly PSY 101, Introduction to Psychology.

Personal discovery of the factors that influence interactions including friendships, romantic relationships, work interactions, and family interactions. Skills in personal communication, active listening, feedback, self-disclosure, empathy, assertiveness, and conflict management are developed. Formerly PSY 111.

Explore the historical, cultural, and biological development of growing up female. Also examined are the social and psychological perspectives of female identity, traditional and non-traditional roles, values, sexuality, dependency, emotions, physical and mental health issues, and the changing perception of femininity and masculinity. Formerly PSY 139. Student may not earn credit for both PSYC 139 and GWST 139. Recommended: READ 088 or higher.

The educational and career demands of the 21st century require individuals to evaluate the relevancy of well-worn pathways to success and achieve interdependence in the pursuit of developing identity. This course will provide students with the opportunity to explore education and career identity development. Readings, assessments, and applying theory to self and others will promote self-understanding and connect the implications of motivation, decision making, self-efficacy, the work we do, and the sense of community we experience. Recommended: ENGL 077 and READ 088. Formerly PSY 140.

Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of healthcare. Student may not receive credit for both PSYC 150 and NURS 150. Prerequisite: Admission to the Nursing Program. Co-Requisite: NURS 100 and NURS 110.

Examines some determinants of health and illness including social, psychological, environmental, spiritual, and cultural dimensions across the lifespan and within the context of healthcare. This is a continuation of content from PSYC 150. Student may not receive credit for both PSYC 151 and NURS 151. Prerequisite: Admission to Nursing Program; PSYC 150. Co-requisite: NURS 101 and NURS 111.

Study of criminal behavior from a psychological perspective. Special emphasis on psychiatric diagnoses most frequently encountered in the criminal justice system. Recommended: READ 088 or higher. Formerly PSY 160.

Study of sexual facts, attitudes, morals, and behavior. Examination of how society impacts our sexual values and behavior, as well as exploration of diverse experiences of others. Course will cover basic biology, as well as a focus on psychosocial issues related to and impacting sexual behaviors. Course for adults -- lectures and films may contain explicit language, nudity, and graphic material. Student may not earn credit for both PSYC& 180 and GWST 180. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly PSYC 113. Prerequisite: Appropriate placement score or grade of C or higher in ENGL 097. Recommended: READ 088 or higher.

In-depth study of the relationship between the mind and body. Course includes application of psychological theories, research, and intervention strategies to performance enhancements in a variety of settings. Formerly PSY 196. Recommended: READ 088 or higher.

An in-depth study of human development focusing on the biological, cognitive, and psychosocial domains of each of the stages of the lifespan from birth to death. Recommended: READ 088 or higher. Formerly PSY 103, Developmental Psychology.

Study of how the behavior presence of others impacts individual behavior and attitudes. Topics include conformity, obedience, aggression, prejudice, persuasion, interpersonal attraction, self-justification, and group processes. Recommended: READ 088 or higher. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly PSY 205.

Introduction to the study of personality, including an overview of the major theories and practical applications to psychological adjustment in daily life. Prerequisite: PSYC& 100. Recommended: READ 088 or higher.

Study of the psychological research and principles in the promotion and maintenance of wellness and health in understanding and preventing disease. Prerequisite: PSYC& 100, General Psychology. Recommended: READ 088 or higher. Formerly PSY 219.

Study of origins and characteristics of maladaptive behavior with emphasis on scientific research on the causes and treatment approaches to psychopathology. Topics include anxiety disorders, schizophrenia, substance abuse disorders, dissociative disorders, and problems of cognitive function and childhood disorders. Prerequisite: PSYC& 100. Recommended: READ 088 or higher. Formerly PSY 250, Abnormal Psychology.

Study of interrelationships between people and the environment. Course will address the theories of environment-behavior relationships and include topics of environmental perception, assessment and cognition; noise, weather, climate, pollution, disasters, personal space and territoriality; planning and design in the work, learning and leisure environments; and changing behavior to save the environment. The course structure will allow the student to apply the theories and concepts of environmental psychology to their particular setting of interest, i.e. work, school, home. Recommended: READ 088 or higher. Formerly PSY 224.
This course is designed to provide students with a social service learning experience. Under supervision, students provide assigned services to an agency, school, health care facility, other non-profit organization or community group in the area. This will be “experiential service learning” which means students have the opportunity to apply what they have learned in social sciences classes to real life situations. This experience may be helpful to students in the selection of a profession/vocation or may be an opportunity to pursue a personal interest. Requires 30 hours of service learning per academic credit. Recommended: READ 088 or higher. Prerequisite: SOC 107 and instructor permission.

SOC 109 Service Learning Field Experience III  1 - 3 Credits
This course is designed to provide students with a social service learning experience. Under supervision, students provide assigned services to an agency, school, health care facility, other non-profit organization or community group in the area. This will be “experiential service learning” which means students have the opportunity to apply what they have learned in social sciences classes to real life situations. This experience may be helpful to students in the selection of a profession/vocation or may be an opportunity to pursue a personal interest. Requires 30 hours of service learning per academic credit. Recommended: READ 088 or higher. Prerequisite: SOC 107 and instructor permission.

SOC 164 Investigating the Dynamics of Socioeconomic Classes  2 Credits
Explores the relationships that exist between socio-economic classes and helps create awareness on the values, priorities, and resources pertaining to those classes. Recommended: READ 088

SOC& 201 Social Problems [SS]  5 Credits
This course examines a variety of global social problems (conditions or phenomena that adversely affect significant segments of the population) using sociological approaches to understand their complex dynamics. Interprets the effects of rapid globalization, with particular emphasis on impact on the United States. From a global perspective, this course examines war, overpopulation, environmental degradation, poverty and wealth, unequal health care, race and gender inequality, and crime. In addition to examining problems, students explore possible solutions. Formerly SOC 201, Intro to Social Problems. Recommended: READ 088 or higher. [SS]

SOC 204 Drugs and Society [SS]  5 Credits
An introduction to psychoactive drugs and their use and abuse from a sociological perspective. This course addresses the social, biological and psychological factors associated with therapeutic use, recreational use, and abuse of drugs. This course provides an exploration of the impact of drugs on social institutions, including issues regarding regulation of drug use. Other topics include prevention and treatment. Recommended: READ 088 or higher. [SS]

SOC 205 Racial and Ethnic Relations [D, SS]  5 Credits
Focuses on intergroup race and ethnic relations with a social-historical emphasis. Students explore how race and ethnic identities are developed; theoretical perspectives on assimilation and pluralism; prejudice and discrimination; the creation of subordinate groups; and historical and contemporary issues. Problems and possible solutions of majority-minority relations are examined. Course taken prior to fall 2010 also accepted for diversity requirement.

SOC 206 Aging and Society [D, SS]  5 Credits
Looks at the effects of the aging population of society, life/health
insurance, retirement planning, and resources for the elderly, discussing the individual and group behaviors with respect to health and illness. Examination of medical professionals and their behaviors, with a look at the human behavioral responses to health, illness and the aging process. The distinction between culture and the process of death, dying and bereavement will be analyzed as it relates to the physical, mental and social changes in people as they age. Emphasis on the aging process itself. Course taken prior to fall 2010 also accepted for diversity requirement.

**SOC 208 Intimate and Family Relations [D, SS]** 5 Credits
Provides a sociological understanding of the processes involved in family relations, household life and structures, and family problems. Emphasizes historical formations, social influences, and the diversity of families in the United States. Explores myths about family forms and features; the role of gender; divisions of labor within household; historical shifts; family privacy and government interventions; stereotypes; and the effect of social, economic, and political forces on the family. Also addresses the broader issues in the sociology of intimate relations beyond conventional marriages and families. Course taken prior to fall 2010 also accepted for diversity requirement. Recommended: READ 088.

**SOC 220 Gender and Society [D, SS]** 5 Credits
Gender is a central feature of social life. Enhances students' recognition of the pervasiveness and complexities of a sex and gender "system," predominately focusing on our own society. Gender is explored on three levels (individual identity, gender roles, and institutional level) to include as a system of social relationships in which gender interacts with, and influences, institutional structures; as what people "do" in social interactions; and as an attribute by individuals for self-identification. Student may not earn credit for both SOC 220 and GWST 220. Course taken prior to fall 2010 also accepted for diversity requirement. Recommended: READ 088 or higher.

**SOC 226 Community Leadership** 6 Credits
The Sherwood Trust Community Leadership Program was established by the Ford Institute for Community in 2000, and is now funded by the Sherwood Trust. This structured 60-hour curriculum is offered to citizens in small towns, such as Walla Walla. The objective is to cultivate community leadership skills with individuals from diverse backgrounds, from different economic and social sectors, and of diverse ages. An outcome of this program is for the class to identify a specific community project to be completed by the end of the program. This course is available to current participants in the Sherwood Trust Community Leadership Program only. Prerequisite: Instructor permission required.

**SOC 227 Community Leadership Service Project** 1 Credit
The Sherwood Trust Community Leadership Program was established by the Ford Institute for Community in 2000, and is now funded by the Sherwood Trust. This 30-hours of community service learning component is the outgrowth of SOC 226. The objective is to cultivate community leadership skills with individuals from diverse backgrounds, from different economic and social sectors, and of diverse ages. An outcome of this program is for the class to identify a specific community project to be completed by the end of the program. This course is available to current participants in the Sherwood Trust Community Leadership Program only.

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**SPANISH**

**Spanish**

**SPAN 121 Spanish I [H]** 5 Credits
Introductory course for students wishing to learn Spanish as a second language. Provides a foundation for practical interpersonal communications. Topics include pronunciation, basic grammar, reading, writing, and an introduction to Hispanic culture. Formerly SPAN 101, Spanish I.

**SPAN 122 Spanish II [H]** 5 Credits
Introductory course for students wishing to learn Spanish as a second language. Provides a foundation for practical interpersonal communications. Topics include pronunciation, basic grammar, reading, writing, and an introduction to Hispanic culture. Prerequisite: SPAN 121 or instructor permission. Formerly SPAN 102, Spanish II.

**SPAN 123 Spanish III [H]** 5 Credits
Introductory course for students wishing to learn Spanish as a second language. Provides a foundation for practical interpersonal communications. Topics include pronunciation, basic grammar, reading, writing, and an introduction to Hispanic culture. To be taken in sequence or with written consent of the instructor. Prerequisite: SPAN 122 or instructor permission. Formerly SPAN 103, Spanish III.

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**Turf Management**

**TURF 101 Turf Equipment Operations I** 3 Credits
Students will operate and maintain turf equipment, including mower units, top dressers, soil aerators, trimmers, sprayers and miscellaneous turf equipment. They will also develop a practical costing of equipment plan which emphasizes safety.

**TURF 122 Turf Maintenance Practices** 3 Credits
Students are introduced to the methods used in maintenance of sports fields, parks, school grounds, and golf courses. It prepares students for cooperative work experience and for entry into the turf industry.

**TURF 191 Cooperative Work Experience** 1 - 10 Credits
Students work in a job directly related to the turf management industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

**TURF 192 Cooperative Seminar** 2 Credits
Students examine issues related to student's cooperative work experience focusing on effective workplace relationships. They evaluate how self-knowledge, perception, attitudes, and behavior affect workplace relationships and job satisfaction. Students will also develop effective learning skills for workplace and educational success. Co-requisite: TURF 191.

**TURF 199 Special Topics** 1 - 5 Credits
In collaboration with your Instructor/Advisor, establish an appropriate project with identified and measurable learning outcomes. Prerequisite: Instructor permission.

**TURF 201 Turfgrass Cultural Practices** 6 Credits
Students are introduced to turfgrass cultural practices. Topics covered include turfgrass types and cultivars, turfgrass uses, selection of grasses, turfgrass fertilization and fertilizer selection, water needs of the grass plant and irrigation, renovation practices, future trends, and turfgrass assessment techniques.
TURF 215 Turf Diseases and Insects 5 Credits
This course concentrates on fundamentals of entomology and plant pathology to set the stage for working with the specifics of turfgrass problems. It is an introduction to the identification, study of life cycles, and control of insects and diseases as well as specific problems and their controls on turf.

TURF 291 Cooperative Work Experience II 1 - 10 Credits
Students are employed in jobs directly related to the turf management industry. This formal training period is agreed upon by the student, employer, and instructor. Demonstrations of gas and diesel engines, electrical, power trains, and hydraulics are done, in order that students are able to perform simple tune-ups and repairs on equipment. Prerequisite: Instructor permission.

TURF 292 Cooperative Seminar II 2 Credits
Students will contribute to discussions related to their cooperative work experience that focus on effective workplace relationships and applying leadership skills to promote personal development. They will also demonstrate effective communication skills, resolve conflicts, build teams, and engage employees in decision making. Co-requisite: TURF 291.

WELD 141 Welding Basics 4 Credits
Opportunity to select customized welding process instruction for application training, industry practices, hobby uses, or skill development to meet employer/employment requirements.

WELD 151 Shielded Metal Arc Welding I 1 - 17 Credits
Entry-level student training in safe practices of fuel gas cutting/welding and shielded metal arc welding. Topics include equipment operation, industry practices, arc welding fundamentals, material preparation methods, basic electricity, metals and electrodes, shop work ethics, and print reading/layout procedures. Prerequisite: Instructor permission.

WELD 152 Shielded Metal Arc Welding II 1 - 17 Credits
Training in safe and proper SMAW arc welding processes and techniques will be covered, including arc welding equipment setup, E-6010 and E-7018 electrode practice, shop work practice, demonstrations, and classroom presentations. Prerequisite: WELD 151 and instructor permission.

WELD 153 Shielded Metal Arc Welding III 1 - 17 Credits
Additional experience and training in safe SMAW welding procedures and the opportunity to complete AWS/WABO certification tests. Prerequisite: WELD 152 and instructor permission.

WELD 191 Cooperative Work Experience 1 - 15 Credits
This course offers students the opportunity to work in jobs directly related to the welding industry. The formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission.

WELD 192 Cooperative Seminar 2 Credits
Students explore issues related to their cooperative work experience focusing on effective workplace relationships and how self-knowledge, perception, attitudes, and behavior affect these relationships and job satisfaction. Students will also learn effective learning skills for workplace and educational success. Co-requisite: WELD 191.

WELD 196 Welding Skill Development I 1 - 17 Credits
This course provides variable lab times and credits to meet individual requirements. A contract is developed with instructor to meet the students’ needs. Grades and credits are assigned according to contract specifications and student accomplishments. Prerequisite: Instructor permission.

WELD 199 Special Topics 1 - 10 Credits
This course provides students the opportunity to study and train to meet established local needs in the welding industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

WELD 255 Gas Tungsten Arc Welding 1 - 17 Credits
This course explores Gas Tungsten Arc Welding (GTAW) processes on ferrous and nonferrous materials. Topics include safe and proper GTAW equipment setup requirements, process variables, material requirements, and welding procedures. Prerequisite: Instructor permission.

WELD 256 Gas Metal Arc Welding 1 - 17 Credits
This course provides Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) experience on ferrous and nonferrous alloys. Topics include welding equipment setup and safety procedures, welding practices and procedures for various applications, and equipment maintenance procedures. Prerequisite: Instructor permission.

WELD 270 Shielded Metal Arc - Pipe 1 - 17 Credits
The focus of this course is on industry practices involving pipe welding and welder certification. Topics include welding procedures, specifications, preparation of test samples, testing, and acceptance standards. Prerequisite: Instructor permission. Formerly WELD 254.

WELD 296 Welding Skill Development II 1 - 17 Credits
This course is a continuance of WELD 196, designed to provide students variable lab time and credits to meet individual requirements. A contract is developed with instructor to meet the student’s needs. Grades and credits are assigned according to contract specifications and student accomplishments. Prerequisite: Instructor permission.

WELD 297 Special Projects 1 - 17 Credits
Project-oriented experiences in the area or applications not covered in the standard welding curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

WELD 299 Leadership 1 Credit
Encourage students to develop awareness of their leadership potential and abilities through small group discussions and assumption of leadership roles and responsibilities. Students will acquire information, experience diverse points of view, construct knowledge, and practice a variety of interpersonal and social skills, such as communicating, goal-setting, decision-making, team-building, and managing stress. Students must complete at least two of the welding skill tests per AWS/WABO standards. Prerequisite: Must be enrolled in the last quarter of the AAAS Welding degree.

WRITE 100 Written Communication in the Workplace 3 Credits
Writing classes prepare students to be effective technical writers. The course focuses on career related writing, especially for students...
in a professional-technical career pathway. Students compose, design, revise, and edit effective letters, memos, reports, descriptions, instructions, and employment documents. An emphasis of the course is on the use of language and graphics to communicate technical and procedural information clearly and precisely. Prerequisite: Appropriate placement score or instructor permission. Recommended: BUS 024.

**Water Technologies & Management**

**WTM 110 Turf Irrigation Design and Components** 5 Credits
This course will study the design aspects and components used in turf irrigation systems. Turf irrigation systems will include residential, commercial, and sports fields. Site evaluation, irrigation system components, valve and sprinkler selection, system piping, system design, and controls will be analyzed and used in the course of designing these types of systems. Installation procedures will be discussed. Formerly WMGT 110.

**WTM 112 Irrigation Principles** 5 Credits
Overview of the elements of irrigation and its industry. Topics include irrigation methods, efficiencies, equipment, and their relationships to soils and plants. Formerly WMGT 112.

**WTM 135 Issues in Agriculture and Natural Resources** 5 Credits
Explore the history of the Pacific Northwest relationship between people and water. Topics include different cultural views of water, from tribal, agricultural, municipal, recreational and transportation entities. State and Federal environmental policies affecting water will be analyzed. The evolution of Native American culture and the effects of water on the culture will also be examined. Formerly WMGT 135.

**WTM 139 Watershed Management** 5 Credits
This course explores Earth systems and natural processes that shape the Earth. Watershed delineations, water and nutrient cycles, and the influences of land management techniques and policies on water quality, quantity, and timing are covered. The course includes climatic conditions and the effects climate changes have on water quantity and quality. The course also explores the impact of various management practices on terrestrial system stability. Formerly WMGT 139.

**WTM 190 Water Quality and Environmental Chemistry** 5 Credits
Applied lab science course focused on water chemistry for workforce education and non-science academic majors. Covers water quality sampling, testing, and reporting procedures for suite of common parameters and relevant background science. Emphasizes importance of accuracy, precision, and chain of custody when completing lab analyses. Recommended: WTM 139, WTM 205, WTM 239, BIOL 130, and/or EST 202.

**WTM 191 Cooperative Work Experience** 1 - 25 Credits
This course provides students the opportunity to work in jobs directly related to the water management industry. This formal training period is agreed upon by the student, employer, and instructor. Prerequisite: Instructor permission. Formerly WMGT 191.

**WTM 205 Wastewater Treatment Plant Operations** 3 Credits
Provides training in the multiple stages of operations, equipment, and maintenance at a typical wastewater treatment plant. Reviews the science and flow of individual processes and their purpose to manage solids, improve water quality, and/or perform disinfection.

Course available to students new to the field and incumbent workers in need of continuing education units. Prepares students for passing the Level I Wastewater Treatment Operator exam. Includes requirements to participate in one wastewater treatment plant tour and shadow wastewater treatment plant operators on at least one eight (8) hour shift. Prerequisites: EST 106, WTM 190, WTM 215, EST 150, and EST 201 or equivalent experience. Co-requisites: EST 202, WTM 221, and/or EST 250 or work in the wastewater industry.

**WTM 215 Basic Fluid Dynamics of Piping Systems** 5 Credits
Basic Fluid Dynamics of Piping Systems is an introduction to the fundamental principles and characteristics of liquid fluids, including water, fuels, and chemicals. Emphasis is placed on the properties and definitions of fluid mechanics, fluid statics, fluid dynamics, fluid flow, and the basic measurement of fluids through orifices and pipes. The coursework covers the math and related knowledge needed to design and troubleshoot basic systems. Interactive hands-on demonstrations of concepts are included throughout the course. Recommended: WTM 112, WTM 221, WTM 205, and/or EST 106.

**WTM 220 Drip Irrigation** 2 Credits
This course is an introduction to drip irrigation concepts, methods, and components. Basic drip system maintenance, troubleshooting, and design are performed. Formerly WMGT 220. Prerequisite or co-requisite: WTM 112 or instructor permission.

**WTM 221 Pump Applications** 3 Credits
Pump types and characteristic of different classes of pumps. Pump types will include positive and non-positive displacement pumps, with the focus of the course on non-positive styles of pumps. Piston, gear, and diaphragm positive displacement pump will be studied. Non-positive styles will include centrifugal classes, including end suction centrifugal, submersible, turbine and jet pumps. The selection and application of pumps will be analyzed. Installation practices will also be studied with a special emphasis on suction side design criteria for end suction centrifugal pump applications. Prerequisite: WTM 112 or WTM 215 or instructor permission. Formerly WMGT 221.

**WTM 225 Turf Irrigation Controls, Installation, and Troubleshooting** 5 Credits
This course will study the controls, installation, and troubleshooting of turf irrigation systems. Systems will include residential, commercial and sports field applications. A comprehensive analysis of the types of control systems used in these applications will be included. Installation and troubleshooting practices and procedures will also be included in the instruction. Students will then demonstrate these practices and procedures in field applications of installation and troubleshooting opportunities. Students will install and troubleshoot all irrigation system components, valves, sprinklers, system piping, controls and wiring. Prerequisite: WTM 110 or instructor permission. Formerly WMGT 225.

**WTM 229 Aquatic Ecology and Research Methods** 5 Credits
This course examines ecological linkages between habitat quality, water quality, human impacts, and species diversity on population size and long-term viability. It explores the basic physiological, anatomical, and behavioral characteristics of a variety of fish species and common aquatic sampling techniques. It includes hands-on lab experience with fish taxonomy, anatomy, and research methods. Collegiate reading skills, technical vocabulary, and vocational writing in standard technical
formats will be studied and practiced. Recommended: BIOL& 100. Formerly NR 220.

**WTM 230 Water and Energy Conservation**  
3 Credits  
This course is an introduction to the techniques used in residential and agricultural applications to reduce water and/or energy consumption and conserve soil. Water application methods, low-pressure systems, and common soil conservation strategies are targeted. Formerly WGMT 230.

**WTM 239 Watershed Processes and Restoration**  
5 Credits  
Explores the physical and biological components of streams and watersheds. Topics discussed focus on watershed characteristics and the potential impacts of such on stream characterization and the living components associated with habitats. Recommend WTM 139. Formerly NR 239.

**WTM 241 Advanced Center Pivot Controls and Troubleshooting**  
3 Credits  
This course builds upon the previously-learned irrigation principles and electrical controls and then applies those concepts into a precision prescription for center pivot controls. Control system programming will be accomplished with real-time data from sensors in the field. Custom prescriptions will be developed for multiple cropping sequences under the pivot. The integration of field mapping, aerial photography and soil moisture content data will be used to develop custom prescriptions. Troubleshooting the programming and custom prescriptions will also be integrated into the instruction and lab components of this course. Prerequisite: WTM 112, EST 133 or instructor permission.

**WTM 292 Cooperative Seminar II**  
2 Credits  
Explore issues related to their cooperative work experience focusing on effective workplace relationships and applying leadership skills to promote personal development. Provide professional improvement through techniques such as effective communication, conflict resolution, team building, employee engagement and decision making. Co-requisite: WTM 291. Formerly WGMT 291.
Faculty, Staff and Administrators
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<tr>
<th>Name</th>
<th>Position</th>
<th>Education</th>
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<tbody>
<tr>
<td>Adams, Jeffrey</td>
<td>Instructor, Spanish</td>
<td>B.A., Eastern Oregon University; M.A., University of Washington</td>
</tr>
<tr>
<td>Adams, Michael D</td>
<td>Instructor, Auto Repair Technology</td>
<td>A.A.A.S., Wyoming Technical Institute</td>
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<tr>
<td>Adamski, Kathleen M</td>
<td>Dean, Health Science Education</td>
<td>B.S.N., Western Washington University; M.N., University of Washington</td>
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<tr>
<td>Alonso, Maria G</td>
<td>TRIO Advisor</td>
<td>B.A., Eastern Washington University, Cheney, WA</td>
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<tr>
<td>Anderson, Brenda</td>
<td>Instructor, Nursing</td>
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Program Coordinator, Transitional Studies
Campus Maps
Clarkston Map Legend

Administration
170 Janet Danley, Director of Clarkston Campus
175 Business/Admissions Office
  Katie Peterson, Office and Bookstore Manager
  Shari Geist, Admissions, Registration, Cashiering
  Shelly Bush, Program Assistant

124 Linda Lane, Accounting, Business, and Office Technology
126a Adjunct Instructors
126b Adjunct Instructors
126c Devon Gustafson, Social Sciences
126d Lori Umfleet, IT
126e Debbie Scharnhorst, IT
130 James Bower, Humanities
132 Sonja Sanders, ABE/GED
  Virginia Foote, WorkFirst and BFET
  Sandra Evans, ESL
133 Paul Boyd, Transitional Studies
146 Tami Mitchel, Medical Assisting
147 Virginia McConnell, English Composition and Literature
150 Adjunct Instructors
152 Cynthia Robinett, Science
160a Christopher Mau, Science Lab Manager and Tutor Center Coordinator
163a Lori Loseth, Science
163b Sara Egbert, Chemistry and Mathematics
163c Michael Shively, Mathematics
172 Phillip Casali and Marco Rohrbach, Facilities and Grounds

Student Services
111 Miguel Inzunza, Financial Aid Specialist and Completion Coach
113 Carol Bennett, Student Services Coordinator and ADA Compliance Officer
114 ASB Office
  Eunice Nowlen, Student Services Assistant
115 Heather Markwalter, TRiO Counselor
116 Chad Miltenberger, Assistant Campus Director, Work Force Education

117 Shelly Bush, Testing Center
119 Jennifer DeJean, Business Entrepreneurship
120 Ashley Morrison, Assistant for Entrepreneurship
123 Emma Brice, Office and Business Technology and PBL

Health Sciences Building
2115 Nursing Skills Lab
2119 Deanna Sullivan, Receptionist
2122 Stephanie Macon-Moore, Nursing
2123 Nursing Faculty
2124 Mike Ayres, Nursing
2125 Genevieve Bross, Nursing
2126 Jenny Charlo, Program Coordinator
2127 Kaye McGehee, Nursing
2128 Sue Rammelsberg, Nursing

Campus Offices
110 Randi Brott, Program Assistant for Worker Retraining, WorkFirst, Transitional Studies
117 Shelly Bush, Testing Center
119 Jennifer DeJean, Business Entrepreneurship
120 Ashley Morrison, Assistant for Entrepreneurship
123 Emma Brice, Office and Business Technology and PBL

North Mezzanine
  LC Valley Literacy Council
201 ITV Classroom
222 Library – Jackson Vance

South Mezzanine
  Math/Science/Writing Learn Lab

Upper Level
2115 Nursing Skills Lab
2119 Deanna Sullivan, Receptionist
2122 Stephanie Macon-Moore, Nursing
2123 Nursing Faculty
2124 Mike Ayres, Nursing
2125 Genevieve Bross, Nursing
2126 Jenny Charlo, Program Coordinator
2127 Kaye McGehee, Nursing
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Clarkston Center Main Building

Clarkston Health Science Center