# 2016 - 2017 Important Dates

<table>
<thead>
<tr>
<th>Event</th>
<th>Summer 2016</th>
<th>Fall 2016</th>
<th>Winter 2017</th>
<th>Spring 2017</th>
<th>Summer 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advising Begins</td>
<td>May 2</td>
<td>May 2</td>
<td>Nov 7</td>
<td>Feb 13</td>
<td>May 1</td>
</tr>
<tr>
<td>Advising Day (most day classes cancelled)</td>
<td>May 11</td>
<td>May 11</td>
<td>Nov 16</td>
<td>Feb 23</td>
<td>May 10</td>
</tr>
<tr>
<td>Returning student registration begins</td>
<td>May 16</td>
<td>May 16</td>
<td>Nov 28</td>
<td>Feb 27</td>
<td>May 15</td>
</tr>
<tr>
<td>New student registration begins</td>
<td>May 23</td>
<td>Jun 17*</td>
<td>Dec 5</td>
<td>Mar 6</td>
<td>May 30</td>
</tr>
<tr>
<td>Tuition due</td>
<td>Jun 10</td>
<td>Sep 9</td>
<td>Dec 27</td>
<td>Mar 20</td>
<td>Jun 9</td>
</tr>
<tr>
<td>Quarter begins</td>
<td>Jun 20</td>
<td>Sep 19</td>
<td>Jan 3</td>
<td>Mar 29</td>
<td>Jun 19</td>
</tr>
<tr>
<td>Last day to add most classes</td>
<td>Jun 23</td>
<td>Sep 23</td>
<td>Jan 9</td>
<td>Apr 4</td>
<td>Jun 22</td>
</tr>
<tr>
<td>Last day for 100% refund</td>
<td>Jun 23</td>
<td>Sep 23</td>
<td>Jan 9</td>
<td>Apr 4</td>
<td>Jun 22</td>
</tr>
<tr>
<td>Last day for 40% refund</td>
<td>Jul 7</td>
<td>Oct 7</td>
<td>Jan 23</td>
<td>Apr 18</td>
<td>Jul 6</td>
</tr>
<tr>
<td>Last day to drop classes</td>
<td>Jul 18</td>
<td>Nov 4</td>
<td>Feb 17</td>
<td>May 11</td>
<td>Jun 17</td>
</tr>
<tr>
<td>Quarter ends</td>
<td>Aug 4</td>
<td>Dec 9</td>
<td>Mar 17</td>
<td>Jun 9</td>
<td>Aug 3</td>
</tr>
<tr>
<td>Graduation - Clarkston</td>
<td></td>
<td></td>
<td></td>
<td>Jun 9</td>
<td></td>
</tr>
<tr>
<td>Graduation - Walla Walla</td>
<td></td>
<td></td>
<td></td>
<td>Jun 10</td>
<td></td>
</tr>
<tr>
<td>Faculty - grades due to registrar by 5pm</td>
<td>Aug 9</td>
<td>Dec 13</td>
<td>Mar 21</td>
<td>Jun 13</td>
<td>Aug 8</td>
</tr>
<tr>
<td>Students - grades available online</td>
<td>Aug 11</td>
<td>Dec 15</td>
<td>Mar 23</td>
<td>Jun 15</td>
<td>Aug 10</td>
</tr>
</tbody>
</table>

*NEW STUDENT ORIENTATION*

Walla Walla Campus (By App’t Only: wwcc.edu/nso) - Jun 17; Jul 6; Aug 9; Sept 7
Clarkston Campus - (App’t Only: 509.758.3339) - Aug 24, 31; Sept 21, 28; Jan 5; Mar 30

## College Closures

<table>
<thead>
<tr>
<th>Reason</th>
<th>Summer 2016</th>
<th>Fall 2016</th>
<th>Winter 2017</th>
<th>Spring 2017</th>
<th>Summer 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>June Sustainability Day</td>
<td>June 14</td>
<td></td>
<td></td>
<td></td>
<td>June 23, 30</td>
</tr>
<tr>
<td>Independence Day</td>
<td>July 4</td>
<td></td>
<td></td>
<td></td>
<td>July 4</td>
</tr>
<tr>
<td>July Sustainability Days</td>
<td>1, 8, 15, 22, 29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug Sustainability Days</td>
<td>5, 12, 19, 26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept Sustainability Day</td>
<td>Sept 2</td>
<td></td>
<td></td>
<td></td>
<td>Sept 1</td>
</tr>
<tr>
<td>Labor Day</td>
<td>Sept 5</td>
<td></td>
<td></td>
<td></td>
<td>Sept 4</td>
</tr>
<tr>
<td>Veterans Day</td>
<td></td>
<td></td>
<td></td>
<td>Nov 11</td>
<td></td>
</tr>
<tr>
<td>Thanksgiving/Sustainability Days</td>
<td></td>
<td></td>
<td></td>
<td>Nov 23-25</td>
<td></td>
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<tr>
<td>Christmas/Sustainability Days</td>
<td></td>
<td></td>
<td></td>
<td>Dec 23-26</td>
<td></td>
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<tr>
<td>New Year’s Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jan 2</td>
</tr>
<tr>
<td>Martin Luther King, Jr. Day</td>
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<td></td>
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<td></td>
<td>Jan 16</td>
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<tr>
<td>President’s Day</td>
<td></td>
<td></td>
<td></td>
<td>Feb 20</td>
<td></td>
</tr>
<tr>
<td>Memorial Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May 29</td>
</tr>
</tbody>
</table>

For the most current information see: [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Welcome to Walla Walla Community College!

Sincerely,

Derek R. Brandes
President

Board of Trustees

Mr. Miguel Sanchez  Chair
Dr. Roland Schirman  Vice-Chair
Mrs. Darcey Fugman-Small
Mrs. Kris Klaveano
Mr. Don McQuary
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**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. 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 Claudia Angus, Coordinator of Disability Support Services, Walla Walla campus: 509.527.4262, TDD 509.527.4412, claudia.angus@wwcc.edu; 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 Act 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 Sherry Hartford, Vice President of Human Resources 509.527.4382. The College’s Section 504 Officer is Jose da Silva, Vice President of Student Services, 509.527.4300. Disabilities Support Services Coordinators are: Walla Walla Campus, Claudia Angus 509.527.4262; Clarkston Campus, Janet Danley 509.758.1703; The College TDD number is 509.527.4412. 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. This information can also be requested from the Office of Admissions and Records.

The College
Walla Walla Community College has grown from 850 students in 1967 to a present annual enrollment of over 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 the 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.

<table>
<thead>
<tr>
<th>Step 1... Admissions</th>
<th>You may apply online or submit an application to the Office of Admissions and Records. 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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</thead>
</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 Testing/Assessment   | Complete placement testing for accurate assessment of your current skill levels. Placement testing schedules are available online, at the Student Development Center, or in the Testing Center. Students may bring in a high school transcript for placement into math. |
| 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. Career exploration services are available through the Student Development 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. |

### Step 1 Admissions

WWCC provides access to any adult that can benefit through an “open door” admissions policy as established by the State of Washington (RCW 288.50.020). Some Workforce Education programs have specific admission criteria and limited space. However, WWCC makes every effort to assure a reasonable probability and timeframe for program admissions. The college's admissions, satisfactory progression, academic appeals, termination, and readmission policies are clearly outlined, published, and administrated in a fair, equitable, and timely manner.

### Explanation of Resident Classification

A resident student is one who is a U.S. citizen and has met specific requirements demonstrating permanent residence in the State of Washington. Two elements are necessary to establish permanent residence. The first element requires physical presence on the location claimed as a permanent residence. The second element requires the intent to permanently reside in that location. These two elements can be established by a variety of factors and documentation which should be dated one year and one day prior to the commencement of the quarter for which the student is applying for residency status.

Special regulations may apply to some eligible non-citizens, Washington higher education employees, and to military personnel and their dependents stationed in the State of Washington. For further information contact the Office of Admissions and Records at 509.527.4283.

### 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 Records. 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/residency/admissions/ and provide necessary documentation. Application for reclassification prior to registration into classes is preferred. Residency reclassification 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 reclassification 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
# ADMISSIONS AND REGISTRATION

www.wwcc.edu/tuition.

<table>
<thead>
<tr>
<th>STUDENT CATEGORY</th>
<th>ENROLLMENT PROCEDURES</th>
</tr>
</thead>
</table>
| New students working on a degree or certificate | Submit the FREE application for admission at [www.wwcc.edu/apply](http://www.wwcc.edu/apply).  
Take Compass placement test.  
Attend New Student Orientation for priority registration.  
Workforce Education programs: Contact the program of interest for specific Entrance Requirements and priority list procedures. |
| Students working on a degree or certificate, transferring credits from another college | Submit the FREE application for admission at [www.wwcc.edu/apply](http://www.wwcc.edu/apply).  
Take Compass placement test (if necessary).  
Submit official transcripts from other colleges and complete a transcript evaluation form found online at [www.wwcc.edu/traneval](http://www.wwcc.edu/traneval).  
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 [www.wwcc.edu/nso](http://www.wwcc.edu/nso) available May 1). |
| Students returning after an interruption in their enrollment at WWCC | Submit updated information to the Office of Admissions and Records including verification of program of study and contact information.  
Take Compass placement test (if necessary).  
Attend New Student Orientation for priority registration (if necessary). |
| Students in the Running Start Program | Submit the FREE application for admission at [www.wwcc.edu/apply](http://www.wwcc.edu/apply).  
Take Compass placement test for eligibility determination.  
Contact high school counselor for Quarterly Referral, Enrollment Verification Form, and transcript information.  
Register for and attend New Student Orientation. |
| Students in the Alternative Education Program (AEP) | 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 [www.wwcc.edu/apply](http://www.wwcc.edu/apply).  
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. |
| 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. | Download the Underage forms online at [www.wwcc.edu/underage](http://www.wwcc.edu/underage) 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. |
| Students attending English as a Second Language (ESL), Adult Basic Education (ABE) or GED® preparation courses | Contact the Transitional Studies Department at 509.524.4808 or 509.758.3339 in Clarkston for registration information. |
| Students planning to take Extended Learning, Quest, Community Education | Extended Learning, Community Education & Quest students, please contact: 509.527.4331 or email jodi.worden@wwcc.edu. |
| Students In High School Completion (HSC) who are 19 yrs of age and older | Submit the FREE application for admission at [www.wwcc.edu/apply](http://www.wwcc.edu/apply).  
Submit official high school transcript(s) from all high schools to the High School Programs Office.  
Take Compass placement test.  
Meet with High School Completion advisor for advising and registration. |
| International Students with F1 or F2 Visa | Submit 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. |
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

<table>
<thead>
<tr>
<th>GRANTS</th>
<th>EMPLOYMENT PROGRAMS</th>
<th>LOAN PROGRAMS</th>
<th>SCHOLARSHIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Pell Grant</td>
<td>Federal Work-Study</td>
<td>Federal Direct Loan</td>
<td>WWCC Foundation Scholarships</td>
</tr>
<tr>
<td>Federal Supplemental Educational Opportunity Grant</td>
<td>State Work-Study</td>
<td>Federal Perkins Loan</td>
<td>General Scholarship Information</td>
</tr>
<tr>
<td>Washington State Need Grant</td>
<td>A federal program which offers a job to financially qualified students. The student may work 10-15 hours per week.</td>
<td>Federal PLUS Loan</td>
<td>Athletic Scholarships</td>
</tr>
<tr>
<td>State Tuition Waiver</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>
<td></td>
<td>Activity Scholarships</td>
</tr>
</tbody>
</table>

Financial Aid Programs

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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 Testing/Assessment
WWCC offers the Compass 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 Student Development 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 Records 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 Student Development 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. Detailed information and procedures for registration, as well as 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 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.
Academic Information
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 intense time. 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 Records 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 the state. For more detailed information, contact the Office of Admissions and Records 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 Records. 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 Records.

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 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 certifications, such as the National Board of Certification for Therapeutic Massage and Bodywork (NBOC), and many others.

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 Records. Please also refer to www.wwcc.edu/pla for more information.
**College Costs**

During the 2016-2017 academic year, full-time tuition and mandatory fees are estimated to cost $3,852 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 will 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 2016-2017 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.</td>
</tr>
<tr>
<td>Summer</td>
<td>Up to 100% refund on or before 4th day of the quarter.</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 twelfth 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 will be processed in Business Services and mailed within approximately three weeks to the address 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**

1. **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 withdraw the student from the current course.

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

2. **Audit** – course not taken for credit (does not appear on transcript).

3. **Passing** – Used for short courses, workshops and where deemed appropriate by the Vice President of Instruction.

4. **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 Records. Withdrawals can be processed at the Office of Admissions and Records 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; Washington Online (WAOL) dates may differ.

5. **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.

6. **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.

7. **Mastery/Qualified/Satisfactory/Unsatisfactory** – Used in a limited number of courses where students will be deemed appropriate by the Vice President of Instruction.

**Grade Exclusion Policy**

A returning student may petition the Academic Standards Committee 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 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. 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 Records. 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 Records, 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 cannot be changed without approval from the Vice President of Instruction.

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 their 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 Records. 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
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 Services 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. borrowing facts, statistics or illustrative material; or
   e. 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 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 Records. For individual certificate and degree requirements, please see the department section of the catalog or a degree audit (for the most recent two years), 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. Except as otherwise indicated, the College will not provide information contained in student records in response to inquiries unless the student has given written consent to the College. 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 Records.

- 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
Student Programs and Services
STUDENT PROGRAMS & SERVICES

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 (BFET) 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.

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

Career assessments and surveys relating to interest, 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
• Textbooks & supplies
• Educational Discount Software Microsoft Office
• 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 – Please call Quality Behavioral Health at 509.758.3341 for mental health and personal counseling.

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 (Claudia Angus, Walla Walla Campus; 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 a quiet location for testing, recording lectures, sign language interpreters, adjustable tables, etc.

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.go2worksource.com

Services include:
• Placement and referral
• Job listings
• Job seeking skills
• Self-service computers with internet access and online labor market information

Food Service
509.527.4286 • Walla Walla • 509.758.3339 • Clarkston
www.wwcc.edu/cafe

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.

CC’s, a local vendor at the Clarkston campus, provides coffee services, snacks, and light breakfast and lunch items from 8:00 a.m. to 1:00 pm Monday through Thursday and 8:00 a.m. to 12:30 pm on Friday.

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

Students have access to reduced rates on injury insurance coverage. Brochures are available from the cashier or information can be obtained online by visiting www.summitamerica-ins.com/wsc.

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.

Library
509.527.4277 • Walla Walla
M-Th 7:30am-7:30pm, F 7:30am-4:00pm
509.758.1714 • Clarkston
M-Th 7:30am-6:00pm, F 8:00am-4pm
www.wwcc.edu/library

Hours vary when classes are not held, during breaks and in the summer. Call or check the website for the most current schedule.

The Walla Walla and Clarkston campus libraries provide a comprehensive selection of collections and services for WWCC students with on-site and remote access to expanded, web-based resources. Both facilities provide computers and networked printing for academic purposes; research and
library use instruction; study and listening/viewing space; and borrowing privileges from libraries throughout the country. When accessing databases, current WWCC students, faculty and staff are prompted to login with their student/staff identification number (SID). A 24/7 reference chat service and full text article and streaming video databases are available from home or work. Visit the Library or our homepage for more information about library services and student access to resources.

Opportunity Grant
509.524.5191 - Walla Walla • 509.758.3339 - Clarkston
www.wwcc.edu/oppgrant

The Opportunity Grant program provides funding and wrap-around services to Washington State resident students who meet financial eligibility requirements and are enrolled in identified high demand educational pathways.

Placement Testing
509.527.4267 - Walla Walla • 509.758.3339 - Clarkston
www.wwcc.edu/testing

To be placed into English, reading and math classes, there are various measuring tools to assess which class the student should enroll in. New students are able to access the Placement Testing schedule online at www.wwcc.edu/testing. Retakes are approved by the testing staff on a case-by-case basis and may cost an additional fee. Students who have transcripts from a previous college or university may submit them to the Office of Admissions for evaluation for placement in English and Math. Other documents may be reviewed for a placement. Please contact the Testing Center for a list of approved documents eligible for placement evaluation.

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

The Walla Walla Campus ASB produces a weekly publication, The Warrior Weekly, featuring student news, events, and ads. The papers are distributed throughout campus. WWCC ASB encourages and welcomes articles, essays, notices, ads, art work, and reviews from WWCC students. Items can be submitted by email to asb@wwcc.edu.

The Clarkston Campus publishes a monthly newspaper, The Campus Informer, featuring locally written articles and news information.

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

Students at Walla Walla Community College are encouraged and welcomed to participate in many programs and activities beyond the classroom. Events and activities are provided to assist students in pursuing a variety of interests, often at no cost. WWCC ASB provides many different activities throughout the year and offers assistance to campus clubs.

Student Development Center
509.527.4262 - Walla Walla • 509.758.1718 - Clarkston
www.wwcc.edu/sdc

The Student Development Center delivers personal counseling, career and educational advising; college completion, financial literacy; disability support services, veterans support services, testing services. Counselors, advisors and completion coaches in the Student Development Center help students identify and successfully achieve their education, career and personal goals. Staff members also assist students with addressing financial and personal barriers to completing their education with the development of navigation skills and advocating for students when appropriate.

Student Handbook
www.wwcc.edu/studenthandbook

The College produces an annual student handbook which is distributed to all new students at New Student Orientation sessions and is available online as well. The handbook provides information regarding student services, college and academic resources, and key policies.

Testing Center
509.527.4267 - Walla Walla • 509.758.3339 - Clarkston
www.wwcc.edu/testing

Professional staff members provide proctoring services for distance learning exams, make-up exams and other specialty exams including CLEP, TEASV and PearsonVUE. Open testing sessions are available Monday through Friday. Please call or email the contact information above or check on the website at www.wwcc.edu/testing for availability. The Walla Walla Campus Testing Center is located in Room 236, on the second floor of the Bldg. D on the Walla Walla campus. The Testing Center at the Clarkson Campus is located in Room 117A.

Transfer Center
509.527.3679 - Walla Walla • 509.758.1718 - Clarkston
www.wwcc.edu/transfer

The WWCC Transfer Center is located in the Student Development Center on the Walla Walla Campus and in Student Services on the Clarkson Campus. College catalogs, websites, equivalency guides, and other college information are available to help students in developing a transfer plan. Students wishing to transfer to other colleges and universities should make an appointment to meet with a transfer advisor. The Transfer Center also hosts a College Transfer Fair, offers workshops, maintains up-to-date information on the WWCC website, and arranges for visits from baccalaureate institutional representatives.

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

www.wwcc.edu/oppgrant
www.wwcc.edu-testing
www.wwcc.edu/asb
www.wwcc.edu/sdc
www.wwcc.edu/studenthandbook
www.wwcc.edu/testing
www.wwcc.edu/transfer
**Transportation**

509.525.9140 - Walla Walla  
509.527.3779 - Dial-A-Ride/Walla Walla  
208.298-1340 - Clarkston  
[www.wwcc.edu/transportation](http://www.wwcc.edu/transportation)

The Valley Transit bus system in Walla Walla provides transportation to the College throughout the city and College Place. On the Walla Walla Campus, discounted bus passes are available to students courtesy of ASB. Dial-A-Ride arrangements can be made for students with mobility disabilities. The Clarkston Campus is on the Valley Transit line with a stop on Bridge Street in front of the Campus. Contact the numbers above for route and schedule information.

**TRIO/Student Support Services**

509.527.4258 - Walla Walla  
509.758.1721 - Clarkston  
[www.wwcc.edu/trio](http://www.wwcc.edu/trio)

The TRiO 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 their first 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 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 aid and Literacy Education

The program application is available at the TRiO office or on the web.

**Tutoring and Learning Center**

509.524.5181 - Walla Walla  
509.751-1291 - Clarkston  
[www.wwcc.edu/tutoring](http://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 Clarkston Campus, the Tutoring and Learning Center is located on the second floor in the Mezzanine area. 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 Clarkston.

**Veterans Affairs**

509.527.1864 - Walla Walla  
509.758.1718 - Clarkston  
[www.wwcc.edu/vets](http://www.wwcc.edu/vets)

A veterans education benefit specialist is located on the Walla Walla Campus to assist veterans attending both the Walla Walla and Clarkston campuses with obtaining VA Education Benefits. The main function of the Veterans Affairs office is to assist veterans/dependents 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.

**WorkFirst**

509.524.4790 - Walla Walla  
509.758.1711 - Clarkston  
[www.wwcc.edu/workfirst](http://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 - Clarkston  
[www.wwcc.edu/wrt](http://www.wwcc.edu/wrt)

Worker Retraining provides tuition assistance for qualifying students. Students will receive education planning and assistance in applying for other funding resources while pursuing a certificate or degree program. Participants may be able to continue to draw unemployment benefits while in training.

**WorkFirst and Worker Retraining both provide:**
- Tuition for one quarter for eligible participants
- Ongoing services to support training completion
- Job search assistance upon completion of training

**WSU Nursing @ WWCC**

509.524.5152 - Walla Walla  
[www.wwcc.edu/wrt](http://www.wwcc.edu/wrt)

WSU Nursing offers Bachelors, Masters, and Doctoral Degrees in Nursing on-site at WWCC. The program courses are in various modalities including online and ITV.
Additional Educational Opportunities
Clarkston Campus
The Clarkston Campus primarily serves the surrounding region of Asotin and Garfield counties. Over 1300 full- and part-time students are enrolled annually in the following programs:

- **Associate 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 primarily to 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.

**Art**
Art courses are provided in cooperation with the Valley Art Center in Clarkston.

**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

**Accounting/Business/Office Technology/Entrepreneurship**

- **Degrees**
  - Accounting Technology
  - Business Administration with Emphasis
    - Administrative Assistant Emphasis
    - Health Information Technology Emphasis
    - Legal Information Technology Emphasis
  - Business and Management
- **Certificates**
  - Bookkeeping
  - Medical Transcription
  - Medical Billing Specialist
  - Office Assistant

**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/MRP 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 through a partnership with Quality Behavioral Health or through CHAS in Lewiston (208.848.8300)

**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 or have a family income at or below 150% of the Federal Poverty Level.
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

Tutoring
509.758.1291 - Clarkston

Free drop-in tutoring is available in the Tutoring and Learning Center located on the south mezzanine, 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 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.

Pre-College Studies
Courses are offered in reading, writing, study skills, 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 using Compass reading, math, and writing placement. Check the tuition and fee schedule available online.

Adult Basic Education (ABE)
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 the labor market.

Adult Basic Education - HS 21+
HS 21+ 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. 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.

Adult Basic Education - 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.

Adult Basic Skills English as a Second Language
English as a second language 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 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 online 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 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.

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 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.

Flexible Options

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 for "eLearning" or contact your advisor.

High School Completion & Dual Enrollment Options

Alternative Education Program

509.527.4324 - Walla Walla

The Alternative Education Program (AEP) provides Washington State students an educational opportunity outside the traditional high school setting. Selected students between 16 and 21 years of age, who have not earned a high school diploma, may be eligible to participate. Students who are enrolled in local area high schools are referred to the program by high school officials. Students who have passed their graduation year or dropped out can directly inquire about AEP. The program, which is a partnership with the Walla Walla School District, covers the cost of tuition and books for program participants. All students must apply for admission to the College and complete the COMPASS placement test prior to meeting with the Director of High School Programs.

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

Running Start, a program created by the Washington State legislature, provides an opportunity for juniors and seniors in public high schools to enroll in courses at Walla Walla Community College. Junior and senior status is determined by the student’s local high school. 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.

Tech Prep- Professional Technical

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 certain courses that are offered in the high school. Participating high school instructors integrate college content into their high school curriculum to match Student Learning Objectives/Outcomes for each course. To earn college course credit, high school students must successfully complete the course requirements with a “B” or better in the Dual Credit Program.

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
**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](http://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 14 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, and Water Technologies & Management Club activities. 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 hosts meetings and events for numerous collaborating partners. The WEC provides community and K-12 education opportunities, including free community workshops and events in collaboration with WEC partners, and K-12 and family hands-on learning experiences in environmental education at annual events, such as Make a Splash! and Return to the River.
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, or 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 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 generally education components at a baccalaureate institution. Each degree has specific articulations with specific schools. Please see the website for detailed information regarding articulation agreements for the degrees listed below.

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>DESCRIPTION</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate in Applied Science-T Agricultural Business</td>
<td>This is a dual-purpose degree intended to prepare students for employment in the Plant and Soil Science field and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>115</td>
</tr>
<tr>
<td>Associate in Applied Science-T Agriculture Technology &amp; Production Management</td>
<td>This is a dual-purpose degree intended to prepare students for employment in Agriculture Technology and Production Management field and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>112</td>
</tr>
<tr>
<td>Associate in Applied Science-T Early Childhood Education</td>
<td>This is a dual-purpose degree intended to prepare students for employment in Early Childhood Education programs such as Head Start, childcare, or pre-school setting, and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>90</td>
</tr>
<tr>
<td>Associate in Applied Science-T Enology and Viticulture</td>
<td>This is a dual-purpose degree intended to prepare students for employment in the Plant and Soil Science field and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>117</td>
</tr>
<tr>
<td>Associate in Applied Science-T Human and Social Services</td>
<td>This is a dual-purpose degree intended to prepare students for employment in the Human and Social Services field and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>91</td>
</tr>
<tr>
<td>Associate in Applied Science-T Plant and Soil Science</td>
<td>This is a dual-purpose degree intended to prepare students for employment in the Plant and Soil Science field and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>111</td>
</tr>
<tr>
<td>Associate in Applied Science-T Plant Operations</td>
<td>This is a dual-purpose degree intended to prepare students for employment in the Plant Operations field and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>97-132</td>
</tr>
<tr>
<td>Associate in Applied Science-T Turf Management</td>
<td>This is a dual-purpose degree intended to prepare students for employment in Turf Management and for transfer to specific baccalaureate degree programs. Please see the degree for articulation details.</td>
<td>115</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 core abilities – communication, critical thinking, personal and professional responsibility, diversity/appreciation of differences, information/technology, and lifelong learning – that shape the overall objectives of each degree.

For the most current information see: [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
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 Records.

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 the Student Development Center (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 Admissions Office.

Washington, 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/ coordinated 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 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 in order 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.

For the most current information see: www.wwcc.edu
Students intending to transfer courses from professional-technical degrees should consult with department advisor, transfer center staff, and advisor at the baccalaureate institution where they plan to transfer.

### AA-DTA Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications</td>
<td>13</td>
</tr>
<tr>
<td>*Diversity</td>
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<tr>
<td>Humanities</td>
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<td>Natural Science</td>
<td>15</td>
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<tr>
<td>Quantitative Skills</td>
<td>5</td>
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<tr>
<td>Social Science</td>
<td>15</td>
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<tr>
<td>Physical Education</td>
<td>3</td>
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<tr>
<td>Electives</td>
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</tr>
<tr>
<td><strong>AA-DTA Degree Total</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

*New students starting at WWCC Fall 2010 and after are required to complete one diversity D course. This is met through distribution areas and does not increase the # of credits required for the degree. (See Diversity Requirements)*

See AA-DTA guide 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 78E 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 shall be fully transferable as defined by the receiving Institution (please see Master List of Transferable Courses).

### Diversity Requirement for the AA-DTA - Effective Fall 2010

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. New students starting at WWCC Fall 2010 and after are required to complete one diversity D course.

All approved “[D]” Diversity courses:

- ART 124 Women Artists in History
- CMST 201 Intercultural Communications (formerly SPCH 201)
- ENGL 147 Comics as Literature
- ENGL 210 Myth and Folklore (formerly LIT 210)
- ENGL 245 American Literature (formerly LIT 245)
- ENGL 251 Voices of Women in Literature (formerly LIT 251)
- ENGL 265 World Literature (formerly LIT 265)
- DRAM 281 Beginning Playwriting
- HIST 105 Roots of World Issues
- HIST 215 Women in U.S. History
- HIST 250 Introduction to Latin America (formerly HIST 280)
- 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 (formerly MUS 101)
- PHIL 103 Asian Philosophy
- PHIL& 115 Critical Thinking
- PSYC 180 Human Sexuality (formerly PSY 113)
- PSYC 205 Social Psychology (formerly PSY 205)
- SOC& 101 Introduction to Sociology (formerly SOC 101)
- 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
- WST 124 Women Artists in History
- WST 180 Human Sexuality
- WST 200 Introduction to Women’s Studies
- WST 215 Women in U.S. History (formerly WST 280)
- WST 220 Gender & Society
- WST 251 Voices of Women in Literature

### Course Designators For Degree Requirements

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

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Designator</th>
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<tbody>
<tr>
<td>Communications</td>
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<tr>
<td>Humanities</td>
<td>[H]</td>
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<tr>
<td>Humanities - Performing/Fine Arts</td>
<td>[HP]</td>
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<tr>
<td>Natural Science</td>
<td>[NS]</td>
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<tr>
<td>Quantitative Skills</td>
<td>[Q]</td>
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<tr>
<td>Physical Education</td>
<td>[PE]</td>
</tr>
<tr>
<td>Social Science</td>
<td>[SS]</td>
</tr>
</tbody>
</table>

**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 mathematics and sciences...
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
- **R** = 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
CMST 105 ..........................Oral Interpretation

**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

*All three courses must be taken in order to count for Written Communications and Oral Communications requirement.*

**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.

[FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU]
Workforce Program Information

Professional-Technical programs provide instruction in the knowledge and skills required in a wide variety of occupations that demand 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 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 6/15.
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] • 13 Credits**

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**Humanities [H] [HP] • 15 Credits**

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**Social Science [SS] • 15 Credits**

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**Quantitative Skills [Q] • 5 Credits**

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**Natural Science [NS] • 15 Credits**

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**Physical Activities • 3 Credits**

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**Electives • 24 Credits**

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**Diversity • 1 Course**

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</table>

**Course Placements:** Reading __English    Math__________

**Notes**

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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 DTAA 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:

  | BIO& | Majors Cellular | 211 |
  | BIO& | Majors Animal   | 212 |
  | BIO& | Majors Plant    | 213 |
  | PHYS&| College Physics I | 114 |
  | PHYS&| College Physics II | 115 |
  | PHYS&| College Physics III | 116 |
  | PHYS&| Engr Physics I w/Lab | 221 |
  | PHYS&| Engr Physics II w/Lab | 222 |
  | PHYS&| Engr Physics III w/Lab | 223 |

  and

  | CHEM& | General Chemistry I | 161 |
  | CHEM& | General Chemistry II | 162 |
  | CHEM& | General Chemistry III | 163 |

- 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.

**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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# ASSOCIATE IN SCIENCE DEGREE - OPTION I

## 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.

### Natural Science [NS] • 30 Credits

<table>
<thead>
<tr>
<th>Biology/Physics Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>COURSE</td>
</tr>
</tbody>
</table>

### Chemistry Sequence

| COURSE | CREDITS | GRADE |

### Additional Natural Science • 10-15 Credits

| COURSE | CREDITS | GRADE |

### Quantitative Skills [Q] • 15 Credits

| COURSE | CREDITS | GRADE |

### Communications [C] • 5 Credits

| COURSE | CREDITS | GRADE |

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

| COURSE | CREDITS | GRADE |

### Physical Activities • 3 Credits

| COURSE | CREDITS | GRADE |

### Electives • 12 Credits

| COURSE | CREDITS | GRADE |

### Notes

- 
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### Course Placements:

| Reading | English | Math |

For the most current information see: www.wwcc.edu

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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.

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# ASSOCIATE IN SCIENCE DEGREE - OPTION II

## 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.

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<th>Category</th>
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<td>Communications [C]</td>
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<tr>
<td>Humanities and Social Science [H] [HP] [SS]</td>
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<tr>
<td>Quantitative Skills [Q]</td>
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<td>Physics [NS]</td>
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<td>Natural Science [NS]</td>
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<tr>
<td>Physical Activities</td>
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</tr>
<tr>
<td>Electives</td>
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</tr>
</tbody>
</table>

## Notes

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### Course Placements:

- Reading: ____________
- English: ____________
- Math: ____________

For the most current information see: 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:
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.

- **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

- **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.

- **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.

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# My Plan

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<thead>
<tr>
<th>Communications [C] • 10 Credits</th>
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<tr>
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<td>MATH&amp; 151 5</td>
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**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 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, 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 SOCC& 101 for the additional Social Science credits. University of Idaho recommends PSYC& 100.

• 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. University of Idaho recommends BIOL 130, General Ecology or ENVS& 101, Introduction to Environmental Science.

• 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: 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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### Humanities [H] [HP] • 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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### 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. A minimum of 63 credits of general education/core courses is required.

**Important Notice:**
The 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]**
  Minimum of 5 credits in a college-level composition course.

- **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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My Plan

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<th>Pre-Major Requisites • 15 Credits</th>
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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. A minimum of 63 credits of general education/core courses is required.

**Important Notice:**
The 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]:**
  Minimum of 5 credits in a college-level composition course.

- **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**
  11 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.

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ASSOCIATE IN SCIENCE IN CIVIL AND MECH. ENGINEERING MRP

My Plan

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Communications [C] • 5 Credits

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

Quantitative Skills [Q] • 25 Credits

Physics [NS] • 15 Credits

Chemistry [NS] • 5 Credits

Pre-Major Requisites • 11 Credits

Electives • 20-25 Credits

Notes

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 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.
## ASSOCIATE IN MATH EDUCATION DTA/MRP

**My Plan**

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**Communications [C] • 15 Credits**

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**Humanities [H] [HP] • 10 Credits**

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**Social Science [SS] • 15 Credits**

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**Quantitative Skills [Q] • 25 Credits**

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**Natural Science [NS] • 10 Credits**

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**Education Core • 8 Credits**

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**Electives • 7 Credits**

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**Diversity • 1 Course**

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**Notes**

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**Course Placements:** Reading ____________ English ____________ Math ____________

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Students are required to earn a minimum of 135 college-level credits with a 2.0 grade point average to graduate. A minimum of 65 credits of general education/core courses is required.

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, Heritage University, Pacific Lutheran University, Seattle Pacific University, 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]
  A minimum of 10 credits, 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 Healthcare1. 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 Healthcare1.

• 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.

1 These courses are completed as part of the core curriculum of the nursing program.
## 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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</thead>
<tbody>
<tr>
<td>ENGL&amp; 101</td>
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### Humanities [H] [HP] • 15 Credits

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PSYC&amp; 10Q</td>
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<tr>
<td>PSYC&amp; 20Q</td>
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<tr>
<td><em>Ethics &amp; Policy In Healthcare</em></td>
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### Social Science [SS] • 15 Credits

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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<tr>
<td>BIOL&amp; 251</td>
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<td>PSYC&amp; 200</td>
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### Quantitative Skills [Q] • 5 Credits

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MATH&amp; 146</td>
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### Natural Science [NS] • 30 Credits

<table>
<thead>
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</tr>
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<tr>
<td>CHEM&amp; 110</td>
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<tr>
<td>NUTR&amp; 101</td>
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### Courses Completed in Nursing Program • 15 Credits

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>NURS 210</td>
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<td></td>
</tr>
<tr>
<td>NURS 212</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

*Course Completed in Nursing Program

### Notes

- Your academic plan is available in MyWWCC. You can access it through Advising/Registration -> Planned Schedules.
- Check your degree progress via Degree Audit. Go to MyWWCC -> Academics tab -> Degree Audit.
- 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 – DTA
- Associate in Science, Option I
- Associate in Science, Option II
- Associate in Science, Civil & Mechanical Engineering MRP
- Associate In Science, Electrical & Computer Science Engineering MRP
- Associates in Biology – DTA/MRP
- Associates in Business – DTA/MRP
- Associates in Math Education – DTA/MRP
- Associates in Nursing – DTA/MRP

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 6/15.

Walla Walla Community College does not discriminate on the basis of race, color, national origin, sex, disability or age in programs and activities.
### Humanities [H] / Performance & Fine Arts [HP]

#### Art
- **ART& 100** Art Appreciation \[\square\] .......................... 5
- **ART 124** Women Artists in History \[\square\] .......................... 5
- **ART 127** History of Western Art I .......................... 5
- **ART 128** History of Western Art II .......................... 5
- **ART 129** History of Western Art III .......................... 5

#### Modern Languages
- **FRCH& 121/122/123** French I, II, III .......................... 5 ea.
- **SPAN& 121/122/123** Spanish I, II, III .......................... 5 ea.

#### Music
- **MUSC& 105** Music Appreciation \[\square\] .......................... 5
- **MUSC 110** History of American Music .......................... 5
- **MUSC& 141/142/143** Music Theory I, II, III .......................... 5 ea.
- **MUSC& 241/242/243** Music Theory IV, V, VI .......................... 5 ea.

#### Performance/Fine Arts [HP]
- **ART 107** Fundamentals of Digital Art .......................... 5
- **ART 115** Drawing for Farrier Science .......................... 1
- **ART 130/131/132** Painting I, II, III .......................... 4 ea.
- **ART 160/161/162** Ceramics I, II, III .......................... 5 ea.
- **ART 230** Painting IV .......................... 4 ea.
- **DRMA 151/152/153** Beg Acting I, II, III .......................... 3 ea.
- **DRMA 251/252/253** Int Acting I, II, III .......................... 3 ea.
- **DRMA 290/291/292** Play Prod IV, V, VI .......................... 1-5 ea.
- **MUSC 110** History of American Music .......................... 5
- **MUSC 161/162/163** Vocal Ensemble I, II, III .......................... 2 ea.
- **MUSC 216/217/218** College Voice IV, V, VI .......................... 1-2 ea.
- **MUSC 226/227/228** Jazz Combo IV, V, VI .......................... 1-3 ea.
- **MUSC 261/262/263** Vocal Ensemble IV, V, VI .......................... 2 ea.

#### Philosophy
- **PHIL& 101** Introduction to Philosophy \[\square\] .......................... 5
- **PHIL 103** Asian Philosophy \[\square\] .......................... 5
- **PHIL 115** Critical Thinking \[\square\] .......................... 5
- **PHIL& 117** Traditional Logic \[\square\] .......................... 5
- **PHIL 131** Introduction to Ethics \[\square\] .......................... 5
- **PHIL 152** Social and Political Philosophy \[\square\] .......................... 5
- **PHIL 205** Philosophy of Religion \[\square\] .......................... 5

#### Women’s Studies
- **WST 124** Women Artists in History \[\square\] .......................... 5
- **WST 251** Voices of Women in Literature \[\square\] .......................... 5
### Master List of Transfer Courses

**Social Science [SS]**

- **Anthropology**
  - ANTH& 100 Survey of Anthropology ............................................. 5
  - ANTH& 206 Cultural Anthropology .................................................. 5

- **Business**
  - BUS& 101 Intro to Business ................................................................ 5

- **Criminal Justice**
  - CJ& 101 Intro to Criminal Justice ..................................................... 5
  - CJ& 106 Juvenile Justice ..................................................................... 5
  - CJ& 110 Criminal Law ......................................................................... 5
  - CJ& 112 Criminology ........................................................................... 5
  - CJ& 240 Forensic Science .................................................................... 5

- **Economics**
  - AGRI 201 Microeconomics in Agriculture ......................................... 5
  - ECON 200 Survey of Economics ......................................................... 5
  - ECON& 201 Micro Economics ................................................................ 5
  - ECON& 202 Macro Economics ............................................................. 5

- **Education**
  - EDUC& 202 Intro to Education ............................................................ 5

- **Geography**
  - GEOG& 102 World Regional Geography ............................................. 5
  - GEOG& 207 Economic Geography ....................................................... 5

- **History**
  - HIST 105 Roots of World Issues ......................................................... 5
  - HIST 120 American Presidency ............................................................ 5
  - HIST& 126 World Civilization I .............................................................. 5
  - HIST& 127 World Civilization II ............................................................. 5
  - HIST& 128 World Civilization III .......................................................... 5
  - HIST& 146 US History I ......................................................................... 5
  - HIST& 147 US History II ........................................................................ 5
  - HIST& 148 US History III ...................................................................... 5
  - HIST 205 American Environmental Hist. ............................................. 5
  - HIST 211 U.S. in World Affairs I ............................................................. 5
  - HIST 212 U.S. in World Affairs II .......................................................... 5
  - HIST& 214 Pacific NW History ............................................................... 5
  - HIST& 215 Women in U.S. History ........................................................ 5
  - HIST 250 Intro to Latin America ........................................................... 5
  - HIST 255 Traditional East Asian Civ. ..................................................... 5
  - HIST 256 Modern East Asian Civilization ............................................. 5
  - HIST 262 The Modern Middle East ........................................................ 5

**Math**

- MATH& 107 Math in Society ..................................................................... 5
- MATH 115 Finite Math ............................................................................ 5
- MATH& 132 Math for Elem School Teachers II .................................... 5
- MATH& 141 Precalculus I ....................................................................... 5
- MATH& 142 Precalculus II ...................................................................... 5
- MATH& 146 Intro to Statistics ................................................................. 5

**Psychology**

- PSYC& 100 General Psychology ............................................................ 5
- PSYC 111 Psychology of Relationships ................................................. 3
- PSYC 139 Psychology of Women ............................................................ 5
- PSYC 160 Psychology of Crim. Behavior ............................................... 5
- PSYC& 180 Human Sexuality ................................................................. 5
- PSYC& 200 Lifespan Psychology .............................................................. 5
- PSYC 205 Social Psychology ................................................................. 5
- PSYC 207 Psychology of Personality ..................................................... 5
- PSYC 219 Health Psychology ................................................................. 5
- PSYC& 220 Abnormal Psychology ......................................................... 5
- PSYC 224 Environmental Psychology .................................................. 5

**Sociology**

- SOC& 101 Intro to Sociology ................................................................... 5
- SOC& 201 Drugs and Society ................................................................. 5
- SOC 204 Racial & Ethnic Relations ......................................................... 5
- SOC 205 Aging and Society ..................................................................... 5
- SOC 206 Intimate & Family Relations .................................................... 5
- SOC 220 Gender & Society ..................................................................... 5

**Women’s Studies**

- WST 139 Psychology of Women ............................................................. 5
- WST 180 Human Sexuality ........................................................................ 5
- WST 200 Intro to Women’s Studies ......................................................... 5
- WST 215 Women in U.S. History ............................................................. 5
- WST 220 Gender & Society ..................................................................... 5

**Political Science**

- AGRI 222 Agricultural and Water Policy ................................................ 5
- POLS 120 The American Presidency ....................................................... 5
- POLS& 202 American Government ......................................................... 5
- POLS 204 Constitutional Law ................................................................. 5
- POLS 211 U.S. in World Affairs I ............................................................. 5
- POLS 212 U.S. in World Affairs II ............................................................ 5
- POLS 222 Agricultural Policy ................................................................. 5

**Quantitative Skills/Reasoning [Q]**

- MATH& 148 Business Calculus ................................................................. 5
- MATH& 151 Calculus I ............................................................................. 5
- MATH 152 Calculus II ............................................................................. 5
- MATH& 153 Calculus III .......................................................................... 5
- MATH 220 Linear Algebra ...................................................................... 5
- MATH 238 Differential Equations ............................................................ 5
- MATH& 254 Calculus IV .......................................................................... 5

### Diversity, Cross-Listed, Evening, Online

For the most current information see: [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
Natural Science [NS]

Courses marked with a ♦ are non-lab courses.

Agriculture
- AGPR 101 Intro to Environ Sciences ♦ 5
- AGPR 201 Basic Soil Science 5

Astronomy
- ASTR& 110 The Solar System 5
- ASTR 115 Stellar Astronomy 5
- ASTR 120 Galaxies, the Universe & Cosmology 5

Biology
- BIOL& 100 Survey of Biology ♦ 5
- BIOL& 160 General Biology w/ lab C 5
- BIOL& 170 Human Biology ♦ 5
- BIOL& 175 Human Biology w/ lab 5
- BIOL 180 Intro to Conservation ♦ 5
- BIOL& 211 Majors Cellular 5
- BIOL& 260 Microbiology C 5
- BIOL 265 Immunology 2

Anatomy & Physiology
- BIOL& 251 Human A & P I C 5
- BIOL& 252 Human A & P II C 5
- BIOL& 253 Human A & P III 5

Botany
- BIOL& 213 Majors Plant 5
- BIOL 221 Systematic Botany (Plant ID) 5

Ecology
- BIOL 130 General Ecology 5

Zoology
- BIOL 205 Intro to Animal Behavior 5
- BIOL& 212 Majors Animal 5

Chemistry
- CHEM& 105 Chemical Concepts 5
- CHEM 106 Intro to Forensic Chemistry 5
- CHEM& 110 Chemical Concepts w/ Lab C 5
- CHEM& 121 Intro to Chemistry 5
- CHEM& 122 Intro to Organic Chemistry 5
- CHEM& 123 Intro to Biochemistry 5
- CHEM& 139 Gen. Chemisty Prep ♦ 5
- CHEM& 161 General Chemistry I 5
- CHEM& 162 General Chemistry II 5
- CHEM& 163 General Chemistry III 5

Environmental Science
- ENV&S& 101 Intro to Environ. Science ♦ 5

Geography
- GEOG 105 Physical Geography 5
- GEOG 210 Intro to Weather 5
- GEOG 211 Intro to Climate & Climate Change ♦ 5

Geology
- GEO& 101 Intro Physical Geology 5
- GEO& 103 Historical Geology 5
- GEO& 110 Environmental Geology 5
- GEO& 115 Survey of Earth Science 5
- GEO& 208 Geology of the Pacific NW ♦ 5

Mathematics ♦ (max. 5 cr./ non lab courses)
- MATH& 107 Math in Society ♦ 5
- MATH 115 Finite Math 5
- MATH& 131 Math for Elem Teachers I 5
- MATH& 132 Math for Elem Teachers II 5
- MATH& 141 Precalculus I ♦ 5
- MATH& 142 Precalculus II 5
- MATH& 146 Intro to Statistics ♦ 5
- MATH& 148 Business Calculus ♦ 5
- MATH& 151 Calculus I 5
- MATH& 152 Calculus II 5
- MATH& 153 Calculus III 5
- MATH 220 Linear Algebra ♦ 5
- MATH 238 Differential Equations ♦ 5
- MATH& 254 Calculus IV ♦ 5

Nutrition
- NUTR& 101 Nutrition ♦ 5

Oceanography
- OCEA& 101 Intro to Oceanography 5

Physics
- PHYS& 110 Physics Non-Sci Majors 5
- PHYS& 114 General Physics I w/ lab 5
- PHYS& 115 General Physics II w/ lab. 5
- PHYS& 116 General Physics III w/ lab 5
- PHYS& 221 Engineering Physics I w/ lab 5
- PHYS& 222 Engineering Physics II w/ lab 5
- PHYS& 223 Engineering Physics III w/ lab 5

Optional Transferable Electives
- BUS& 201 Business Law ♦ 5
- CS 115 Intro to Computer & Information Technology ♦ 5
- CS& 131 Computers Science 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 5
- ENGR& 204 Electrical Circuits 5
- ENGR 205 Electrical Circuits Lab 5
- ENGR& 214 Statics ♦ 5
- ENGR& 215 Dynamics ♦ 5
- ENGR& 225 Mechanics of Materials ♦ 5
- ENGR 240 Applied Numerical Methods ♦ 5
- HPER 264 Stress Management ♦ 3
- HPER 267 Outdoor Recreation ♦ 5
- HPER 268 Diversity in Sports ♦ 5
- HPER 274 Personal & Community Health & Hygiene ♦ 5
- HPER 275 Prevention and Care of Athletic Injury ♦ 5
- HSS 101 Intro to Human Services 5

Diversity Cross-Listed Evening Online
Areas of Study
Program Level Outcomes:
A program level outcome is a specific measurable statement of learning. The Accounting Technology curriculum is reviewed by an advisory board composed of local and regional industry members. 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. A placement test offered by the Student Development Center must be completed prior to admittance to the program.

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

Certification 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.

### 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.

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<tbody>
<tr>
<td><strong>Quarter One</strong></td>
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<tr>
<td>ACCT&amp; 201, Principles of Accounting I</td>
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</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>
<tr>
<td><strong>Quarter Two</strong></td>
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<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>
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<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Quarter Three</strong></td>
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<tr>
<td>ACCT 115, Integrated Computer Applications for Accounting</td>
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<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>Total Credits</strong></td>
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</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>60</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>60</strong></td>
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</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 manually 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 AAS 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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quarter One</strong></td>
<td></td>
</tr>
<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>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</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></td>
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<tr>
<td>ACCT&amp; 202, Principles of Accounting II</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>CS 110, Introduction to Computers and Applications</td>
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</tr>
<tr>
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<td>20</td>
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<tr>
<td><strong>Quarter Three</strong></td>
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</tr>
<tr>
<td>ACCT&amp; 203, Principles of Accounting III</td>
<td>5</td>
</tr>
<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 218, Desktop Calculator *</td>
<td>5</td>
</tr>
<tr>
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**Year Two**

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<tr>
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<tbody>
<tr>
<td>ACCT 204, Intermediate Accounting I</td>
<td>5</td>
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<tr>
<td>ACCT 216, Principles of Income Tax</td>
<td>5</td>
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<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>5</td>
</tr>
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<tr>
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</tr>
<tr>
<td>ACCT 205, Intermediate Accounting II</td>
<td>5</td>
</tr>
<tr>
<td>ACCT 209, Cost Accounting</td>
<td>5</td>
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<tr>
<td>BUS 192, Business Leadership Seminar I (L)</td>
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<tr>
<td>ACCT 115, Integrated Computer Applications for Accounting</td>
<td>5</td>
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<tr>
<td>ACCT 175, Payroll Accounting</td>
<td>5</td>
</tr>
<tr>
<td>BUS 292, Business Leadership Seminar II (J)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 291, Co-op Work Experience</td>
<td>2 - 5</td>
</tr>
<tr>
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</table>

**Grand Total** . . . . . . . . . . 103-106

EPC: 505

* Or equivalent OT course

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

<table>
<thead>
<tr>
<th>(J)</th>
<th>(W)</th>
<th>(L)</th>
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</thead>
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<tr>
<td>BUS 292</td>
<td>BUS 137</td>
<td>BUS 192</td>
</tr>
<tr>
<td>BUS 112</td>
<td>BUS 157</td>
<td>CMST 102, CMST &amp; 220</td>
</tr>
</tbody>
</table>

For the most current information see: WWW.WWCC.EDU

**Adult Basic Education**

http://wwcc.edu/abe

Jennifer Vaughn 509.527.4295 jennifer.vaughn@wwcc.edu
Sonja Sanders- Clik 509.758.1707 sonja.sanders@wwcc.edu

**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.

**Adult Basic Education - 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.

**Adult Basic Education - 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 Educational Development (GED®) exam. Courses integrate content from the following subject areas: Reasoning through language arts-writing; science; social studies; and mathematical reasoning.
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 development levels with the goal of reaching college level and earning work ready certificates and degrees. Participating programs: Ag Science, Energy, Water Management, Arts & Sciences, Early Childhood Education, and Nursing.

Adult Basic Skills - 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. Students are assessed at entry and placed at one of VI ELA levels and progress is measured every 45 hours through CASAS.

**Program Level Outcomes:** ADULT BASIC EDUCATION (GED®, HS21+, I-BEST, ELA)

Upon successful completion of the 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.

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**Adult Basic Education/ELA**

For the most current information see: [WWW.WWCC.EDU](http://www.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:** Adult Basic Education - 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. Students are assessed at entry and placed at one of VI ELA levels and progress is measured every 45 hours through CASAS.

**Program Level Outcomes:** Upon successful completion of the 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 1 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.
**Agriculture - Ag-Business**

CERT, AAS-T, AAAS, AA-DTA, AA  
http://www.cwu.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 agriculture sector employs a large percentage of the U.S. labor force.

**Entrance Requirements:** Students may enter the program fall, winter, spring, or summer quarter. A placement test must be completed before starting the program.

**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]

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quarter One</strong></td>
<td></td>
</tr>
<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>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>Quarter Two</strong></td>
<td></td>
</tr>
<tr>
<td>AGPR 110, Livestock Production</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>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Quarter Three</strong></td>
<td></td>
</tr>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 123 or CHEM&amp; 163</td>
<td>5</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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<td><strong>Year One Total</strong></td>
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<tbody>
<tr>
<td><strong>Quarter One</strong></td>
<td></td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
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<tr>
<td>BIOL&amp; 211, Majors Cellular</td>
<td>5</td>
</tr>
<tr>
<td>CMST&amp; 220, Public Speaking</td>
<td>5</td>
</tr>
<tr>
<td>WTM 241, Advanced Center Pivot Controls and Troubleshooting</td>
<td>3</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Quarter Two</strong></td>
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<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 213, Majors Plant</td>
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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU]
### 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>
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<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
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</tr>
<tr>
<td>CHEM&amp; 121, Introduction to Chemistry</td>
<td>5</td>
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<td>WTM 135, Issues in Agriculture and Natural Resources</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 122, Introduction to Organic Chemistry *</td>
<td>5</td>
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<tr>
<td>ECON&amp; 202, Macro Economics</td>
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<td>MATH 115, Finite Mathematics **</td>
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<tr>
<th>Quarter Three</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGRI 211, Small Business Management</td>
<td>5</td>
</tr>
<tr>
<td>CHEM&amp; 123, Introduction to Biochemistry *</td>
<td>5</td>
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<tr>
<td>ENGL&amp; 101, English Composition I</td>
<td>5</td>
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<tr>
<td>MATH&amp; 148, Business Calculus</td>
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| **Year One Total**                                 | **60**     |

#### YEAR TWO

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

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

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

**EPC: 125T**

### 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.

#### YEAR ONE

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<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<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><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
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</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><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 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><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

| **Year One Total**                                                | **51**     |

| **Grand Total**                                                   | **51**     |

**EPC: 110C**

* Either AGRI 211 or AGRI 220 will meet the requirement for certificate completion. Both courses are required for degree completion. Certificate can be earned by completing the first 3 quarters of the degree program.
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):

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

* 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):

(W) - ENGL 097, ENGL& 101  (M) - MATH& 141, OCSUP 107
(J) - AGPR 292, any 292 course  (O) - CMST 102, CMST& 220, OCSUP 102

### 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, salesmen, commodity brokers, store managers, or consultants.

**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.

#### Year One

<table>
<thead>
<tr>
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<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers</td>
<td>3</td>
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<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>
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<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
<td>5</td>
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<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</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>AGPR 292, Leadership (L)</td>
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<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>6 - 10</td>
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<td><strong>8-12</strong></td>
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| Year One Total | 59-63 |

<table>
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<tr>
<th>Quarter Four</th>
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<tr>
<td>AGRI 103, Intro to Precision Ag for Farm Management</td>
<td>5</td>
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<tr>
<td>AGRI 222, Agricultural and Water Policy</td>
<td>5</td>
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<tr>
<td>CMST 102, Interpersonal Communication (O)</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Elective**</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</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.

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

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

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 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 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.

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. A placement test must be completed prior to starting the program.

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 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.
Agriculture - Animal Science

Associated 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.
- Develop a basic understanding of the factors involved in the marketing of farm animals for profit.

### YEAR ONE

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<thead>
<tr>
<th>Quarter One</th>
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<td>AGPR 110, Livestock Production</td>
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<tr>
<td>AGPR 120, Agricultural Chemistry</td>
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<td>AGRI 102, Farm Records and Analysis</td>
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<td>AGRI 108, Computers in Agriculture</td>
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<td>AGPR 112, Feeds and Feeding</td>
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<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
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<td>AGPR 115, Animal Health and Disease</td>
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<tr>
<td>AGRI 211, Small Business Management</td>
<td>5</td>
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<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
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<td>IFA 022, AHA Heartsaver First Aid</td>
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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

### YEAR TWO

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<tr>
<td>AGPR 112, Feeds and Feeding</td>
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<td>AGPR 115, Animal Health and Disease</td>
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<td>ENGL 097, Basic Expository Writing (W)</td>
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<tr>
<td>AGPR 292, Leadership (L)</td>
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<td>AGRI 191, Cooperative Work Experience</td>
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<tr>
<td>AGPR 116, Livestock Selection and Carcass Evaluation</td>
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<tr>
<td>AGPR 201, Basic Soil Science</td>
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<td>AGPR 274, Beef Cattle Production</td>
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<td>WTM 112, Irrigation Principles</td>
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<tbody>
<tr>
<td>AGPR 224, Pasture and Range Management</td>
<td>5</td>
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<td>AGRI 222, Agricultural and Water Policy</td>
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EPC: 107

* Agri-Business electives: AGRI 221, AGRI 220, AGRI 201. Select two of three 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
(W) - ENGL 097, ENGL 101
(L) - AGPR 292
(O) - CMST 102, CMST& 220
(R) - WTM 135
(M) - MATH& 141, MATH& 146, OCSUP 107
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 an 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. A placement test must be completed prior to starting the program.

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.

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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]

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGPR 113, Cultivated Plants</td>
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<tr>
<td>CHEM&amp; 121 or CHEM&amp; 161</td>
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<tr>
<td>ENGL&amp; 101, English Composition I</td>
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<tr>
<td>WTM 112, Irrigation Principles</td>
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<table>
<thead>
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<tbody>
<tr>
<td>AGPR 114, Plant Physiology</td>
<td>5</td>
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<tr>
<td>CHEM&amp; 122 or CHEM&amp; 162</td>
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<td>ENT 150, Introduction to GIS</td>
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<td>MATH&amp; 141, Precalculus I</td>
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<tbody>
<tr>
<td>AGRI 201, Microeconomics in Agriculture</td>
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</tr>
<tr>
<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
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<td>CHEM&amp; 123 or CHEM&amp; 163</td>
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<tr>
<td>ENT 151, Advanced GIS</td>
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<tr>
<td>Year One Total</td>
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</table>
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.

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 soil analysis and fertility program for a designated crop to include a cost analysis.
- Place a chemical in its proper toxicity category and identify safety precautions necessary in its application and use when given a LD50 value of a certain pesticide product.
- 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
### Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AGPR 100, Introduction to Agriculture and</td>
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<tr>
<td>Natural Resource Careers (J)</td>
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<td>AGPR 140, Agriculture Safety and Pesticides</td>
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<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>
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### Quarter Three

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<td>AGPR 105, Weed Biology and Identification</td>
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<tr>
<td>AGPR 114, Plant Physiology</td>
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<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
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<td>WTM 112, Irrigation Principles</td>
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### Quarter Four

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<th>Course</th>
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<tr>
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#### Year One Total

**66.4-70.4**

#### Year Two

<table>
<thead>
<tr>
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<tr>
<td>AGPR 110, Livestock Production</td>
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<td>AGPR 201, Basic Soil Science</td>
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<tr>
<td>Ag Elective: AGRI 201 or AGRI 221</td>
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<td><strong>Total Credits</strong></td>
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<td>AGPR 230, Plant Diseases and Insects</td>
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<td>CMST 102, Interpersonal Communication (O)</td>
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<td>AGRI 103, Intro to Precision Ag for Farm Management</td>
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#### Year Two Total

**43**

#### Grand Total

**109.4-113.4**

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**EPC: 108**

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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### Agriculture - Precision Agriculture

**CERT, AAAS**

[http://www.wwcc.edu/precisionagriculture](http://www.wwcc.edu/precisionagriculture)

**Michael Hagerman**  
509.527.4217  
michael.hagerman@wwcc.edu

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

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

Precision Ag is the cutting edge of agriculture technology and provides skills that workers in this industry need. Development of the program provides for industry workforce needs while supporting positive economic impact to the region and State of Washington. The targeted industry of agriculture, and emerging technological workforce needs, are considered critical to rural economic development as well as in meeting the health and economic needs of citizens in southeastern Washington.

#### Program Level Outcomes:

- Provide students with the highest level of instruction by offering the latest concepts in precision agriculture.
- To attract, retain, and graduate competent students into the Precision Agriculture industry.
- Keep program on “cutting edge” of agriculture by involving industry in curriculum development and verification of student learning outcomes.
- Articulate the Precision Agriculture 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: Associate in Applied Arts and Sciences Degree (AAAS) in Precision Agriculture is a two-year degree program that prepares students for the precision ag industry.

A Precision Agriculture Certificate is also available.

**Industry Description:** Precision Ag is the cutting edge of agriculture technology and provides skills that workers in this industry need. Precision Ag provides industry workforce needs while supporting positive economic impact to the region and State of Washington. The targeted industry of agriculture, and emerging technological workforce needs, are considered critical to rural economic development as well as in meeting the health and economic needs of citizens in southeastern Washington.

**Entrance Requirements:** Students may enter the program fall, winter, spring or summer quarter. A placement test must be completed prior to admittance to 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).
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.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPR 135, Mechanization of GIS</td>
<td>3</td>
</tr>
<tr>
<td>ENT 151, Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td>ENT 161, Elementary Surveying</td>
<td>3</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application *</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</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>
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</thead>
<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>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics **</td>
<td>3</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
<td>5</td>
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<td><strong>Total Credits</strong></td>
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<td><strong>Grand Total</strong></td>
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</table>

Transferability:

**Associate in Applied Arts and Sciences Degree in Precision Agriculture**

This technical degree prepares the student for a career in the precision agriculture industry.

Degree available at/via: [Walla Walla]

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.

**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>AGPR 100, Intro to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 108, Computers in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application *</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</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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</thead>
<tbody>
<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 135, Mechanization of GIS</td>
<td>3</td>
</tr>
<tr>
<td>EST 133, Introduction to Controls</td>
<td>5</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</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>AGPR 170, Precision Equipment Installation and Troubleshooting</td>
<td>4</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics **</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td>WTM 112, Irrigation Principles</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
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<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AGPR 292, Leadership (L)</td>
<td>2</td>
</tr>
<tr>
<td>AGRI 191, Cooperative Work Experience</td>
<td>6-10</td>
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<td><strong>Total Credits</strong></td>
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</tr>
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<table>
<thead>
<tr>
<th>Year Two</th>
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<tbody>
<tr>
<td>AGPR 215, Field Crop Production</td>
<td>5</td>
</tr>
<tr>
<td>AGRI 102, Farm Records and Analysis</td>
<td>5</td>
</tr>
<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
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<td><strong>Total Credits</strong></td>
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</tbody>
</table>

*EST 132 can be substituted with EST 131 or JD 215
**EST 159 can be substituted with JD 205

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (W) - ENGL 097, ENGL & 101
- (R) - WTM 135, any 192 course
- (M) - MATH & 141, MATH & 146, OCSUP 107
ALLIED HEALTH AND SAFETY EDUCATION

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
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<tr>
<td>AGRI 210, Fundamentals of Selling and Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>ENT 151, Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td>ENT 161, Elementary Surveying</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<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>
</tr>
<tr>
<td>WTM 241, Advanced Center Pivot Controls and Troubleshooting</td>
<td>3</td>
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<tr>
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<td><strong>Grand Total</strong></td>
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</tr>
</tbody>
</table>

EPC: 125A
* EST 132 can be substituted with EST 131 or JD 215
** EST 159 can be substituted with JD 205
***Business core electives: AGRI201, AGRI221, AGRI210, AGRI211, AGRI102, AGRI108, CS 110

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
- (L) - AGPR 292, any 292 course
- (M) - MATH 141, MATH 146, OCSUP 107
- (O) - CMST 102, CMST 220, OCSUP 102
- (R) - WTM 135, any 192 course

Allied Health and Safety Education

CERT

http://www.wwcc.edu/alliedhealth

Sandra Graham 509.527.4462 sandra.graham@wwcc.edu
Bradley Mason 509.527.4579 bradley.mason@wwcc.edu

Program available 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 and maintaining job skills, 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) and Physical Therapy Assistant (Whatcom Community College).

The Nursing Assistant program provides training in basic nursing care under state and federal guidelines. The Phlebotomy Technician course is offered on an annual basis during spring quarter 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 opportunities 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 health 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]

Certificate Outcomes:

- Demonstrate a global understanding of culture difference and its application to healthcare settings.
- Learn Spanish and English medical terminology related to major body systems, common prefixes, suffixes, and word roots.
- Develop knowledge of written interpretation methodology.
- Develop knowledge of oral interpretation methodology.
- Understand the role of the interpreter and elements of communication related to interpreting.

FO R THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

89
• Demonstrate understanding of business concepts, business plans, and entrepreneurship used in the interpreting industry.
• Perform the role of the Medical Interpreter in accordance with the national standards of practice in a lab or clinical setting.
• Demonstrate ability to perform the manual skill components of effective BLS/CPR according to AHA standards.
• Demonstrate effective use of technological devices for interpreting.
• Develop awareness of transcultural issues in healthcare settings.
• Understand and abide by the ethics involved in all interpretation situations.
• Demonstrate professional behavior and communication in all interpretation situations.

**Certification 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.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 280, Medical Terminology</td>
<td>5</td>
</tr>
<tr>
<td>HO 110, HIV/AIDS Education</td>
<td>4</td>
</tr>
<tr>
<td>CPR 051, Basic Life Support for Healthcare Providers/CPR</td>
<td>4</td>
</tr>
<tr>
<td>HO 109, Bilingual Spanish/English Writing in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>MEDA 110, Human Body Structure and Function in Health and Disease I</td>
<td>5</td>
</tr>
<tr>
<td>MEDA 140, Medical Law and Ethics</td>
<td>2</td>
</tr>
<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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</thead>
<tbody>
<tr>
<td>HO 174, Transcultural Competency for Health Professionals</td>
<td>2</td>
</tr>
<tr>
<td>HO 180, Fundamentals of Spanish/English Medical Translation</td>
<td>1</td>
</tr>
<tr>
<td>HO 181, Fundamentals of Medical Interpreting I</td>
<td>7</td>
</tr>
<tr>
<td>MEDA 120, Human Body Structure and Function in Health and Disease II</td>
<td>5</td>
</tr>
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<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 182, Fundamentals of Medical Interpreting II</td>
<td>12</td>
</tr>
<tr>
<td>HO 189, Social Services Interpreting</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Year One Total</strong></td>
<td><strong>44.8</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>44.8</strong></td>
</tr>
</tbody>
</table>

**EPC: 382**

*This course is taught in winter quarter on the Walla Walla Community College Clarkston Campus.*

### 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] [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.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 130, Emergency Medical Technician Program</td>
<td>10</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tr>
<tr>
<td><strong>Year One Total</strong></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

**EPC: 364**

### 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.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO 100, Nursing Assistant</td>
<td>7</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Year One Total</strong></td>
<td><strong>7</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

**EPC: 329**

*Waiver of prerequisites for Healthcare Professionals with current credentials.

Students must have their high school diploma or GED* before entering the program.

### 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 specimens 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.
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.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>HO 142, Survey of Patient Navigation</td>
<td>1</td>
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<td>HO 143, The Patient Experience</td>
<td>1</td>
</tr>
<tr>
<td>HO 144, The Medical Team</td>
<td>1</td>
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<tr>
<td>HO 145, The Whole Patient</td>
<td>1</td>
</tr>
<tr>
<td>HO 146, The Communication Link</td>
<td>1</td>
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<tr>
<td>HO 147, The Navigator as Coach</td>
<td>1</td>
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<td>HO 148, The Navigator Skills</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Year One Total</strong></td>
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<tr>
<td><strong>Grand Total</strong></td>
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</tr>
</tbody>
</table>

EPC: 310S

Anthropology

http://wwcc.edu/anthropology

Jan Kruper 509.527.4319 jan.kruper@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Anthropology studies 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: A major in Anthropology is strengthened by studies in statistics, history, sociology, and humanities. The ability to utilize computers for research purposes is mandatory in most disciplines.

Art

http://wwcc.edu/art

Margaret Jamison 509.527.4651 margaret.jamison@wwcc.edu
Lisa Rasmussen 509.527.1873 lisa.rasmussen@wwcc.edu
Warren Rood 509.524.5188 warren.rood@wwcc.edu

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 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)

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.
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 and paying a priority list fee to determine specific quarter start in the program. Students may enter the program fall or winter, however, due to course sequencing it is recommended to begin in the fall. A placement test offered by the Student Development Center must be completed prior to admittance to the program. 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.

**For the Most Current Information See: www.wwcc.edu**
The following courses meet the related instruction requirements of this certificate/degree program:

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

**EPC: 712**

*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 program (one course per category required):

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

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.
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.

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.

Certification Outcomes:

- Demonstrates the ability to communicate clearly and concisely in proper retail management.
- 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.

Degrees and Certificates

Business Administration

CERT, AAAS, AA-DTA

http://wwcc.edu/business

[Online]

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. A placement test offered by the Student Development Center must be completed prior to admittance to the program.

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>
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<td>BUS 102, Customer Service</td>
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<td>BUS 112, Business Mathematics (M)</td>
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<td>BUS&amp; 101, Intro to Business</td>
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<td>BUS 136, Business Communications I *</td>
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<tr>
<td>BUS 157, Human Relations in Business (R)</td>
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<tr>
<td>BUS 192, Business Leadership Seminar I</td>
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**Year One Total** | **53-56**

EPC: 502C

* 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 112, Business Mathematics (M)</td>
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<td>CS 110, Introduction to Computers and Applications</td>
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<tr>
<td>BUS 125, BUS 126, BUS 151, BUS 222, BUS 224, BUS 226, BUS 287</td>
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<td>BUS 270, Hospitality Operations</td>
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<td>CA 133, Food and Wine/Beverage</td>
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<td>GEOG&amp; 207, Economic Geography</td>
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<td>BUS 215, eMarketing</td>
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<td>BUS 273, Legal Issues in Hospitality</td>
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<td>CA 243, Food and Beverage Management</td>
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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:

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]

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<tr>
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<td>BUS 136, Business Communications I</td>
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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:
BUSINESS ADMINISTRATION

BUS 115, BUS 125, BUS 222, BUS 231, BUS 232, BUS 234, BUS 280
Example - IT Support and Help Desk emphasis:
CS 115, CS 123, CS 130, CS 275, CS 276, CS 261
Example-Digital Art emphasis:
ART 107, CSS 220, CSS 222, CSS 223, CSS 224, CSS 226, CSS 227

ASSOCIATE IN APPLIED ARTS AND SCIENCES DEGREE IN BUSINESS AND MANAGEMENT

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:

YEAR ONE

<table>
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<tr>
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<tr>
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<tr>
<td>BUS 194, Entrepreneurship Development</td>
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YEAR TWO

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<tr>
<td>BUS 189, Principles of Management **</td>
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<td>BUS 217, Computer Software Applications</td>
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<tr>
<td>ECON &amp; 201, Micro Economics</td>
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<tbody>
<tr>
<td>BUS 137, Business Communications II (W)</td>
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<td>BUS 192, Business Leadership Seminar I (J)</td>
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<td>BUS 215, eMarketing</td>
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<tr>
<td>CMST &amp; 220, Public Speaking (O)</td>
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<td>BUS 292, Business Leadership Seminar II (L)</td>
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<tr>
<td>BUS &amp; 201, Business Law I</td>
<td>5</td>
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<tr>
<td>BUS 291, Co-op Work Experience</td>
<td>2 - 5</td>
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</table>

| Year Two Total | 48-51 |
| Grand Total | 98-101 |

**EPC: 502**

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

** Students may elect to take BUS 189, Principles of Management or PHIL & 115, Critical Thinking.

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

<table>
<thead>
<tr>
<th>(J) - BUS 192</th>
<th>(W) - BUS 137</th>
<th>(L) - BUS 292</th>
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<tbody>
<tr>
<td>(O) - CMST &amp; 220</td>
<td>(R) - BUS 157</td>
<td>(M) - BUS 112, BUS 113, MATH 115, MATH &amp; 146</td>
</tr>
</tbody>
</table>

Note: OT courses taken prior to Winter 2016 may be substituted for equivalent BUS courses.

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 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

97
Carpentry

CERT, AAAS
http://www.wwcc.edu/carpentry
Armando Maldonado 509.524.4806 armando.maldonado@wwcc.edu

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 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 work place 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 system, floor systems, wall and ceiling framing, plumbing, and electrical work. 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 and paying a priority list fee 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. A placement test offered by the Student Development Center must be completed prior to admittance to the program.

Other Information: All construction work expected of carpenters is completed by students. Electricians, plumbers, and heating/air conditioning technicians and concrete flat work sub-contractors 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

Advanced Carpentry Certificate

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate the ability to problem solve.
- Communicate effectively using construction language.
- Demonstrate green building practices.
- Apply paint to both the interior and exterior.
- Insert insulation and hang drywall.
- Set trusses and construct roofing system.
- Perform tile prep work.
- Install interior trim.
- Apply paint to both the interior and exterior.
- Develop concrete form and layout.
- Install sheetrock.
- Install doors.
- Demonstrate concrete pouring and stem walls.
- Communicate effectively using construction language.
- Demonstrate the ability to problem solve.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARP 284, Advanced Work in Layout</td>
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<tr>
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<td>Grand Total</td>
<td>20</td>
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EPC: 745F

Carpentry Certificate

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate the ability to problem solve.
- Communicate effectively using construction language.
- Demonstrate green building practices.
- Apply paint to both the interior and exterior.
- Insert insulation and hang drywall.
- Set trusses and construct roofing system.
- Perform tile prep work.
- Install interior trim.
- Apply paint to both the interior and exterior.
- Develop concrete form and layout.
- Install sheetrock.
- Install doors.
- Demonstrate concrete pouring and stem walls.
- Communicate effectively using construction language.
- Demonstrate the ability to problem solve.

<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>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
</tr>
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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>
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<td>WRITE 100, Written Communication in the Workplace (W)</td>
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</tr>
</tbody>
</table>

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

98
## Chemistry

### Degree Outcomes:
- Understand and follow safety guidelines for laboratory work.
- Develop and utilize appropriate chain of command and courtroom procedures.
- Demonstrate a safe work environment.
- Operate hand and power tools/equipment used in carpentry.
- 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 systems.
- 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.

### 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:
- An understanding of discipline specific terminology and methods.
- An ability to use discipline specific tools and /or techniques correctly.

### Year One

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Carpentry</td>
<td>OCSUP</td>
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<tr>
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<td>OCSUP 101, Human Relations (R)</td>
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### Year Two

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<tr>
<td>Carpentry</td>
<td>OCSUP</td>
</tr>
<tr>
<td>CARP 182, On-Site Work: Exterior</td>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
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<td>Year Two Total</td>
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<td>Grand Total</td>
<td>126.4-134.4</td>
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</table>

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

**Department Overview:** Chemistry provides much of the common vocabulary, facts, and tools necessary for success in any area of science. Ultimately, most of the phenomena in the biological, geological, physical, environmental, and medical sciences can be expressed in terms of the chemical and physical behavior of atoms and molecules. Because of chemistry’s key role, one or two years of chemistry are essential for students planning careers in the sciences.

**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 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 to prepare students for upper division study in Chemistry. Please consult with an advisor at WWCC and your intended transfer institution to determine an appropriate educational plan. (See AS Option I in Degrees section of catalog.)

**Preparation for Success:** Majors in chemistry are well prepared to pursue careers in a wide variety of allied fields as well as in chemistry. Students interested in a major in chemistry should take courses in science and mathematics.

---

**College Experience**

Darlene Snider 509.527.4265 darlene.snider@wwcc.edu

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

**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.

---

**Collision Repair Technology**

CERT, AAAS

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

Daniel Norton 509.527.4569 daniel.norton@wwcc.edu

Program available at/via: [Walla Walla]

**Department Overview:** Collision Repair keeps pace with the fast-moving auto body/collision repair industry and covers all aspects of body repair and refinishing with an emphasis on the most up-to-date methods. The program is nationally certified by NATEF/ASE in four areas of instruction. The Collision Repair program is designed to provide students with hands-on, work based learning. To facilitate this, the college acquires late model, damaged vehicles, providing a platform on which student may learn and develop skills. The Collision Repair curriculum is reviewed by an advisory board composed of local and regional industry members.

**Program Level Outcomes:**

- Update Collision Repair Technology program curriculum in accordance with current industry skill standards and I-CAR standards.
- Prepare graduates to enter the collision repair industry with the knowledge and skills necessary to be successful.
- Articulate the Collision Repair Technology program horizontally with other WWCC programs and vertically with regional high schools and tech centers.

**Degrees and Certificates**

**Advanced Collision Repair Technology Certificate**

Certificate available at/via: [Walla Walla]

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 264, Unibody Rebuilding</td>
<td>21</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td>21</td>
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<td><strong>Year One Total</strong></td>
<td>21</td>
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<td><strong>Grand Total</strong></td>
<td>21</td>
</tr>
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</table>

EPC 709F

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

### Year One Credits

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 161, Auto Body Repair</td>
<td>21</td>
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<td>OCSUP 101, Human Relations (R)</td>
<td>3</td>
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<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
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</thead>
<tbody>
<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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<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>ABT 163, Auto Body Refinishing</td>
<td>21</td>
</tr>
<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>
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<tr>
<td><strong>Year One Total</strong></td>
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<td><strong>74</strong></td>
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</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

### Year Two Credits

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 264, Unibody Rebuilding</td>
<td>21</td>
</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT 265, Electrical Mechanical</td>
<td>21</td>
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<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
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<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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<tbody>
<tr>
<td>ABT 299, Leadership (L)</td>
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<tr>
<td>ABT 266, Damage Estimating and Shop Operation</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Year Two Total</strong></td>
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<tr>
<td><strong>Grand Total</strong></td>
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</table>

EPC: 709

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (L) - AGPR 100, BUS 292, OCSUP 103, PSYC 140
- (W) - BUS 137, ENGL 101, WRITE 100
- (L) - ABT 299, BUS 192, OCSUP 299, POLS 125
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (O) - CMST 102, CMST& 220, OCSUP 102
- (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.
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.

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.

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TRK 110, Truck Driver Training</td>
<td>12</td>
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<tr>
<td>TRK 120, Truck Driver Training - Lab</td>
<td>10</td>
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<td>Total Credits</td>
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<td>Year One Total</td>
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<tr>
<td>Grand Total</td>
<td>22</td>
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</tbody>
</table>

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 paper work correctly.

### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRK 191, Cooperative Work Experience</td>
<td>18</td>
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<tr>
<td>TRK 192, Cooperative Seminar</td>
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</table>

**EPC: 715**

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**Communication Studies**

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

Connie Loomer 509.524.5153 connie.loomer@wwcc.edu

Bart Preecs 509.325.4725 barton.preecs@wwcc.edu

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

**Department Overview:**

Communication Studies department offers courses designed to increase students' knowledge and understanding of the principles of communication in order to communicate competently, effectively, appropriately, and ethically. Knowledge and skill in competent communication will benefit students in their personal, family, civic, cultural and workplace activities, as well as future educational class work.

**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](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. A placement test offered by the Student Development Center must be completed prior to admittance to 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).
### 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>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
<td>5</td>
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<tr>
<td>CS 110, Introduction to Computers and Applications</td>
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<tr>
<td>CS 115, Introduction to Computer &amp; Information Technology</td>
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<tr>
<td>CS 120, Networking Using Internet Technologies</td>
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<table>
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<th>Quarter Two</th>
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<tbody>
<tr>
<td>CS 121, Problem Solving with Programming *</td>
<td>5</td>
</tr>
<tr>
<td>CS 125, Operating Systems</td>
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<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<tbody>
<tr>
<td>CS 130, PC Support and Maintenance I</td>
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</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
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<tr>
<td>PSYC&amp; 100, General Psychology (R)</td>
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</table>

**EPC: 527C**

* Students may elect to substitute CS& 131, CS 140, or CS 142. 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
- (W) - BUS 137, ENGL& 101
- (L) - CS 292
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (O) - CMST 102, CMST& 220
- (R) - BUS 102, PSYC& 100

---

### Associate in Applied Arts and Sciences Degree in Networking

This technical degree provides students with a working knowledge of computer networks, including network hardware and popular network operating systems. Successful completion will prepare students for the Certified Cisco Network Associate exam (CCNA). Additional credits will be necessary to prepare for the Certified Cisco Network Professional (CCNP) certification examination.

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

**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>
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<tr>
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<td>CS 115, Introduction to Computer &amp; Information Technology</td>
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<table>
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<td>ENGL&amp; 101, English Composition I (W)</td>
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#### Year Two

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<td>CS 265, CCNA</td>
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<td>CS 275, Windows Client</td>
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</tbody>
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**FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU**

104
### Digital Design Certificate

This certificate provides the basic knowledge in the fields of digital design for publishing on the web.

#### 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.

### YEAR ONE

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<td>CS 110, Introduction to Computers and Applications *</td>
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<td>CS 223, Photoshop **</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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**EPC: 507C**

* Students may elect to take either CS 110, Introduction to Computers and Applications or CS 115, Introduction to Computer and Information Technology.

** Students may elect to substitute CS 223 or CS 224.

*** Students may elect to substitute CS 140, CS& 141, CS 142, or CS 229.

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (W) - BUS 137, ENGL& 101
- (R) - BUS 102, PSYC& 100
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (O) - CMST 102, CMST& 220
- (J) - CS 192

### 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 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 transferable to public or private baccalaureate institutions.

### YEAR ONE

<table>
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<tr>
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<table>
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<tbody>
<tr>
<td>CS 121, Problem Solving with Programming *</td>
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</tr>
<tr>
<td>ENGL 101, English Composition I (W)</td>
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<td>CS 220, Digital Imaging Foundations</td>
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<td>PSYC&amp; 100, General Psychology (R)</td>
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**For the most current information see: [WWW.WWCC.EDU](http://WWW.WWCC.EDU)**
### Certificate Outcomes:

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

### Associate in Applied Arts and Sciences in Software Design

This technical degree prepares the student for entry-level employment in the fields of programming, database design and application software support.

**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 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 entry-level 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.

---

### Software Design Certificate

This technical degree prepares the student for entry-level employment in the fields of programming, database design and application software support.

**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 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 entry-level software design requirements and certifications.
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<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<tr>
<td>CS 220, Digital Imaging Foundations</td>
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| Year One Total    | 50 |

### Year Two

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<tr>
<td>CS 235, Introduction to Database Design and Theory</td>
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<tr>
<td>CS 240, Application Integration using VBA</td>
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<td>CS 231, Application Development</td>
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<td>CS 245, Advanced Database Development</td>
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<thead>
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<th>Quarter Three</th>
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<tbody>
<tr>
<td>CS 229, Dynamic Website Design with PHP MySQL</td>
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<tr>
<td>CS 241, Programming II (JAVA/C++)</td>
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<td>CS 242, Advanced Software Development</td>
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<td>CS 291, Work Experience II</td>
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<tr>
<td>CS 292, Cooperative Seminar II (L)</td>
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<td>CS 192, Cooperative Seminar I (J)</td>
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</table>

| Year Two Total    | 50 |

| Grand Total       | 100 |

EPC: 501

* Students may elect to substitute CS 140, CS 142 or CS 220 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 220 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
- (W) - BUS 137, ENGL& 101
- (L) - CS 292
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (O) - CMST 102, CMST& 220
- (R) - BUS 102, PSYC& 100

---

### Cosmetology

#### AAAS

http://wwcc.edu/cosmetology

Ashley Lawyer 509.527.4228 ashley.lawyer@wwcc.edu
Michelle McKibben 509.527.4220 michelle.mckibben@wwcc.edu

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, rinses, 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 Cosmetologist 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 and paying a priority list fee to determine specific quarter start in the program.
- 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.

### Cosmetology

#### 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.

<table>
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<td>Quarter One</td>
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<tr>
<td>COSM 111, Principles and Procedures of Cosmetology I</td>
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<td>COSM 112, Practical Application I</td>
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<td>OCSUP 103, Job Seeking Skills (J)</td>
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<td>COSM 121, Principles and Procedures of Cosmetology II</td>
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<td>COSM 122, Practical Application II</td>
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<td>HO 110, HIV/AIDS Education</td>
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<td>IFA 022, AHA Heartsaver First Aid</td>
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<td>BUS 112, Business Mathematics (M)</td>
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<td>COSM 241, Intermediate Principles and Procedures II</td>
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<td>COSM 242, Practical Application IV</td>
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<td>COSM 251, Advanced Principles and Procedures I</td>
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<tr>
<td>COSM 252, Practical Application V</td>
<td>11</td>
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<tr>
<td>OCSUP 101, Human Relations (R)</td>
<td>3</td>
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<td><strong>Total Credits</strong></td>
<td>25</td>
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<td><strong>Year Two Total</strong></td>
<td>52</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>139.8-140.1</td>
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EPC 823

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

- (J) - OCSUP 103, PSYC 140
- (W) - BUS 137, ENGL 101, WRITE 100
- (L) - COSM 299
- (M) - BUS 112, OCSUP 105, OCSUP 106
- (O) - CMST 102, CMST 220, OCSUP 102
- (R) - BUS 157, OCSUP 101, PSYC 111, PSYC 100

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

http://wwcc.edu/criminaljustice

Jan Kruper 509.527.4319 jan.kruper@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. A placement test offered by the Student Development Center must be completed prior to admittance to the program.

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://www.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. A Culinary Arts Certificate, is available upon completion of the first year of study in the program.

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

Quarter One

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BUS 112</td>
<td>Business Mathematics (M)</td>
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<tr>
<td>CA 110</td>
<td>ServSafe</td>
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<td>CA 111</td>
<td>Storeroom Operations</td>
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<td>CA 112</td>
<td>Introduction to the Culinary Arts</td>
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<tr>
<td>IFA 022</td>
<td>AHA Heartsaver First Aid</td>
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Quarter Two

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<tr>
<td>CA 120</td>
<td>Culinary Arts Methods</td>
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<tr>
<td>CA 121</td>
<td>American Regional Cuisine</td>
<td>4</td>
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<tr>
<td>CA 122</td>
<td>Food, Farmers, and Culture</td>
<td>4</td>
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<tr>
<td>OCSUP 103</td>
<td>Job Seeking Skills (J)</td>
<td>3</td>
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<td>WRITE 100</td>
<td>Written Communication in the Workplace (W)</td>
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YEAR TWO

Quarter One

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<th>Course Code</th>
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<tr>
<td>CA 130</td>
<td>Introduction to Baking</td>
<td>6</td>
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<tr>
<td>CA 131</td>
<td>Advanced Baking and Pastry</td>
<td>5</td>
</tr>
<tr>
<td>CA 132</td>
<td>Plated Desserts</td>
<td>2</td>
</tr>
<tr>
<td>CA 133</td>
<td>Food and Wine/Beverage</td>
<td>4</td>
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<tr>
<td>OCSUP 102</td>
<td>Oral Communication in the Workplace (O)</td>
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YEAR ONE Total | 64.4 |

Quarter Two

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<tr>
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</thead>
<tbody>
<tr>
<td>CA 240</td>
<td>French and Mediterranean Cooking</td>
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<tr>
<td>CA 241</td>
<td>Asian Cooking</td>
<td>4</td>
</tr>
<tr>
<td>CA 242</td>
<td>Nutritional Cooking</td>
<td>4</td>
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<tr>
<td>CA 243</td>
<td>Food and Beverage Management</td>
<td>3</td>
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YEAR Two Total | 62 |

Grand Total | 126.4 |

Quarter Three

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<tr>
<td>CA 250</td>
<td>Garde Manger</td>
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<tr>
<td>CA 251</td>
<td>Latin American Cooking</td>
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<td>CA 252</td>
<td>Culinary Trends and Concepts</td>
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Quarter Four

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<tr>
<td>CA 260</td>
<td>Menu Development</td>
<td>3</td>
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<td>CA 261</td>
<td>A la Carte Cooking</td>
<td>8</td>
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<tr>
<td>CA 262</td>
<td>Service Management</td>
<td>4</td>
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<tr>
<td>Total Credits</td>
<td></td>
<td>15</td>
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</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):

(M) - BUS 112, OCSUP 105, OCSUP 106
(L) - CA 292, OCSUP 299
(W) - BUS 137, ENGL 101, WRITE 100
(O) - CMST 102, CMST & 220, OCSUP 102
(R) - BUS 157, CA 192, OCSUP 101, PSYC & 100

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

110
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.

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

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.

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

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 and paying a priority list fee 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. A placement test and mechanical reasoning test offered by the Student Development Center must be completed prior to admittance to the program.

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

Advanced Diesel Technology Certificate
Certificate available at/via: [Walla Walla]

<table>
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<th>YEAR ONE</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>DT 266, Advanced Equipment Repair I</td>
<td>10</td>
</tr>
<tr>
<td>DT 284, Hydraulics</td>
<td>5</td>
</tr>
<tr>
<td>DT 280, Brakes and Air Systems</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>Year One Total</strong></td>
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</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>20</strong></td>
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</tbody>
</table>

EPC.775F

Diesel Technology Certificate
Certificate available at/via: [Walla Walla]

Certificate Outcomes:
- Demonstrate basic shop fundamentals and safety.

<table>
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<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>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<td><strong>Total Credits</strong></td>
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</table>

| Quarter Two |         |
| DT 162, Machinery Repair I | 10 |
| DT 180, Suspension and Alignment | 5 |
| DT 185, Drive Trains | 5 |
| WELD 141, Welding Basics | 4 |
| WRITE 100, Written Communication in the Workplace (W) | 3 |
| **Total Credits** | **27** |

| Quarter Three |         |
| DT 163, Machinery Repair II | 8 |
| DT 187, Heating and Air Conditioning | 5 |
| DT 192, Cooperative Seminar (R) | 2 |
| DT 183, Electronics I | 5 |
| DT 189, Preventive Maintenance | 5 |
| **Total Credits** | **25** |
| **Year One Total** | **80** |
| **Grand Total** | **80** |

EPC.775C

* WELD 141, Welding Basics 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):
(W) - BUS 137, ENGL & 101, WRITE 100
(M) - BUS 112, OCSUP 105, OCSUP 106
(R) - BUS 157, DT 192, OCSUP 101, PSYC & 100

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.

<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>
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<tr>
<td><strong>Total Credits</strong></td>
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</table>

| Quarter Two |         |
| DT 162, Machinery Repair I | 10 |
| DT 180, Suspension and Alignment | 5 |
| DT 185, Drive Trains | 5 |
| WELD 141, Welding Basics | 4 |
| WRITE 100, Written Communication in the Workplace (W) | 3 |
| **Total Credits** | **27** |

| Quarter Three |         |
| DT 163, Machinery Repair II | 8 |
| DT 187, Heating and Air Conditioning | 5 |
| DT 192, Cooperative Seminar (R) | 2 |
| DT 183, Electronics I | 5 |
| DT 189, Preventive Maintenance | 5 |
| **Total Credits** | **25** |
| **Year One Total** | **80** |

<table>
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<tbody>
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<td>Quarter One</td>
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<tr>
<td>DT 266, Advanced Equipment Repair I</td>
<td>10</td>
</tr>
<tr>
<td>DT 284, Hydraulics</td>
<td>5</td>
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<tr>
<td>DT 280, Brakes and Air Systems</td>
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</tr>
<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

| Quarter Two |         |
| DT 267, Advanced Equipment Repair II | 10 |
| DT 283, Electronics II | 5 |
| ELECT DT3, DT 299, Leadership (L) | 1 |
| DT 281, Engines Advanced | 5 |
| OCSUP 103, Job Seeking Skills (J) | 3 |
| **Total Credits** | **24**

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Quarter Three Credits
DT 191, Cooperative Work Experience** 12 - 15
Total Credits 12-15
Year Two Total . . . . . . . 59-62
Grand Total . . . . . . . 139-142

EPC: 775

** DT 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. Student 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 3 credits of TRX 101 for DT 191. TRX 101 will be taken for 11-12 credits but only 3 will be applied to DT 191.

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
(L) - DT 299, ELECT DT3
(M) - BUS 112, OCSUP 105, OCSUP 106
(O) - CMST 102, CMST& 220, OCSUP 102
(R) - BUS 157, DT 192, OCSUP 101, PSYC& 100

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 Foundation musical, 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.

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

Degree 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 program 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 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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. A placement test offered by the Student Development Center must be completed prior to admission to the program.

WSP 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, 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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**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 ability to communicate effectively with adults and children.
- Demonstrate appropriate professional and ethical behavior in early childhood settings.
- 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.

**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]

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**For the most current information see:** WWW.WWCC.EDU
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]**

<table>
<thead>
<tr>
<th>Year One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
</tr>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Safety/Nutrition</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

| Quarter Two | Credits |
| ECED& 134, Family Child Care | 3 |
| EDUC& 115, Child Development | 5 |
| **Total Credits** | **8** |
| **Year One Total** | **20** |
| **Grand Total** | **20** |

EPC: 44E

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]**

<table>
<thead>
<tr>
<th>Year One</th>
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</thead>
<tbody>
<tr>
<td>Quarter One</td>
</tr>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Safety/Nutrition</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

| Quarter Two | Credits |
| EDUC& 115, Child Development | 5 |
| EDUC& 136, School Age Care | 3 |
| **Total Credits** | **8** |
| **Year One Total** | **20** |
| **Grand Total** | **20** |

EPC: 41E

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]**

<table>
<thead>
<tr>
<th>Year One</th>
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</thead>
<tbody>
<tr>
<td>Quarter One</td>
</tr>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Safety/Nutrition</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

| Quarter Two | Credits |
| EDUC& 132, Infants/Toddlers Care | 3 |
| EDUC& 115, Child Development | 5 |
| **Total Credits** | **8** |
| **Year One Total** | **20** |
| **Grand Total** | **20** |

EPC: 42E

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>
<thead>
<tr>
<th>Year One</th>
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</thead>
<tbody>
<tr>
<td>Quarter One</td>
</tr>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
</tr>
<tr>
<td>ECED&amp; 107, Health/Safety/Nutrition</td>
</tr>
<tr>
<td>ECED&amp; 120, Practicum-Nurturing Rel</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
</tr>
</tbody>
</table>

| Quarter Two | Credits |
| EDUC& 115, Child Development | 5 |
| EDUC& 130, Guiding Behavior | 3 |
| **Total Credits** | **8** |
| **Year One Total** | **20** |
| **Grand Total** | **20** |

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
ENGL& 101, English Composition ................................. 5
ENGL& 102, English Composition II ............................... 5
CMST& 220, Public Speaking ..................................... 5

Quantitative Skills Choose One 5 credits
MATH& 107, Math in Society ........................................ 5
MATH& 132, Mathematics for Elementary School Teachers II ........................................................................ 5
MATH& 141, Precalculus I ............................................. 5
MATH& 148, Business Calculus ...................................... 5
MATH& 151, Calculus I .................................................. 5
MATH& 146, Intro to Statistics ................................. 5

Humanities, Choose One ................................. 5 credits
ART, ASL, DRMA, ENGL LIT only, FREN, MUSC, SPAN [H] [HP]

Social Sciences 10 credits
Choose one from each area:
(a) PSYC& 100, General Psychology ............................. 5
(b) ANTH& 206, Cultural Anthropology ......................... 5
or SOC& 101, Introduction to Sociology ................. 5

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

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

State ECE Initial Certificate is available upon completion of the following courses:
(12 Credits Total)
ECED& 105, Intro Early Child Ed
ECED& 107, Health/Safety/Nutrition
ECED& 120, Practicum-Nurturing Relationships
State ECE Short Certificate of Specialization is available upon completion of the Initial ECE Certificate and 8 credits of specialized instruction (20 Credits Total)
State ECE Certificate is available upon completion of the State ECE Initial Certificate, State ECE Short Certificate of Specialization and 27 credits of specialized instruction (47 Credits Total)
* 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
**EARLY CHILDHOOD PARENTING EDUCATION**

**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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</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>ECED&amp; 105, Intro Early Child Ed</td>
<td>5</td>
</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>
<td>5</td>
</tr>
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<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>ECED&amp; 132, Infants/Toddlers Care</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 115, Child Development</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 130, Guiding Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MATH&amp; 107, Math in Society (M)</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED&amp; 160, Curriculum Development</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 180, Lang/ Literacy Develop</td>
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</tr>
<tr>
<td>ECED&amp; 190, Observation/Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 150, Child/Family/Community</td>
<td>3</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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| Year One Total | **50** |

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Quarter One</td>
<td></td>
</tr>
<tr>
<td>CMST 102, Interpersonal Communication (O)</td>
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<tr>
<td>ECE 150, Math and Science for Early Childhood</td>
<td>5</td>
</tr>
<tr>
<td>ECED&amp; 170, Environments-Young Child</td>
<td>3</td>
</tr>
<tr>
<td>ECE 191, Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 255, Children at Risk</td>
<td>1-3</td>
</tr>
<tr>
<td>ECED&amp; 139, Admin Early Lrgn Prog (L)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 136, School Age Care</td>
<td>3</td>
</tr>
<tr>
<td>ECE 291, Cooperative Work Experience II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>10-12</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 232, Curriculum Development II</td>
<td>5</td>
</tr>
<tr>
<td>ECE 239, Teaching Young Children - Capstone</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 203, Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

| 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):

- OCSUP 103, PSYC 140
- ENGL 101
- ECED& 139
- MATH& 107
- CMST 102, CMST& 220, OCSUP 102
- OCSUP 101

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**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.

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**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.
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.)

Energy - Electrical

CERT, AAAS
http://www.wwcc.edu/energy
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 Machinery.
• 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 Walla Walla Community College, 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.

• OCSUP 106, Applied Mathematics.
• WRITE 100, Applied Writing.
• CS 110, Introduction to Computers and Applications.

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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Energy Systems Technology - Electrical

Year One

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
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</tr>
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</table>

Total Credits . . . . . 15.4

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EST 109, Orientation to the Energy Industry (J)</td>
<td>3</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>EST 192, Human Relations Seminar (R)</td>
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</tr>
<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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Total Credits . . . . . 15

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 133, Introduction to Controls</td>
<td>5</td>
</tr>
<tr>
<td>EST 134, Electrical Raceways</td>
<td>3</td>
</tr>
<tr>
<td>EST 150, Electric Motors and Motor Maintenance</td>
<td>5</td>
</tr>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits . . . . . 17

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):

- (J) - 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.

Year Two

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 106, Plant Equipment and Controls</td>
<td>3</td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>EST 240, Intro to Basic Electronics</td>
<td>5</td>
</tr>
<tr>
<td>EST 252, Principles of Power Generation and Distribution</td>
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Total Credits . . . . . 16

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
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<tr>
<td>ENT 112, Blueprint Reading</td>
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</tr>
<tr>
<td>EST 235, Introduction to Solar PV and Applications</td>
<td>3</td>
</tr>
<tr>
<td>EST 250, Introduction to PLC and DDC Control</td>
<td>5</td>
</tr>
<tr>
<td>EST 260, Introduction to the National Electrical Code</td>
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Total Credits . . . . . 17

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>EST 255, Advanced PLC's and Integrated Architecture</td>
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<tr>
<td>EST 285, Intro to Instrumentation</td>
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<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
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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 and dean permission.

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):

<table>
<thead>
<tr>
<th>Category</th>
<th>Course Code/Description</th>
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</thead>
<tbody>
<tr>
<td>(J)</td>
<td>AGPR 100, EST 109, OCSUP 103</td>
</tr>
<tr>
<td>(L)</td>
<td>EST 292, any 292 course</td>
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<tr>
<td>(M)</td>
<td>OCSUP 107, MATH&amp; 141 or higher</td>
</tr>
<tr>
<td>(O)</td>
<td>CMST&amp; 220, OCSUP 102</td>
</tr>
<tr>
<td>(W)</td>
<td>WRITE 100, ENGL 087 or higher</td>
</tr>
<tr>
<td>(R)</td>
<td>EST 192, any 192 course</td>
</tr>
</tbody>
</table>

**Energy - HVACR**

CERT, AAAS

http://wwcc.edu/hvacr

Michael Houdak
509.527.4252 michael.houdak@wwcc.edu

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

**Department Overview:** The HVACR Technician installs, maintains, and repairs heating, ventilating, air-conditioning and refrigeration systems in residential, commercial, and industrial sites. WWCC’s HVACR training program is nationally accredited offering a two-year degree and a one-year certificate. Students exit the program with related certifications in entry-level positions covering safety, electrical theory, refrigeration basics and components, applied wiring, air conditioning systems, controls, electric motors, duct design and installation, heating systems, industrial refrigeration, electronics, national electrical code, programmable logic controllers and direct digital controls, and commercial refrigeration. The HVACR 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 marketable technical and interpersonal skills for the HVACR trade, resulting in career placement, with potential for advancement.
- Provide environmental and workplace training that meets appropriate industry local, regional and federal standards.
- Develop students’ developmental problem-solving abilities through interactive media, troubleshooting, instructional lectures, hands-on labs, and assigned project completion.
- Assess student preparedness through online, verbal, written, lab tests, and national certification exams.
- Acquire appropriate licenses, certificates and degrees upon exiting Walla Walla Community College.

**Degrees:** An Associate in Applied Arts and Sciences (AAAS) in Heating Ventilating Air-Conditioning and Refrigeration (HVACR) is available upon completion of the two-year program of study. Also, the HVACR Certificate is available upon completion of the one-year program of study.

**Industry Description:** Technicians apply technical training in electrical, electronics, environmental, and mechanical to operate, maintain and service these types of HVACR systems:

Heating and air conditioning (HAC) equipment are climate control systems installed in buildings. In addition to providing thermal comfort they are meant to provide acceptable indoor air quality and the ability to regulate and maintain the systems. An HAC system typically consists of central forced air heating, and air conditioning equipment. Central heating equipment generally consists of a type of furnace or heat pump used to heat water, steam or air in a central location, and them distributes the heat through piping or ductwork.

Ventilation (V) systems, a forced or displacement ventilation system can also be used to control humidity or odors through heat recovery ventilators (using heat exchangers to bring the fresh air temperature to room temperature) or displacement ventilation systems (introducing air into a room at low velocities). Air conditioning equipment provides heating as well as cooling and humidity control to a building with increased energy efficiencies.

Refrigeration (R) is the process of controlling temperature and humidity to process or preserve products such as food, pharmaceuticals, semiconductors, artifacts, and medical supplies.

**Entrance Requirements:** Students contemplating entering the Energy - HVACR training program should complete an online application, complete financial aid forms, and take a placement test offered by Walla Walla Community College, and then meet with a program advisor in the HVACR training area. A high school diploma or GED® is recommended for entry into this program and is required if students are pursuing an AAAS degree.

WWCC Energy - HVACR is an approved electrical training program through the State of Washington (WAC 296-46B-971) and to comply with Washington Law students entering the program that will be working in Washington State are required to obtain Washington State LNI Electrical trainee card within the first two weeks of the quarter enrolled (this may be waived if out of state, and will be covered during program orientation). Students completing an AAAS degree will receive 1419 electrical hours on the 06A.

Students may enter the program fall, winter or spring quarter, however, due to course sequencing it is recommended the students begin in the fall quarter.

**NOTE:** It is recommended that the student contact the lead instructor and discuss program interest and to determine appropriate program placement; paying a priority list fee will hold placement in the program, and this fee will be applied to your tuition.

**Other Information:** Technicians entering the HVACR Industry should:

- Have a valid driver’s license.
- Have an acceptable driving record; this typically will be checked by employer.
- Be able to write reports and subtract, multiply, and divide in all units of measure.
- Be able to use personal computer or notebook with basic computer skills.
- Be able to pass a drug test if required by an employer.
- Be able to work in adverse weather and ambient conditions.
- Be able to lift 75 lbs.
- Be able to work in confined spaces.
- Be able to work long hours - during peak season 12 hour days are possible.
- Be able to follow exact instructions and perform service and installation outlined in manuals.
- Be able to read and interpret technical manuals, schematics, blueprints, and code regulations.
- Be able to work in and promote a safe environment.
- Be able to take initiative and work without direct supervision.
- Be able to work with others and effectively communicate orally and written.
- Be prepared to work around electrical and mechanical potential hazards.
- Be able to use critical thinking and problem solving skills with an aptitude for mechanical and electrical troubleshooting.
- Be prepared for possible relocation.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Degrees and Certificates

Energy Systems Technology - Heating and Refrigeration Certificate

Certificate available at/via: [Walla Walla]

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EST 225, Commercial Air Conditioning Systems</td>
<td>4</td>
</tr>
<tr>
<td>EST 263, Electric Heat, Heat Pumps, and Solar Heat</td>
<td>4</td>
</tr>
<tr>
<td>EST 264, Fossil Fuel Heating and Boiler Systems</td>
<td>4</td>
</tr>
<tr>
<td>EST 265, Commercial Refrigeration I</td>
<td>4</td>
</tr>
<tr>
<td>EST 266, Commercial Refrigeration II</td>
<td>4</td>
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</tr>
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<td>Year One Total</td>
<td>20</td>
</tr>
<tr>
<td>Grand Total</td>
<td>20</td>
</tr>
</tbody>
</table>

EPC: 703F

Energy Systems Technology - Air Conditioning Certificate

Certificate available at/via: [Walla Walla]

Certificate Outcomes:

- Demonstrate basic knowledge of electrical safety, theory, interpreting electrical wiring diagrams, knowledge of electrical components, fundamentals of motors and capacitors, knowledge of NEC, electrical troubleshooting and problem solving, knowledge of electrical tools and instruments.
- Demonstrate basic knowledge of fundamentals and theory of Air conditioning system, safety, relative codes, refrigerants and refrigeration oils, system components, electrical, recovery, recycling, reclaiming, leak detection and testing, evacuation and charging, troubleshooting, problem solving air conditioning, and knowledge and use of tools and instruments for air conditioning.
- Demonstrate basic knowledge of electrical heat theory and application, safety, system components, installation and service, thermostats, air flow, troubleshooting and problem solving, and use of tools and instrument for electric heat.
- Demonstrate knowledge of gas and oil heat combustion theory and heating fuels, safety, knowledge of different heating system component, installation and service, gas piping, venting, electrical, gas heat troubleshooting and service and use of related tools and instruments.
- Demonstrate a basic knowledge of heat pump theory, electrical and mechanical components, meet core competencies set by the national accreditation standards, heat pump troubleshooting and problem solving, and knowledge of tools and instruments required for work with heat pumps.
- Demonstrate a basic knowledge of core competencies of theory, electrical and mechanical for light commercial, and industrial refrigeration, troubleshoot and problem solve light commercial refrigeration.

Associate in Applied Arts and Sciences Degree in Energy Systems Technology - HVACR

This technical degree prepares the student for success in the refrigeration and air conditioning industry. 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:

- Demonstrate basic knowledge of electrical safety, theory, interpreting electrical wiring diagrams, knowledge of electrical components, fundamentals of motors and capacitors, knowledge of NEC, electrical troubleshooting and problem solving, knowledge of electrical tools and instruments.
- Demonstrate basic knowledge of fundamentals and theory of Air conditioning system, safety, relative codes, refrigerants and refrigeration oils, system components, electrical, recovery, recycling, reclaiming, leak detection and testing, evacuation and charging, troubleshooting, problem solving air conditioning, and knowledge and use of tools and instruments for air conditioning.
- Demonstrate basic knowledge of electrical heat theory and application, safety, system components, installation and service, thermostats, air flow, troubleshooting and problem solving, and use of tools and instrument for electric heat.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
- Demonstrate knowledge of gas and oil heat combustion theory and heating fuels, safety, knowledge of different heating system component, installation and service, gas piping, venting, electrical, gas heat troubleshooting and service and use of related tools and instruments.
- Demonstrate a basic knowledge of heat pump theory, electrical and mechanical components, meet core competencies set by the national accreditation standards, heat pump troubleshooting and problem solving, and knowledge of tools and instruments required for work with heat pumps.
- Demonstrate a basic knowledge of core competencies of theory, electrical and mechanical for light commercial, and industrial refrigeration, troubleshoot and problem solve light commercial refrigeration.

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>
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<tbody>
<tr>
<td>EST 100, Refrigeration Basics I</td>
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<tr>
<td>EST 131, Principles of Electricity Theory</td>
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<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II</td>
<td>5</td>
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<tr>
<td>WRITE 100, Written Communication in the Workplace</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>EST 101, Refrigeration Basics II</td>
<td>4</td>
</tr>
<tr>
<td>EST 109, Orientation to the Energy Industry</td>
<td>3</td>
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<tr>
<td>EST 110, Refrigeration Components</td>
<td>5</td>
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<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
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<td>EST 144, Industrial Safety in the Workplace</td>
<td>3</td>
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<td>IFA 022, AHA Heartsaver First Aid</td>
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<tr>
<td>EST 120, Air Conditioning Systems</td>
<td>4</td>
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<tr>
<td>EST 133, Introduction to Controls</td>
<td>5</td>
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<tr>
<td>EST 150, Electric Motors and Motor Maintenance</td>
<td>5</td>
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<td>EST 192, Human Relations Seminar</td>
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<tr>
<td>EST 191, Cooperative Work Experience</td>
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<tr>
<td>EST 292, Leadership Seminar</td>
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YEAR ONE Total \(116.4\)

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<tbody>
<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
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<tr>
<td>EST 225, Commercial Air Conditioning Systems</td>
<td>4</td>
</tr>
<tr>
<td>EST 266, Commercial Refrigeration II</td>
<td>4</td>
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<tr>
<td>OCSUP 102, Oral Communication in the Workplace</td>
<td>3</td>
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YEAR TWO

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<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 200, Ductwork Design and Fabrication</td>
<td>4</td>
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<tr>
<td>EST 220, Ammonia Refrigeration Systems</td>
<td>3</td>
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<tr>
<td>EST 240, Intro to Basic Electronics</td>
<td>5</td>
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<tr>
<td>EST 263, Electric Heat, Heat Pumps, and Solar Heat</td>
<td>4</td>
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<table>
<thead>
<tr>
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<tr>
<td>EST 250, Introduction to PLC and DDC Control</td>
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</tr>
<tr>
<td>EST 260, Introduction to the National Electrical Code</td>
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</tr>
<tr>
<td>EST 264, Fossil Fuel Heating and Boiler Systems</td>
<td>4</td>
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<tr>
<td>EST 265, Commercial Refrigeration I</td>
<td>4</td>
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<tr>
<td>WTM 221, Pump Applications</td>
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YEAR TWO Total \(51\)

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<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
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<tr>
<td>EST 225, Commercial Air Conditioning Systems</td>
<td>4</td>
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<tr>
<td>EST 266, Commercial Refrigeration II</td>
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<tr>
<td>OCSUP 102, Oral Communication in the Workplace</td>
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YEAR TWO Total \(51\)

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<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
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<tr>
<td>EST 225, Commercial Air Conditioning Systems</td>
<td>4</td>
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<td>EST 266, Commercial Refrigeration II</td>
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<tr>
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YEAR TWO Total \(51\)

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<tr>
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<tbody>
<tr>
<td>EST 191, Cooperative Work Experience</td>
<td>10</td>
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<tr>
<td>EST 192, Leadership Seminar</td>
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<td><strong>Total Credits</strong></td>
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YEAR TWO Total \(65.4\)

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<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
</tr>
<tr>
<td>EST 225, Commercial Air Conditioning Systems</td>
<td>4</td>
</tr>
<tr>
<td>EST 266, Commercial Refrigeration II</td>
<td>4</td>
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<tr>
<td>OCSUP 102, Oral Communication in the Workplace</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
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YEAR TWO Total \(51\)

Energy - Industrial Maintenance

CERT

http://www.wwcc.edu/industrialmaintenance

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.

Degrees and Certificates

Industrial Maintenance Certificate

The Industrial Maintenance Certificate is available upon completion of the one-year program of study.

Certificate available at/via: [Clarkston]

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENT 112, Blueprint Reading</td>
<td>2</td>
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<tr>
<td>EST 109, Orientation to the Energy Industry</td>
<td>3</td>
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<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
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<tr>
<td>EST 192, Human Relations Seminar</td>
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</table>

YEAR ONE Total \(116.4\)
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, 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
- Certificate in Bioenergy 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
- Certificate in Biomass Feedstock Management

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.

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

123
### ENERGY - PLANT OPERATIONS

#### Year One

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
</thead>
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<td>EST 104, Introduction to Bioenergy</td>
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<tr>
<td>Quarter Two</td>
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<td>EST 105, Process Support Systems*</td>
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<tr>
<td>Quarter Three</td>
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<tr>
<td>AGPR 121, Biomass Feedstock Management</td>
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<td>Total Credits</td>
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<tr>
<td>Quarter Four</td>
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<tr>
<td>EST 292, Leadership Seminar (L)*</td>
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<tr>
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#### Year Two

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<tbody>
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<td>WTM 215, Basic Fluid Dynamics of Piping Systems*</td>
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<td>Total Credits</td>
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**Note:** All EST courses work to satisfy required elective requirements at the university level.

**Note2:** "Optional" courses required by University of Idaho Renewable Materials: none

**Note3:** Alternative and "Optional" courses required by University of Washington Bioresource Science and Engineering: Calculus series, SOC& 101, WRITE 110, ANTH&206, HUM&116, Engineering Physics series, MATH& 238 and 220, ENGR&214, + GEOL& 110

**Note4:** "Optional" courses required by Oregon State University Bioresource Research: Calculus series and Biology series

**Note5:** All EST courses work to satisfy required elective requirements at the university level.

#### 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]**

- For the most current information see: www.wwcc.edu
### 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.

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<tr>
<th>Quarter One</th>
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<tr>
<td>EST 105, Process Support Systems</td>
<td>3</td>
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<td>EST 109, Orientation to the Energy Industry (J)</td>
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<tr>
<td>EST 131, Principles of Electricity Theory</td>
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<tr>
<td>EST 144, Industrial Safety in the Workplace</td>
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<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>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
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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>
<td>5</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Year One Total</strong></td>
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<td><strong>Grand Total</strong></td>
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</table>

**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

---

**YEAR TWO**

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<thead>
<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>EST 100, Refrigeration Basics I</td>
<td>4</td>
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<tr>
<td>EST 104, Introduction to Bioenergy</td>
<td>2</td>
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<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
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<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
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<tr>
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<thead>
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<th>Credits</th>
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<tbody>
<tr>
<td>EST 105, Process Support Systems</td>
<td>3</td>
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<tr>
<td>EST 109, Orientation to the Energy Industry (J)</td>
<td>3</td>
</tr>
<tr>
<td>EST 131, Principles of Electricity Theory</td>
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<td>EST 144, Industrial Safety in the Workplace</td>
<td>3</td>
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<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
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</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
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<table>
<thead>
<tr>
<th>Quarter Three</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>
<td>5</td>
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<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</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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<td><strong>Total Credits</strong></td>
<td><strong>12-22</strong></td>
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</table>

**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 255 and EST 285 can be taken in place of - or in addition to - EST 191 with Instructor and Dean’s approval.**
Biomass Feedstock Management Certificate

This full Certificate is geared for students in the WWCC Plant and Soil Science and Precision Agriculture programs. 75% of the courses required for this Certificate meet a portion of the requirements for the AAAS degrees in Plant and Soil Science and/or Precision Agriculture. This Certificate will enable graduates to get a foothold in the emerging feedstock side of the Bioproducts industry, as well as established industries, including Pulp and Paper and Agriculture/Forestry Products Processors.

Certificate available at/via: [Walla Walla]

<table>
<thead>
<tr>
<th>YEAR ONE</th>
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</thead>
<tbody>
<tr>
<td>Quarter One</td>
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<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
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<tr>
<td>AGPR 113, Cultivated Plants</td>
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<td>WRITE 100, Written Communication in the Workplace (W)</td>
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<td>WTM 112, Irrigation Principles</td>
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<tr>
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<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
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<tr>
<td>AGPR 201, Basic Soil Science</td>
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<td></td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
<td></td>
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<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
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<td>OCSUP 106, Quantitative Problem Solving for the Trades I (M)</td>
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<tr>
<td>Quarter Three</td>
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<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
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<td>AGPR 121, Biomass Feedstock Management</td>
<td>3</td>
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<tr>
<td>AGRI 103, Intro to Precision Ag for Farm Management</td>
<td>5</td>
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<tr>
<td>WTM 190, Water Quality and Environmental Chemistry</td>
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<td>Grand Total</td>
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EPC: 1088

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

(J) - AGPR 100
(W) - WRITE 100
(M) - OCSUP 106

---

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]

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td></td>
<td></td>
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<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>
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<tr>
<td>EST 165, Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
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<tr>
<td>EST 192, Human Relations Seminar (R)</td>
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<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
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<tr>
<td>Quarter Two</td>
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<tr>
<td>EST 106, Plant Equipment and Controls</td>
<td>3</td>
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<tr>
<td>EST 131, Principles of Electricity Theory</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>EST 159, Hydraulics and Pneumatics</td>
<td>3</td>
<td></td>
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<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
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<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
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<td>WELD 141, Welding Basics</td>
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</tr>
<tr>
<td>Quarter Three</td>
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<td></td>
</tr>
<tr>
<td>EST 115, Industrial Mechanics</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
<td></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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<tr>
<td>Total Credits</td>
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<tr>
<td>Quarter Four</td>
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</tr>
<tr>
<td>EST 191, Cooperative Work Experience</td>
<td>6 - 10</td>
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<tr>
<td>EST 292, Leadership Seminar (L)</td>
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ENERGY - WIND

YEAR TWO

<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 104, Introduction to Bioenergy</td>
<td>2</td>
</tr>
<tr>
<td>EST 133, Introduction to Controls</td>
<td>5</td>
</tr>
<tr>
<td>WTM 215, Basic Fluid Dynamics of Piping Systems</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<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>
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<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
<td>3</td>
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<tr>
<td>WTM 205, Wastewater Treatment Plant Operations</td>
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<table>
<thead>
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<th>Quarter Three</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EST 203, Thermo-Chemical Conversion</td>
<td>5</td>
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<tr>
<td>EST 250, Introduction to PLC and DDC Control</td>
<td>5</td>
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<tr>
<td>WTM 190, Water Quality and Environmental Chemistry</td>
<td>5</td>
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<tr>
<td>WTM 221, Pump Applications</td>
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</tbody>
</table>

| Year Two Total | 47 |
| Grand Total | .107.4-111.4 |

Energy - Wind

CERT, AAAS

http://www.wwcc.edu/wind

James Bradshaw 509.524.5186 james.bradshaw@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: The Wind Turbine Technology program provides entry level training for wind energy and wind turbine generator technicians with emphasis on the emerging wind energy industry. The two-year technical training focuses on safety, power generation, distribution, electrical theory and control mechanisms, mechanical systems, along with crane rigging, bolt torque, and general education components. Wind Turbine Technicians play a key role in ensuring quality, safety and service involving the operation and maintenance of wind turbine units, performing mechanical and electrical troubleshooting, as well as repair and preventative maintenance. Work may include basic circuits, electrical motors and their controls, electronic controls, programmable logic controllers and variable frequency drives. Wind Turbine Technicians install and maintain, repair and replace malfunctioning parts and equipment, transmissions and drives, programmable logic controllers, motors, and breakers.

Program Level Outcomes:

- 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.

Degrees: Students may earn an Associate in Applied Arts and Sciences degree in Wind Energy Technology. A one-year certificate is also available in Wind Energy Technology.

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.

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, Applied Mathematics
- WRITE 100, Applied Writing
- 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.
- Be able to follow exact instructions.

For the most current information see: www.wwcc.edu
The following courses meet the related instruction requirements of this certificate/degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CS 110</td>
<td>Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td>EST 103</td>
<td>Introduction to Wind Energy</td>
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<tr>
<td>EST 109</td>
<td>Orientation to the Energy Industry (J)</td>
<td>3</td>
</tr>
<tr>
<td>EST 192</td>
<td>Human Relations Seminar (R)</td>
<td>2</td>
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<tr>
<td>WRITE 100</td>
<td>Written Communication in the Workplace (W)</td>
<td>3</td>
</tr>
<tr>
<td>EST 240</td>
<td>Intro to Basic Electronics</td>
<td>5</td>
</tr>
<tr>
<td>EST 175</td>
<td>Tower Rescue and Climbing Competency</td>
<td>1.2</td>
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<tr>
<td>EST 165</td>
<td>Rigging, Equipment Operation &amp; Material Handling</td>
<td>4</td>
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<tr>
<td>EST 132</td>
<td>Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>EST 292</td>
<td>Leadership Seminar (L)</td>
<td>2</td>
</tr>
<tr>
<td>EST 191</td>
<td>Cooperative Work Experience**</td>
<td>0-10</td>
</tr>
<tr>
<td>CS 110</td>
<td>Introduction to Computers and Applications</td>
<td>5</td>
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<tr>
<td>EST 132</td>
<td>Principles of Electricity AC Application</td>
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<tr>
<td>EST 159</td>
<td>Hydraulics and Pneumatics</td>
<td>3</td>
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<td>EST 165</td>
<td>Rigging, Equipment Operation &amp; Material Handling</td>
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<tr>
<td>EST 175</td>
<td>Tower Rescue and Climbing Competency</td>
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<tr>
<td>EST 240</td>
<td>Intro to Basic Electronics</td>
<td>5</td>
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<tr>
<td>OCSUP 107</td>
<td>Quantitative Problem Solving for the Trades II (M)</td>
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Quarter One Credits: 16
Quarter Two Credits: 16
Quarter Three Credits: 18.4
Quarter Four Credits: 18.2
Year One Total: 52.6

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.

For the most current information see: www.wwcc.edu
ENGINEERING TECHNOLOGY

Quarter Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</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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<tr>
<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
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<td><strong>Total Credits</strong></td>
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Quarter Three

<table>
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<tbody>
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<td>EST 255, Advanced PLC's and Integrated Architecture *</td>
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<tr>
<td>EST 285, Intro to Instrumentation *</td>
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Year Two Total . . . . 40

Grand Total . . . . 94.6-104.6

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):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>(J) - AGPR 100, EST 109, OCSUP 103 (W) - WRITE 100, ENGL 087 or higher</td>
<td></td>
</tr>
<tr>
<td>(L) - EST 292, any 292 course (M) - OCSUP 107, MATH&amp; 141 or higher</td>
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</tr>
<tr>
<td>(O) - CMST&amp; 220, OCSUP 102 (R) - EST 192, OCSUP 101, any 192 course</td>
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GIS, CAD, and Surveying Certificate

YEAR ONE

<table>
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<th>Quarter One</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>3</td>
</tr>
<tr>
<td>ENT 112, Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>ENT 150, Introduction to GIS</td>
<td>3</td>
</tr>
<tr>
<td>ENT 161, Elementary Surveying</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 106, Quantitative Problem Solving for the Trades</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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Quarter Two

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENT 121, Computer Aided Drafting and Design</td>
<td>3</td>
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<tr>
<td>ENT 151, Advanced GIS</td>
<td>3</td>
</tr>
<tr>
<td>ENT 162, Intermediate Surveying</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 107, Quantitative Problem Solving for the Trades II</td>
<td>5</td>
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<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
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<tr>
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Quarter Three

<table>
<thead>
<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>ENT 122, Advanced Computer Aided Design &amp; 3-D Modeling</td>
<td>5</td>
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<tr>
<td>ENT 152, Practical Field Applications of GIS</td>
<td>3</td>
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<tr>
<td>ENT 163, Advanced Surveying</td>
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<tr>
<td>ENT 192, Cooperative Seminar (R)</td>
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Year One Total . . . . 50

Grand Total . . . . 50

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

---

**Engineering Transfer**

AS

http://www.wwcc.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 and complete training at a baccalaureate engineering institution.
- Develop critical thinking and problem solving skills, both technical and non-technical.
- Provide a well-balanced educational experience that fosters communication skills, appreciation of social values, and an understanding of the social implications of technology.
- Remain technically current and responsive to the changing needs of society.

**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 I (Engineering):** A 90 college-level credit state-standard program. A recommended list of courses in included under degrees.
- **Track 2:** A Major Ready Program (MRP) agreement between the community and technical college system and many universities within the state of Washington as an equivalent for the first two years of engineering education.

**Industry Description:** Engineers change the world! They dream up creative practical solutions, and work with other intelligent inspiring people to invent, design, and create things that matter. Engineers and technicians work both indoors and outdoors, using a wide variety of technologies to provide solutions that affect all aspects of daily life. The demand for engineers has jumped recently and will increase as aging highways, utilities, and other systems need to be replaced. People are more easily finding jobs upon graduation also. However, not enough engineers and technicians are being produced to meet this demand. Well-trained people are needed now. 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. Technicians normally assist them with more hands-on activities such as surveying, computer aided drafting and design, and inspection. Government agencies, utility districts, private consultants, and fabrication plants hire engineers and technicians. The ability to visualize components spatially, perform computations, be organized, account for cost, and use computers effectively is essential to a successful engineer. Many shy away from engineering because they feel they cannot do this. However, many people have successfully overcome these concerns, developed the skills, and now enjoy a rewarding career.

**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. A placement test offered by the Student Development Center must be completed prior to admittance to the program. 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**

**Assoc. in Science-Transfer Track 2 Comp E EE/MPR**

Students completing the AS-Track 2/MPR 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/MPR degree are designed for the following areas: Computer and Electrical, and Mechanical/Civil/Aeronautical/Industrial/Materials Science. (See MRP in degrees section of catalog.)
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.

Enology and Viticulture

CERT, AAS-T, AAAS
http://wwcc.edu/wine

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 ample opportunity 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. Flexibility of the course scheduling allows for seasonal instruction and participation in short courses and seminars. 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 making, 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, 740+ 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. Please click here to download the admissions guidelines.

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. The Student Development Center offers a placement test and student orientation; both of which must be completed prior to beginning the program in fall quarter. 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 complete special admissions requirements to be admitted and enrolled in the Enology & Viticulture program. After acceptance to the program, students will be required to make a deposit.

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.
ENOLOGY AND VITICULTURE

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 product, agricultural production, food processing and retailing; and their influence on food 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.

YEAR ONE

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<th>Quarter One</th>
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<td>BUS 102, Customer Service</td>
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<td>BUS&amp; 101, Intro to Business</td>
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<td>EV 106, Intro to Viticulture &amp; Enology for Wine Marketing Students**</td>
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<td>ACCT&amp; 201, Principles of Accounting I</td>
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<td>BUS 210, Principles of Marketing</td>
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<tr>
<td>AGRI 211, Small Business Management *</td>
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<td>CS 110, Introduction to Computers and Applications *</td>
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<td>EV 299, Professional Wine Leadership (L)</td>
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| Year One Total | 50 |

YEAR TWO

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<td>BUS 157, Human Relations in Business (R)</td>
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<td>BUS&amp; 201, Business Law I</td>
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<td>CA 133, Food and Wine/Beverage</td>
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<td>ECON 200, Survey of Economics</td>
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<tr>
<td>BUS 215, eMarketing</td>
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<td>CMST&amp; 220, Public Speaking (O)</td>
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<td>EV 142, Applied Wine Marketing</td>
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<td>EV 180, Wines of the World</td>
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<td>EV 191, Cooperative Work Experience**</td>
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<td>EV 131, Essentials of Winery Compliance</td>
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<td>EV 189, Sensory Analysis of Wine</td>
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<tr>
<td>EV 193, Winery Operations Management</td>
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| Year Two Total | 47 |

| Grand Total | 97 |

EPC: 502W

* Can substitute BUS 189 for AGRI 211; can substitute CS 100 for CS 110

** Students must complete 6 credits of cooperative work experience in order to earn degree. Co-op hours may be completed in the summer.

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, BUS 113, MATH 115
(O) - CMST& 220
(R) - BUS 157

Associate of Arts and Science - Transfer - WSU - Enology & Viticulture

This degree is articulated with Washington State University's College of Agriculture, Human and Natural Resources Sciences B.S. in Integrated Plant Sciences, Viticulture & Enology.

Degree available at/via: [Walla Walla]

Transferability:

YEAR ONE

<table>
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<td>AGPR 201, Basic Soil Science</td>
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<tr>
<td>EV 107, Intro to Viticulture &amp; Enology</td>
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<tr>
<td>EV 196, Viticulture Practicum I</td>
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<td>WTM 112, Irrigation Principles</td>
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<tr>
<td>CHEM&amp; 122, Intro to Organic Chemistry or CHEM&amp; 162, General Chemistry II</td>
<td>5</td>
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<tr>
<td>AGPR 114, Plant Physiology</td>
<td>5</td>
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<tr>
<td>AGPR 202, Soil Fertility &amp; Management</td>
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<tr>
<td>EV 101, Establishing a Vinifera Vineyard</td>
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<td>EV 197 Viticulture Practicum I</td>
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</table>
### Fermentation Science Certificate

This certificate 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 can 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.

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### Viticulture Science Certificate

This certificate is dedicated to the science of wine making. 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.

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

**Certificate 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.

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**YEAR ONE**

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<td>CMST &amp; 220, Public Speaking</td>
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<td>EV 203, Science of Winemaking</td>
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<td>EV 286, Winemaking Practicum I</td>
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<td>PSYC &amp; 100, General Psychology (R)</td>
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<td>EV 204, Science of Winemaking II</td>
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<td>EV 131, Essentials of Winery Compliance</td>
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<td>EV 142, Applied Wine Marketing</td>
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<td>EV 189, Sensory Analysis of Wine</td>
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<td>EV 193, Winery Operations Management</td>
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<td>EV 205, Science of Winemaking III</td>
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<td>EV 288, Winemaking Practicum III</td>
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| Year One Total               |         | 46 - 59 |
| Grand Total                  |         | 46 - 59 |

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**YEAR TWO**

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<td>BIOL &amp; 213, Majors Plant</td>
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<td>CMST &amp; 220, Public Speaking</td>
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<td>EV 287 Winemaking Practicum II</td>
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<td>WTM 220, Drip Irrigation</td>
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<td>AGPR 113, Plant Anatomy &amp; Morphology</td>
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<td>EV 288, Winemaking Practicum III</td>
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<tr>
<td>MATH &amp; 146, Introduction to Statistics</td>
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| Year Two Total               |         | 55     |
| Grand Total                  |         | 117    |

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**EPC: 121E**

The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
- (O) - CMST 102, OCSUP 102
- (J) - EV 108
- (R) - BUS 102, BUS 157, OCSUP 101, PSYC 111
- (W) - ENGL & 101
ENOLOGY AND VITICULTURE

<table>
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<tr>
<td>AGPR 201, Basic Soil Science</td>
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<tr>
<td>CHEM&amp; 110, Chemical Concepts w/Lab *</td>
<td>5</td>
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<tr>
<td>EV 107, Introduction to Viticulture and Enology</td>
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<tr>
<td>EV 196, Viticulture Practicum I</td>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)*</td>
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**Total Credits** | **21**

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<tbody>
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<td>AGPR 113, Cultivated Plants</td>
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<td>EV Elective Offering(s)**</td>
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<tr>
<td>EV 102, Maintaining a Vignera Vineyard</td>
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<tr>
<td>EV 205, Science of Winemaking II</td>
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**Total Credits** | **19**

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**Grand Total** | **35-44**

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### 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.

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**FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU**
The American Farrier's Association and is reviewed by an advisory board setting. The Farrier Science curriculum complies with standards set by providing students the chance to work with horse owners in a business or hoof. Techniques are practiced on local, privately owned horses, alleviate disorders of the feet, and provide relief for the injured limb experience to retain true gaits of horses, improve or correct faulty gaits, sufficient knowledge of the anatomy of the horse's leg and the practiced measures. Upon program completion the farrier will have gained disease, leg and hoof lameness and corresponding therapeutic anatomy as it pertains to farrier science, conformation fault analysis, and society, including the impact of course-specific technology.

**Environmental Studies**

http://www.wwcc.edu/environmentalstudies

Steve May 509.527.4278 steve.may@wwcc.edu
Cynthia Robinett-Clk 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:**
- 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.

**Farrier Science**

CERT, AAAS

http://wwcc.edu/farrier

Jeffrey Engler 509.527.4291 jeffrey.engler@wwcc.edu

Program available at/via: [Walla Walla]

**Department Overview:** Farrier Science prepares students as professional, trained farriers able to work on most types of horses. A combination of classroom and lab coursework focuses on equine anatomy as it pertains to farrier science, conformation fault analysis, disease, leg and hoof lameness and corresponding therapeutic measures. Upon program completion the farrier will have gained sufficient knowledge of the anatomy of the horse's leg and the practiced experience to retain true gaits of horses, improve or correct faulty gaits, alleviate disorders of the feet, and provide relief for the injured limb or hoof. Techniques are practiced on local, privately owned horses, providing students the chance to work with horse owners in a business setting. The Farrier Science curriculum complies with standards set by the American Farrier's Association and is reviewed by an advisory board composed of local and regional industry members.

**Program Level Outcomes:**
- Competency Skills: demonstrate safe shop practices utilizing basic tools and equipment as evaluated by instructors on a daily basis; demonstrate high levels of efficiency in the trimming and shoeing of the horses provided for laboratory experience.
- 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 paying a priority list fee 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. A placement test offered by the Student Development Center must be completed prior to admittance to the program.

**Other Information:** For additional information including regional employment data, completion rates, student characteristics, and employment see 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.
FIRE SCIENCE

Cert, AAAS
http://wwcc.edu/fire

Bradley Mason
509.527.4579
bradley.mason@wwcc.edu

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

Department Overview:
Fire Science provides students with the fundamental knowledge and skills required to function as an entry-level firefighter. EMT training is included as an essential component of the curriculum. The program is designed on a two-year rotational basis, with each new group of students beginning the program on even numbered years. Fire Science courses are taught through a combination of lecture and cooperative training. Many students volunteer with local fire departments to gain more hands-on practice of their skills. WWCC works closely with local fire departments, the EMS system, and the state association in order to offer a quality program, and curriculum is reviewed by an advisory board composed of these local, state and regional industry members.

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.

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.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</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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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<tr>
<td>BIOL 150, Applied Equine Biology</td>
<td>3</td>
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<td>FRR 195, Intermediate Shoeing</td>
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<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
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<tr>
<td>FRR 197, Advanced Shoeing</td>
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<tr>
<td>FRR 162, Small Business Management for Farriers</td>
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<tr>
<td>FRR 299, Leadership (L)</td>
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<td>OCSUP 101, Human Relations (R)</td>
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<td>FRR 245, Advanced Hoof Preparation and Shoeing</td>
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<td>OCSUP 102, Oral Communication in the Workplace (O)</td>
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<td><strong>Total Credits</strong></td>
<td><strong>19</strong></td>
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Year One Total = 72
Grand Total = 72

Year Two Total = 54
Grand Total = 126

For the most current information see: www.wwcc.edu
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 the control, prevention, and cleanup of oil spills and other 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. A placement test offered by the Student Development Center must be completed prior to admittance to the program. 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.

<table>
<thead>
<tr>
<th>Year One</th>
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<tbody>
<tr>
<td><strong>Quarter One</strong></td>
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<tr>
<td>CMST&amp; 220, Public Speaking (O)</td>
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<tr>
<td>FCA 100, Introduction to Firefighting (J)</td>
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<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Quarter Two</strong></td>
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<tr>
<td>FCA 111, Fundamentals of Firefighting</td>
<td>9</td>
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<tr>
<td>FCA 137, Fire Protection Systems</td>
<td>3</td>
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<tr>
<td>FCA 170, Hazmat Operations</td>
<td>3.0</td>
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<td>MATH&amp; 107, Math in Society (M)</td>
<td>5</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Quarter Three</strong></td>
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<tr>
<td>FCA 115, Advanced Firefighting</td>
<td>9</td>
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<tr>
<td>FCA 177, Wild Land Fire Management</td>
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<tr>
<td>HO 130, Emergency Medical Technician Program</td>
<td>10</td>
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<td><strong>Total Credits</strong></td>
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<td><strong>Year One Total</strong></td>
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EPC: 828C

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

- (U) - FCA 100
- (O) - CMST& 220
- (W) - ENGL& 101, WRITE 100
- (M) - MATH& 107

### 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.

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<td>FCA 100, Introduction to Firefighting (J)</td>
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<td>WRITE 100, Written Communication in the Workplace *</td>
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<tr>
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<tr>
<td>Quarter Two</td>
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<td>CHEM&amp; 110, Chemical Concepts w/Lab</td>
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<td>ENGL&amp; 101, English Composition I (W)</td>
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<tr>
<td>FCA 130, Hydraulics</td>
<td>3</td>
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<td>FCA 152, Building Construction</td>
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<td>CS 110, Introduction to Computers and Applications</td>
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<tr>
<td>FCA 120, Fire Investigation</td>
<td>3</td>
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<td>FCA 190, Uniform Fire Codes and Inspections</td>
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<td>PSYC&amp; 100, General Psychology (R)</td>
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<td>FCA 155, Fire Instructor I</td>
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<td>SOC&amp; 101, Introduction to Sociology</td>
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EPC: 828
* Student may substitute ENGL& 102 for WRITE 100

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

- (J) - FCA 100
- (R) - PSYC& 100
- (O) - CMST& 220
- (W) - ENGL& 101
- (M) - MATH& 107
- (L) - FCA 299

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.

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.
GEOGRAPHY

Geography

http://www.wwcc.edu/geography

Steve May 509.527.4278 steve.may@wwcc.edu
Frank Skorina 509.527.4578 frank.skorina@wwcc.edu
John Van Slyke 509.527.4493 john.vanslyke@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Geography is an integrative discipline that unites the physical and social sciences in the study of people, places and the environment. Geography studies the where-and-why factors that shape our world and our lives in spatial terms.

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: A major in Geography is strengthened by studies in mathematics. The ability to utilize computers for research purposes is mandatory in most disciplines. Most geographers will also need to be familiar with GIS technology.

Geology

http://www.wwcc.edu/geology

AS

Steve May 509.527.4278 steve.may@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Geology is the study of the materials, processes, and evolutionary development of the Earth. Geologic understanding of the Earth is obtained by geoscientists working in a range of disciplines. Examples of the areas of study are: Mineralogy - the study of Earth’s naturally occurring minerals; Petrology - the study of rocks; Paleontology - the study of the history of life on Earth; Seismology - the study of Earthquakes; Volcanology - the study of volcanoes; Environmental Geology - the study of the interactions between humans and the geologic world; and Petroleum Geology - the study of fossil fuel resources and their development.

The geology courses offered will serve students interested in pursuing geology as a major, as well as general students taking the courses to fulfill the Natural Sciences requirement for graduation with an AA or AS degree.

FOR THE MOST CURRENT INFORMATION SEE: 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: History is a study that emphasizes interpreting past human experiences through evidence such as written record and cultural materials. As such it is a 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/humanservices

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:

- 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.

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.

Associate in 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] [100% Online]

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.

Associate in 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.

Required Core Courses 46 credits

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HSS 101</td>
<td>Introduction to Human Services</td>
<td>5</td>
</tr>
<tr>
<td>HSS 102</td>
<td>Cultural Diversity and Client Populations</td>
<td>5</td>
</tr>
<tr>
<td>HSS 103</td>
<td>Applied Skills for Human Services</td>
<td>5</td>
</tr>
<tr>
<td>HSS 110</td>
<td>Ethics in Health &amp; Human Services</td>
<td>5</td>
</tr>
<tr>
<td>HSS 141</td>
<td>Field Experience in Human Services I</td>
<td>3</td>
</tr>
<tr>
<td>HSS 142</td>
<td>Human Services Practicum Seminar I</td>
<td>2</td>
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<tr>
<td>HSS 241</td>
<td>Field Experience in Human Services II</td>
<td>3</td>
</tr>
<tr>
<td>HSS 242</td>
<td>Human Services Practicum Seminar II</td>
<td>2</td>
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<tr>
<td>CJ&amp; 106</td>
<td>Juvenile Justice</td>
<td></td>
</tr>
<tr>
<td>PSYC&amp; 100</td>
<td>General Psychology</td>
<td>5</td>
</tr>
<tr>
<td>SOC 206</td>
<td>Aging and Society</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022</td>
<td>AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>HSS 022</td>
<td>Mental Health First Aid</td>
<td>6</td>
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</table>

Supporting Elective Courses 15 credits

Supporting elective courses will vary. With the assistance of an adviser, student will select 15 credits in supporting elective courses. As an example, the following courses meet the related instructional requirements of the program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 231</td>
<td>Medical Office Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS 232</td>
<td>Medical Insurance Procedures</td>
<td>5</td>
</tr>
<tr>
<td>BUS 234</td>
<td>Medical Coding</td>
<td>5</td>
</tr>
<tr>
<td>BUS 280</td>
<td>Medical Terminology</td>
<td>5</td>
</tr>
<tr>
<td>CJ 105</td>
<td>Introduction to Corrections</td>
<td>5</td>
</tr>
<tr>
<td>CJ&amp; 101</td>
<td>Introduction to Criminal Justice</td>
<td>5</td>
</tr>
<tr>
<td>CJ&amp; 112</td>
<td>Criminology</td>
<td>5</td>
</tr>
<tr>
<td>ECE 255</td>
<td>Children at Risk</td>
<td>1-3</td>
</tr>
<tr>
<td>ECED&amp; 107</td>
<td>Health/Safety/Nutrition</td>
<td>5</td>
</tr>
<tr>
<td>EDUC&amp; 130</td>
<td>Guiding Behavior</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 136</td>
<td>School Age Care</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 150</td>
<td>Child/Family/Community</td>
<td>3</td>
</tr>
<tr>
<td>EDUC&amp; 203</td>
<td>Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td>HSS 201</td>
<td>Case Management</td>
<td>5</td>
</tr>
<tr>
<td>HSS 202</td>
<td>Co-occurring Disorders</td>
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<tr>
<td>PSYC 205</td>
<td>Social Psychology</td>
<td>5</td>
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<tr>
<td>PSYC 219</td>
<td>Health Psychology</td>
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<tr>
<td>PSYC&amp; 200</td>
<td>Lifespan Psychology</td>
<td>5</td>
</tr>
<tr>
<td>PSYC&amp; 220</td>
<td>Abnormal Psychology</td>
<td>5</td>
</tr>
<tr>
<td>SOC 204</td>
<td>Drugs and Society</td>
<td>5</td>
</tr>
<tr>
<td>SOC 205</td>
<td>Racial and Ethnic Relations</td>
<td>5</td>
</tr>
<tr>
<td>SOC 208</td>
<td>Intimate and Family Relations</td>
<td>5</td>
</tr>
<tr>
<td>SOC&amp; 101</td>
<td>Introduction to Sociology</td>
<td>5</td>
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Related Instruction 30 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL&amp; 101</td>
<td>English Composition I</td>
<td>5</td>
</tr>
<tr>
<td>BUS 157</td>
<td>Human Relations</td>
<td>5</td>
</tr>
<tr>
<td>CMST 201</td>
<td>Intercultural Communications or CMST&amp; 220</td>
<td>5</td>
</tr>
<tr>
<td>MATH&amp; 146</td>
<td>Introduction to Statistics or approved Quantitative Skills [Q] course</td>
<td>5</td>
</tr>
<tr>
<td>BIOL&amp; 100</td>
<td>Survey of Biology or approved Natural Science [NS] course</td>
<td>5</td>
</tr>
<tr>
<td>HUM 110 Four Perspectives or approved Humanities[H] or Fine arts [HP] course</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Grand Total 91

Associate in Applied Science Degree in Human & Social Services

Graduates 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 uses of technology.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>CS 110, Introduction to Computers and Applications</td>
<td>5</td>
</tr>
<tr>
<td>ENGL&amp; 101, English Composition I (W)</td>
<td>5</td>
</tr>
<tr>
<td>HSS 101, Introduction to Human Services</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
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</table>

<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 157, Human Relations in Business (R)</td>
<td>5</td>
</tr>
<tr>
<td>HSS Supporting Elective Course*</td>
<td>5</td>
</tr>
<tr>
<td>HSS 102, Cultural Diversity and Client Populations</td>
<td>5</td>
</tr>
<tr>
<td>Total Credits</td>
<td>15</td>
</tr>
</tbody>
</table>
Exploring the diversity and the influences of these historical moments, these courses prepare students for success on the world stage by focusing on a blend of topics in art, literature, philosophy, history, religion, music, theatre, film, and architecture. Segments include:

- **The Classical**
- **The Medieval and Renaissance**
- **The Modern**

**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 must 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.)

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**Humanities**

**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
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.

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**John Deere Technology**

**AAAS**

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

**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 two-year 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. A placement test and a mechanical reasoning test offered by the Student Development Center must be completed prior to admittance to 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).

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**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.
- Troublesleshoot 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.

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**ODD YEAR START – YEAR TWO**

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>JD 102, Forklift Safety Training and Certification</td>
<td>1</td>
</tr>
<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>
<tr>
<td>WRITE 100, Written Communication in the Workplace (W)</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>
<td>4</td>
</tr>
<tr>
<td>JD 105, John Deere Hydraulics</td>
<td>8</td>
</tr>
<tr>
<td>JD 115, John Deere Electrical</td>
<td>8</td>
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<tr>
<td>Total Credits</td>
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<table>
<thead>
<tr>
<th>Quarter Three</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>JD 190, Cooperative Work Experience I</td>
<td>16</td>
</tr>
<tr>
<td>JD 192, Human Relations Seminar (R)</td>
<td>2</td>
</tr>
<tr>
<td>Total Credits</td>
<td>18</td>
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<table>
<thead>
<tr>
<th>Quarter Four</th>
<th>Credits</th>
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</thead>
<tbody>
<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>
<td>10</td>
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<tr>
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**Year One Total | 71.4**

**EVEN YEAR START – YEAR ONE**

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<tr>
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<td>JD 102, Forklift Safety Training and Certification</td>
<td>1</td>
</tr>
<tr>
<td>AGPR 139, Agriculture Safety and Health</td>
<td>3</td>
</tr>
<tr>
<td>JD 101, John Deere Fundamentals and Orientation</td>
<td>3</td>
</tr>
<tr>
<td>IFA 022, Medic First Aid Basic</td>
<td>4</td>
</tr>
<tr>
<td>JD 105, John Deere Hydraulics</td>
<td>8</td>
</tr>
<tr>
<td>JD 115, John Deere Electrical</td>
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</tr>
<tr>
<td>Total Credits</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 190, Cooperative Work Experience I</td>
<td>16</td>
</tr>
<tr>
<td>JD 192, Cooperative Seminar I (R)</td>
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<td>Total Credits</td>
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**Year Two Total | 72**

**Grand Total | 143.4**

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
### Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>JD 120, John Deere Heating and Air Conditioning</td>
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</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>
<td>10</td>
</tr>
<tr>
<td>OCSUP 105, Intro to Quant Prob Solving Skills (M)</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>JD 191, Cooperative Work Experience II**</td>
<td>16</td>
</tr>
<tr>
<td>JD 193, Cooperative Seminar II (J)</td>
<td>2</td>
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<tr>
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<td><strong>Year One Total</strong></td>
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### Quarter Four

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>JD 191, Cooperative Work Experience II**</td>
<td>16</td>
</tr>
<tr>
<td>JD 193, Cooperative Seminar II (J)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>143.4</strong></td>
</tr>
</tbody>
</table>

**EPC: 125**

*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**
- **(W) - BUS 137, ENGL 101, WRITE 100**
- **(O) - CMST 102, CMST 220, OCSUP 102**
- **(R) - JD 192**
- **(M) - OCSUP 105, OCSUP 106**

### 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.

### 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 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.

### For the Most Current Information See:

[WWCC.edu/math](http://wwcc.edu/math)
Medical Assisting

CERT

http://www.wwcc.edu/medicalassisting

Tami Mitchell 509.527.4330 tami.mitchell@wwcc.edu
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 100%, 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 75.23% 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 (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board.

Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 N., Suite 158
Clearwater, FL 33763
727-210-2350 • www.caahep.org

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 interrelationship and 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 on 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.

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.

<table>
<thead>
<tr>
<th>Year One</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter One</td>
<td>Credits</td>
</tr>
<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>
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<tr>
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<tr>
<td>Quarter Two</td>
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<tr>
<td>CPR 051, Basic Life Support (BLS) for Healthcare Providers</td>
<td>4</td>
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<tr>
<td>HO 110, HIV/AIDS Education</td>
<td>7</td>
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<tr>
<td>HO 172, Pharmacology</td>
<td>2</td>
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<tr>
<td>HO 174, Transcultural Competency for Health Professionals</td>
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<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
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<tr>
<td>MEDA 114, Therapeutic Relationships (R)</td>
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<tr>
<td>MEDA 120, Human Body Structure and Function in Health and Disease II</td>
<td>5</td>
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<td>MEDA 140, Medical Law and Ethics</td>
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FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MEDA 125, Clinical Procedures</td>
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<tr>
<td>MEDA 144, Medical Office Administrative Procedures</td>
<td>5</td>
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<tr>
<td>MEDA 145, Office Emergencies for Medical Assistants</td>
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<td>MEDA 149, Medical Insurance Procedures for Medical Assisting</td>
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Quarter Four

<table>
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<tr>
<td>MEDA 191, Medical Assisting Practicum</td>
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<tr>
<td>MEDA 192, Medical Assisting Seminar (L)</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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</tbody>
</table>

EPC: 381

Students must demonstrate computer and keyboarding skills through placement testing or complete CS 100, Introduction to Microcomputers and OT 025 Keyboarding prior to entering the program.

*It is recommended students take MATH 072B before taking MEDA 105, Health Occupations Mathematics.

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 (R) - MEDA 114

Music

http://wwcc.edu/music

Julie Jones 509.524.5160 julie.jones@wwcc.edu
Thomas Simon 509.527.4690 thomas.simon@wwcc.edu
Kristin Vining 509.524.5160 viningkm@whitman.edu

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).

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.
• 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 2014 was $66,640 or $32.04/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 (End Program Nursing 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 health care 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.

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 Program 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 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 (TEASV) 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 http://www.wwcc.edu/nursing.
### Year One

#### Quarter One
- NURS 100, Fundamentals of Nursing: 4 credits
- NURS 110, Fundamentals Practicum: 4 credits
- NURS/PHIL 140, Ethics and Policy in Healthcare I: 1 credit
- NURS/PSYC 150, Psychosocial Issues in Healthcare I-II: 2 credits

**Total Credits:** 11

#### Quarter Two
- NURS 101, Beginning Nursing Concepts I: 5 credits
- NURS 111, Practicum I: 4 credits
- NURS/PSYC 151, Psychosocial Issues in Healthcare III: 1 credit

**Total Credits:** 10

#### Quarter Three
- NURS 102, Beginning Nursing Concepts II: 6 credits
- NURS 112, Practicum II: 4 credits
- NURS/PHIL 142, Ethics and Policy in Healthcare II: 1 credit

**Total Credits:** 11

**Year One Total:** 32

### Year Two

#### Quarter One
- NURS 200, Advanced Nursing Concepts I: 5 credits
- NURS 210, Practicum III: 6 credits
- NURS/PHIL 240, Ethics and Policy in Healthcare III: 1 credit
- NURS/PSYC 250, Psychosocial Issues in Healthcare IV: 1 credit

**Total Credits:** 13

#### Quarter Two
- NURS 201, Advanced Nursing Concepts II: 5 credits
- NURS 211, Practicum IV: 6 credits
- NURS/PHIL 241, Ethics and Policy in Healthcare IV: 1 credit
- NURS/PSYC 251, Psychosocial Issues in Healthcare V: 1 credit

**Total Credits:** 13

**Quarter Three**
- NURS 202, Advanced Nursing Concepts III: 7 credits
- NURS 212, Practicum V: 4 credits
- NURS/PHIL 242, Ethics and Policy in Healthcare: 1 credit

**Total Credits:** 12

**Year Two Total:** 38

**Grand Total:** 70

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### Practical Nursing Certificate

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 (End Level 1 Student Learning 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](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 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 [http://www.wwcc.edu/nursing](http://www.wwcc.edu/nursing).
Nutrition

http://wwcc.edu/nutrition

Lori Loseth  509.758.1710  loriloseth@wwcc.edu

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

Department Overview: Nutrition currently offers a course designed to develop understanding of the importance of the science of nutrition and dietary recommendations to maintenance of a healthy life. Students will learn the principles of nutrition as they apply to macro-nutrients and metabolic pathways. Application of vitamins, minerals, and special nutritional requirements at different stages of the life cycle, as well as current issues in nutrition will be considered.

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 nutrition or in becoming a registered dietician should take courses in chemistry for health sciences, anatomy and physiology. Additional coursework in general education, humanities and social sciences will be required at the transfer institution. Students need to meet with department advisors at the intended baccalaureate institution to determine appropriate educational plan.

Occupational Support

http://wwcc.edu/ocsup

Darlene Snider  509.527.3689  darlene.snider@wwcc.edu
Chad Miltenberger- Clk  509.758.1711  chad.miltenberger@wwcc.edu

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

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

Degrees: 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. 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
**Entrance Requirements:** A placement test offered by the Student Development Center must be completed prior to enrolling in OCSUP courses.

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**Oceanography**

http://www.wwcc.edu/oceanography

Steve May  
509.527.4278  
steve.may@wwcc.edu

**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.

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**Outdoor Power Equipment**

CERT, AAAS

http://www.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. A placement test and mechanical reasoning test offered by the Student Development Center must be completed prior to admittance to the program.

**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 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 an 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.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TST 154, Basic 4-Stroke Engine Principles</td>
<td>10</td>
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<tr>
<td>TST 151, Shop Fundamentals</td>
<td>4</td>
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<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>
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<td><strong>Total Credits</strong></td>
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<tr>
<th>Quarter Two</th>
<th>Credits</th>
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<tbody>
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<td>TST 156, Electrical Principles</td>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
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<tr>
<td>TST 159, Generator Fundamentals</td>
<td>5</td>
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<td>WELD 141, Welding Basics</td>
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<tr>
<td>TST 158, Power Trains</td>
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</tr>
<tr>
<td>TST 157, Hydraulics</td>
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<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
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**Year One Total** | **65**

YEAR TWO

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</thead>
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<tr>
<td>TST 155, Basic 2-Stroke Engine Principles</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>TST 125, Paints and Painting</td>
<td>3</td>
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<tr>
<td>TST 299, Leadership (L)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
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</table>

**Year Two Total** | **17**

**Grand Total** | **82**

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.

YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
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<td>TST 151, Shop Fundamentals</td>
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<td>TST 152, Forklift Safety Training and Certification</td>
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<td>TST 159, Generator Fundamentals</td>
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<tr>
<td>WELD 141, Welding Basics</td>
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<td>TST 158, Power Trains</td>
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<td>TST 157, Hydraulics</td>
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<tr>
<td>OCSUP 103, Job Seeking Skills (J)</td>
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</table>

**Year One Total** | **65**

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

### Physical Education and Recreation

- 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.

#### 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.

---

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

**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.

**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.
Physics

AS

http://wwcc.edu/physics

Steve May 509.527.4278 steve.may@wwcc.edu
Frank Skorina 509.527.4578 frank.skorina@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: The ultimate goal in the science of physics is the understanding of materials, structures and behaviors of everything from the grand scale of the entire universe down to the smallest, most fundamental bit of matter. It is referred to as the most fundamental of the sciences. More specifically, it includes, but not limited to, the study of mechanics, gravitation, oscillations, fluids, thermodynamics, waves, optics, electricity, magnetism, relativity, quantum physics, and nuclear physics.

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 II (90 credits) which is designed to prepare students for upper division study in physics. Please consult with an advisor at WWCC and your intended transfer institution to determine an appropriate education plan. (See AS Option II in Degrees section of catalog.)

Preparation for Success: Students interested in a major in physics should take additional courses in mathematics, computer programming and chemistry. Physics' degrees are often combined with other sciences, such as astronomy, biology and geology; so courses in those areas are also recommended.

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 201, 202, 203, a calculus-based series.
- The other 3-quarter sequence, PHYS 121, 122, 123, 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.

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

Political Science

http://wwcc.edu/politicalscience

Jim Peitersen 509.527.4601 james.peitersen@wwcc.edu

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.

Professional Golf Management

CERT, AAAS

http://wwcc.edu/golf

Mike Rostollan 509.529.5678 mike.rostollan@wwcc.edu

Program available at/via: [Walla Walla]

Department Overview: Professional Golf Management provides students with expert instruction in golf shop operations, facility management, tournament administration, rules of golf, turf science, golf car fleet management and golf instruction. The program is an accredited USGA member training facility and staffed by certified Class A PGA Golf Professionals. Upon completion of the course content and a two-quarter cooperative training internship at an approved golf facility, the student is uniquely prepared for a variety of career paths in field of professional golf management. The program was developed in cooperation with regional golf professionals representing a wide variety of golf facilities; curriculum is maintained with oversight by an advisory committee comprised of local and regional industry members.

Program Level Outcomes:

- Develop marketable technical and interpersonal skills in the golf industry, resulting in career placement.
- Acquire appropriate licenses, certificates, and degrees upon exiting Walla Walla Community College.
Degrees: Students may earn an Associate in Applied Arts and Sciences Degree in Professional Golf Management upon completion of the course content and a two-quarter cooperative training internship at an approved golf facility. A Professional Golf Management Certificate is available upon completion of the first year of the program.

Industry Description: The demand for professional golf managers and teachers has increased steadily with golf’s ever expanding popularity. Professional golf managers work as club professionals, equipment manufacturer representatives, general managers, and golf instructors or coaches. Utilizing their knowledge of their sport, physiology, and corrective techniques, professional golf instructors work with golfers of all experience levels to improve their game. They determine the type and level of difficulty of exercises, prescribe specific drills, and evaluate the golfer’s games.

Entrance Requirements: Students are required to have a golf background, letters of recommendation and instructor permission before entering the program. A placement test offered by the Student Development Center must be completed prior to admittance to the program.

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

Professional Golf Management Certificate
This certificate is equivalent to the first year of the AAAS Degree in Professional Golf Management.

Certificate available at/via: [Walla Walla]
Certificate Outcomes:
- Perform tasks essential to golf shop operations.
- Develop organization and maintenance plans for golf car fleets.
- Demonstrate abilities in tournament administration.
- Promote golf lessons and develop instructional programs.
- Interpret and apply the rules of golf.
- Work closely with golf course maintenance staff.

Associate in Applied Arts and Sciences Degree in Professional Golf Management
This technical degree prepares students for careers as club professionals, equipment manufacturer representatives, general managers, and golf instructors or coaches.

Degree available at/via: [Walla Walla]

Degree Outcomes:
- Perform tasks essential to golf shop operations.
- Develop organization and maintenance plans for golf car fleets.
- Demonstrate abilities in tournament administration.
- Promote golf lessons and develop instructional programs.
- Exhibit skills in practice facility management.
- Interpret and apply the rules of golf.
- Manage key areas of golf merchandising concerns.
- Work closely with golf course maintenance staff.
- Understand fundamental practices in general management.

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>
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<td>PGM 111, Introductory Golf Instruction</td>
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<td>PGM 121, Rules of Golf I</td>
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YEAR ONE

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<td>PGM 102, Golf Management II</td>
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<td>PGM 112, Intermediate Golf Instruction</td>
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YEAR ONE

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EPC: 176C

* Students may take either CS 110, Intro to Computers and Applications or CS 115, Intro to Computer and Information Technology.
The following courses meet the related instruction requirements of this certificate/degree (one course per category required):
(J) - AGPR 100, BUS 292, OCSUP 103, PSYC 140  (R) - PGM 192
(M) - BUS 112, OCSUP 105, OCSUP 106
The following courses meet the related instruction requirements of this certificate/degree:

**Computer and Information Technology.**

* Students may take either CS 110, Intro to Computers and Applications or CS 115, Intro to Computer and Information Technology.

YEAR TWO

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<td>PGM 211, Corrective Golf Lessons</td>
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<td>PGM 221, Rules of Golf II</td>
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<td>ACCT 201, Principles of Accounting I</td>
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<td>CS 110, Introduction to Computers and Applications</td>
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<td>PGM 112, Intermediate Golf Instruction</td>
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<td>PGM 131, Golf Car Fleet Management</td>
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<td>PGM 192, Cooperative Seminar (R)</td>
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**YEAR ONE Total** | **83**

**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.

**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.
Program Level Outcomes:

- 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 for 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 and paying a priority list fee 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. A placement test and mechanical reasoning test offered by the Student Development Center must be completed prior to admittance to the program.

**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.

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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] [100% Online]**

**YEAR ONE**

<table>
<thead>
<tr>
<th>Quarter One</th>
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<td>CHEM&amp; 121 or CHEM&amp; 161</td>
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<tr>
<td>ENGL&amp; 101, English Composition I</td>
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<td>WTM 112, Irrigation Principles</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<th>Quarter Two</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
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<tr>
<td>AGPR 114, Plant Physiology</td>
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<tr>
<td>CHEM&amp; 122 or CHEM&amp; 162</td>
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<tr>
<td>ENT 150, Introduction to GIS</td>
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| Year One Total                  | 56      |

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**YEAR TWO**

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<td>AGRI 201, Microeconomics in Agriculture</td>
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<td>AGRI 221, Introduction to Food and Agricultural Markets</td>
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<td>CHEM&amp; 123 or CHEM&amp; 163</td>
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| Year One Total                 | 114     |

**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, aeration 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.
# TURF MANAGEMENT

## YEAR ONE

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
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<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
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<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
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<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</td>
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<tr>
<td>TURF 122, Turf Maintenance Practices</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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<tr>
<td>TURF 191, Cooperative Work Experience</td>
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<td>TURF 192, Cooperative Seminar (R)</td>
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<tr>
<td>TURF 291, Cooperative Work Experience II</td>
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**Year One Total** . . . . **59.4-63.4**

**Grand Total** . . . . **59.4-63.4**

EPC: 160

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 or higher
- **(L)** - TURF 292, any 292 course
- **(M)** - MATH & 141, MATH & 146, OCSUP 107
- **(O)** - CMST 102, CMST & 220, OCSUP 102
- **(R)** - TURF 192, WTM 135

## YEAR TWO

<table>
<thead>
<tr>
<th>Quarter One</th>
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<tbody>
<tr>
<td>AGPR 120, Agricultural Chemistry</td>
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<tr>
<td>CMST 102, Interpersonal Communication (O)</td>
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<tr>
<td>TURF 201, Turfgrass Cultural Practices</td>
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<tr>
<td>WTM 215, Basic Fluid Dynamics of Piping Systems</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Quarter Two</th>
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<tr>
<td>AGPR 105, Weed Biology and Identification</td>
<td>5</td>
</tr>
<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
</tr>
<tr>
<td>WTM 110, Turf Irrigation Design and Components</td>
<td>5</td>
</tr>
<tr>
<td>WTM 221, Pump Applications</td>
<td>3</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td>AGPR 202, Soils Fertility and Management</td>
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<tr>
<td>Business Core Elective*</td>
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<tr>
<td>WTM 225, Turf Irrigation Controls, Installation, and Troubleshooting</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</table>

**Year Two Total** . . . . **50**

**Grand Total** . . . . **109.4-113.4**

EPC: 160

* Choose 1: AGRI 201, AGRI 221, AGRI 210, AGRI 211, AGRI 102, AGRI 108, CS 110, BUS 101

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

---

## Degree available at/via: [Walla Walla] [100% Online]

### Degree 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.

### 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.
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. A placement test offered by the Student Development 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 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>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>Quarter One</strong></td>
<td></td>
</tr>
<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
<td>5</td>
</tr>
<tr>
<td>EST 132, Principles of Electricity AC Application</td>
<td>5</td>
</tr>
<tr>
<td>IFA 022, AHA Heartsaver First Aid</td>
<td>4</td>
</tr>
<tr>
<td>TURF 101, Turf Equipment Operations I</td>
<td>3</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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<tr>
<th><strong>Quarter Two</strong></th>
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<tbody>
<tr>
<td>EST 115, Industrial Mechanics</td>
<td>5</td>
</tr>
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<td>EST 133, Introduction to Controls</td>
<td>5</td>
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<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
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</tr>
<tr>
<td>WTM 221, Pump Applications</td>
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<td><strong>Total Credits</strong></td>
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WATER - NATURAL RESOURCES TECHNOLOGY & MANAGEMENT

Quarter Three

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ENGL 087, Writing Essentials (W)</td>
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<tr>
<td>EST 150, Electric Motors and Motor Maintenance</td>
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<td>OCSUP 105, Introduction to Quantitative</td>
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<td>Problem Solving for the Trades (M)</td>
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<td>WTM 241, Advanced Center Pivot Controls and Troubleshooting</td>
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EPC: 125F

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

(W) - ENGL 087 or higher
(M) - OCSUP 105, OCSUP 106 or higher
(R) - WTM 135, any 192 course

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.

YEAR ONE

Quarter One

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AGPR 140, Agriculture Safety and Pesticides</td>
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<tr>
<td>EST 132, Principles of Electricity AC Application</td>
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<tr>
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Quarter Two

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<tr>
<td>EST 115, Industrial Mechanics</td>
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<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
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<tr>
<td>WTM 221, Pump Applications</td>
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<td><strong>Total Credits</strong></td>
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Quarter Three

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<td>OCSUP 107, Quantitative Problem Solving for the Trades II (M)</td>
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Quarter Four

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<td>WTM 191, Cooperative Work Experience</td>
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YEAR TWO

Quarter One

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<tr>
<td>AGPR 100, Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
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<tr>
<td>AGPR 113, Cultivated Plants</td>
<td>5</td>
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<tr>
<td>AGPR 201, Basic Soil Science</td>
<td>5</td>
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<td>WTM 215, Basic Fluid Dynamics of Piping Systems</td>
<td>3</td>
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Quarter Two

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<tr>
<td>AGRI 210, Fundamentals of Selling and Customer Service *</td>
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<td>ENGR&amp; 111, Engineering Graphics I</td>
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<tr>
<td>WTM 110, Turf Irrigation Design and Components</td>
<td>5</td>
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Quarter Three

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<td>CMST 102, Interpersonal Communication (O)</td>
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<td>WTM 220, Drip Irrigation</td>
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<tr>
<td>WTM 225, Turf Irrigation Controls, Installation, and Troubleshooting</td>
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EPC: 125B

* Business Core Elective: AGRI 201, AGRI 221, AGRI 210, AGRI 211, AGRI 102, AGRI 108, OR CS 110

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) - ENGL 097, ENGL 101
(L) - WTM 292, any 292 course
(M) - MATH& 146, MATH& 141, OCSUP 107
(R) - CMST 102, CMST& 220, OCSUP 102

Water - Natural Resources Technology & Management

AAAS

http://wwcc.edu/wec

Dave Stockdale 509.524.5193 dave.stockdale@wwcc.edu

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

Department Overview: 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 are 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. 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.

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

Quarter One

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<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>AGRI 108, Computers in Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135, Issues in Agriculture and Natural Resources (R)</td>
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<tr>
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Quarter Two

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>AGPR 110, Livestock Production</td>
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<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>3</td>
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<td>WTM 112, Irrigation Principles</td>
<td>5</td>
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<tr>
<td>WTM 221, Pump Applications</td>
<td>3</td>
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<tr>
<td>WTM 230, Water and Energy Conservation</td>
<td>3</td>
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Quarter Three

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<tr>
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<tbody>
<tr>
<td>AGRI 222, Agricultural and Water Policy</td>
<td>5</td>
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<tr>
<td>CMST 102, Interpersonal Communication (O)</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 097, Basic Expository Writing (W)</td>
<td>5</td>
</tr>
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Quarter Four

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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>8-12</strong></td>
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</table>

**Year One Total** **63-67**

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
WATER - WATERSHED ECOLOGY

YEAR TWO

Quarter One Credit
AGPR 201, Basic Soil Science ........................................ 5
ENT 150, Introduction to GIS ........................................ 3
WTM 139, Watershed Management .............................. 5
WTM 215, Basic Fluid Dynamics of Piping Systems .......... 3
Total Credits ......................................................... 16

Quarter Two Credit
AGPR 140, Agriculture Safety and Pesticides ............... 5
ENT 151, Advanced GIS ............................................. 3
ENT 161, Elementary Surveying .................................. 3
IFA 022, AHA Heartsaver First Aid ............................ 4
WTM 110, Turf Irrigation Design and Components .......... 5
Total Credits ......................................................... 16.4

Quarter Three Credit
AGPR 105, Weed Biology and Identification ................. 5
AGRI 103, Intro to Precision Ag for Farm Management .... 5
AGRI 201, Microeconomics in Agriculture* .................. 5
ENT 152, Practical Field Applications of GIS ................. 3
WTM 220, Drip Irrigation .......................................... 2
Total Credits ......................................................... 20
Year Two Total .................................................. 52.4
Grand Total ....................................................... 115.4-119.4

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 & Sciences degrees (AAAS) and transfer options are available.

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. 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 assessments 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. 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.

Degrees

Associate in Applied Arts and Sciences in Watershed Ecology

This technical degree prepares students for immediate employment in the natural resource and/or environmental industry.

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**

**Quarter One**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>AGPR 100</td>
<td>Introduction to Agriculture and Natural Resource Careers (J)</td>
<td>3</td>
</tr>
<tr>
<td>AGPR 113</td>
<td>Cultivated Plants</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 097</td>
<td>Basic Expository Writing (W)</td>
<td>5</td>
</tr>
<tr>
<td>WTM 135</td>
<td>Issues in Agriculture and Natural Resources (R)</td>
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**Quarter Two**

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<tbody>
<tr>
<td>AGPR 105</td>
<td>Weed Biology and Identification</td>
<td>5</td>
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<tr>
<td>AGRI 210</td>
<td>Fundamentals of Selling and Customer Service*</td>
<td>3</td>
</tr>
<tr>
<td>OCSUP 107</td>
<td>Quantitative Problem Solving for the Trades II (M)</td>
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**Quarter Three**

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<tbody>
<tr>
<td>AGPR 140</td>
<td>Agriculture Safety and Pesticides</td>
<td>5</td>
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<tr>
<td>BIOL 130</td>
<td>General Ecology</td>
<td>5</td>
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<tr>
<td>CMST 102</td>
<td>Interpersonal Communication (O)</td>
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<td>IFA 022</td>
<td>AHA Heartsaver First Aid</td>
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<td>WTM 112</td>
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**Quarter Four**

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<tr>
<td>WTM 191</td>
<td>Cooperative Work Experience</td>
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<td>WTM 292</td>
<td>Cooperative Seminar II (L)</td>
<td>2</td>
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<td><strong>Total Credits</strong></td>
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**Year One Total** . . 62.4-66.4

**YEAR TWO**

**Quarter One**

<table>
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<tr>
<th>Course Code</th>
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<tr>
<td>AGPR 201</td>
<td>Basic Soil Science</td>
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<tr>
<td>AGRI 222</td>
<td>Agricultural and Water Policy</td>
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<tr>
<td>ENT 150</td>
<td>Introduction to GIS</td>
<td>3</td>
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<tr>
<td>WTM 139</td>
<td>Watershed Management</td>
<td>5</td>
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**Quarter Two**

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<tr>
<td>Eco Elective**</td>
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<tr>
<td>Eco Elective**</td>
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<td>. . . . 3</td>
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<tr>
<td>ENT 151</td>
<td>Advanced GIS</td>
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<tr>
<td>WTM 230</td>
<td>Water and Energy Conservation</td>
<td>3</td>
</tr>
<tr>
<td>WTM 239</td>
<td>Watershed Processes and Restoration</td>
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<tbody>
<tr>
<td>AGPR 224</td>
<td>Pasture and Range Management</td>
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<tr>
<td>WTM 190</td>
<td>Water Quality and Environmental Chemistry</td>
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<td>WTM 229</td>
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**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):

(1) - AGRI 100, OCSUP 103  (W) - ENGL 097, ENGL 101
(1) - WTM 292, any 292 course  (M) - MATH 141, OCSUP 107
(1) - 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**

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<td>Survey of Biology</td>
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</table>

**Year One 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):

(1) - AGRI 100, OCSUP 103  (W) - ENGL 097, ENGL 101  (R) - WTM 135, any 192 course
(1) - 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 procedures, 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/WABO certification 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.
• Fully institutionalize aluminum and stainless steel welding certificate programs.
• 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 proficiency, 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.

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. A placement test offered by the Student Development Center must be completed prior to attendance in degree or certificate level courses.

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

Advanced Degrees and Certificates

Advanced Welding Technology Certificate

Certificate available at/via: [Walla Walla]

<table>
<thead>
<tr>
<th>Quarter One</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>WELD 152, Shielded Metal Arc Welding II</td>
<td>17</td>
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<tr>
<td>OCSUP 103, Job Seeking Skills</td>
<td>3</td>
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<tr>
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<tr>
<td><strong>Year One Total</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

EPC: 814F

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.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>WELD 151, Shielded Metal Arc Welding I</td>
<td>17</td>
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<tr>
<td>ENGR&amp; 111, Engineering Graphics 1</td>
<td>3</td>
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<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>WELD 255, Gas Tungsten Arc Welding</td>
<td>17</td>
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<tr>
<td>OCSUP 105, Introduction to Quantitative Problem Solving for the Trades (M)</td>
<td>5</td>
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<td><strong>Total Credits</strong></td>
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### Program available at/via: [Walla Walla]

#### Degree Overview: The Women's Studies department offers students an opportunity to learn about the past and present achievements and experiences of women and to understand more clearly the decisive role that gender has played and continues to play in human societies. Women's Studies is an interdisciplinary program which provides a frame of reference for understanding the contemporary and historical experience, roles, and contributions of both women and men.

#### 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 Women's Studies is strengthened by advanced studies in psychology, sociology, literature, and history.

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: A placement test offered by the Student Development Center must be completed prior to enrolling in WRITE courses.
Accounting Technology

ACCT 115 Integrated Computer Applications for Accounting 5 Credits
Computerized accounting systems, emphasizing various elements of an integrated general ledger package will be discussed. Special attention to hands-on operation of related accounting software packages. Prerequisites: CS 110 and ACCT& 201.

ACCT 175 Payroll Accounting 5 Credits
Provides an understanding of payroll records and numerous laws that affect operation of a payroll system. Prerequisite: ACCT& 201.

ACCT 199 Special Topics 1-5 Credits
Study and train to meet established local needs in the accounting industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

ACCT& 201 Principles of Accounting I 5 Credits
Addresses the fundamentals of accounting theory and practice, including: study of the accounting cycle, use of special journals, and use of accounting in management decisions. Formerly ACCT 201, Principles of Accounting.

ACCT& 202 Principles of Accounting II 5 Credits
Develops the accounting principles employed by partnerships and corporations with a heavy emphasis on the partners’ and stockholders’ equities. Also covers the time value of money concepts, which are used extensively throughout accounting. Prerequisite: ACCT& 201. Formerly ACCT 202, Principles of Accounting II.

ACCT& 203 Principles of Accounting III 5 Credits
Application of accounting concepts and techniques to managerial problems of planning and control are discussed. Accounting is viewed as a management tool. Prerequisite: ACCT& 202. Formerly ACCT 203, Managerial Accounting.

ACCT 204 Intermediate Accounting I 5 Credits
Addresses financial accounting principles and practices, including study of the theory and principles underlying presentation and interpretation of working capital, investments, long-term liabilities, and stockholders’ equity. Prerequisite: ACCT& 202.

ACCT 205 Intermediate Accounting II 5 Credits
Continuance of ACCT 204, Intermediate Accounting I. Topics include study of long-term assets and liabilities, matching principle as it relates to the Income Statement and Income Recognition. Prerequisite: ACCT 204.

ACCT 209 Cost Accounting 5 Credits
In-depth understanding of cost accounting systems and application of differential cost for decision-making. Also develops background for using budgets. Prerequisite: ACCT& 202.

ACCT 216 Principles of Income Tax 5 Credits
Reviews the federal tax structure and ability to apply tax principles to specific problems. Prerequisite: ACCT& 202 or instructor permission.

ACCT 297 Special Projects 1-5 Credits
Project-oriented experiences in the area or applications not covered in the standard accounting curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

Adult Basic Education

ABE 001 ABE Level I 1-11 Credits
Instruction in reading, writing, and computational skills for individuals with a goal to improve basic skills. Placement is determined by a score of less than 200 on a CASAS or other intake assessment. All students under 19 years of age must have a signed release form from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Underage Admissions policy, which is available in the Student Development Center.

ABE 002 ABE Level II 1 Credit
Instruction in reading, writing, and computational skills for individuals with a goal to improve basic skills. Placement is determined by a score of 201-210 on a CASAS test or other intake assessment. All students under 19 years of age must have a signed release form from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Underage Admissions policy, which is available in the Student Development Center.

ABE 003 ABE Level III 1-11 Credits
Instruction in reading, writing, and computational skills for individuals with a goal to improve basic skills. Placement is determined by a score of 211-220 on a CASAS test or other intake assessment test. Prerequisite: All students under 19 years of age must have a signed release form from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Underage Admissions policy, which is available in the Student Development Center.

ABE 004 ABE Level IV 1-11 Credits
Instruction in reading, writing, and computational skills for individuals with a goal to improve basic skills. Placement is determined by a score of 221-235 on a CASAS test or other intake assessment. All students under 19 years of age must have a signed release form from the last school they attended. Students 16-17 years of age must first be admitted to the College following the Underage Admissions policy, which is available in the Student Development Center.

ABE 004A ABE Context 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 221-235 and writing assessment are used for placement. Students with an
ADULT BASIC EDUCATION

end of quarter CASAS score of 236 and above, and a grade of A may qualify for READ 088 or College Level Reading. Instructor permission required.

ABE 005 Educational Interview 1 Credit
This learner-focused orientation course can be offered with students one-to-one, in small or large groups, or in a combination of these configurations and should begin the first quarter of enrollment. Students can register for three consecutive 1 credit courses. The course must meet for at least ten hours per quarter to earn one credit. State-mandated pre-testing and assessment testing as well as the college’s registration process are included.

ABE 013 Basic Math 1-4.5 Credits
A group course whose focus is on addition, subtraction, multiplication, and division including practice solving one- and two-step work problems, basic fractions, decimals, and simple measurement. Minimum computational skills at a level determined by intake assessment test, or by instructor permission. Prerequisite: 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 student development center. Students may enroll anytime throughout the year.

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 admission policy, which is available in the High School Programs office. Prerequisite: Grade of C or higher in ABE 013, CASAS score 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 Alternative Education Program (AEP) eligibility or the underage admission 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 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 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 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. Prerequisite: CASAS score 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 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 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** 1-10.5 Credits
The focus of instruction in this course is to strengthen reading, writing, problem solving, and computational skills for individuals whose CASAS pre-testing does not place them in the GED®-025/Fast Track Class. This class is to bridge the educational needs of students who have minimal GED® tests left to complete, as well as open enrollment. This course will endeavor to help meet the demanding schedules of everyday life. This class will provide lecture, group work, individual work, and hands on learning with practical application to GED® and life.

**GED 025 GED® Preparation** 1-11 Credits
Provided in both English and bilingual settings, GED® Preparation courses are offered in a variety of instructional environments: multi-level one-on-one instruction; structured courses; computer-guided courses; and learning communities. These courses emphasize proficiency in the five GED® subject areas: social studies, natural science, literature, writing, and mathematics. Prerequisite: Students under 19 years of age must have a signed release form from the last school they attended. Students 16-17 years of age must first be admitted to the College as an underage student by following the Underage Admissions Policy available in the Student Development Center.

**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. Formerly ESL 001.

**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. Formerly ESL 005. Prerequisite: Placement by CASAS score of 185, oral screen, or instructor permission.

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FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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 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. Formerly ESL 010. Prerequisite: Placement by CASAS score 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. Formerly ESL 014. 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.

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 quality 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. Formerly ESL 028. Prerequisite: CASAS Reading score 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 student will reach the level of “proficient” as listed in the College and Career Readiness rubrics. Formerly ESL 030. Prerequisite: Placement by CASAS score 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. Formerly ESL 031. 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. Formerly ESL 060.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
**AGRICULTURE - AG-BUSINESS**

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. Formerly ESL 066.

ELA 070 Special Purposes in ELA 1-11 Credits
Opportunity for students to pursue special interests and topics in ELA. Formerly ESL 070.

**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 Mgmt. 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.

**Agriculture - Plant and Soil Science**

AGPR 100 Introduction to Agriculture and Natural Resource Careers 3 Credits
A survey of the agriculture industry looking at different jobs, working conditions, employment structure, and employee-employer relationships. Each student builds a personal job portfolio to include letters of application, resume, references and job interview techniques.

AGPR 101 Introduction to Environmental Sciences [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 097; or permission of the Science Division Chair or designee. Recommended: READ 088 of higher. Student may not earn credit for both AGPR 101 and ENVS& 101.

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.

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

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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.) into electricity, heat, transportation fuels, recovered nutrients/soil amendments, reclaimed water, animal feed, bio-chemicals, and other byproducts. Review technologies available to convert biomass for fuels, electricity, heat, byproducts, reclaimed water, and carbon sequestration in PNW. Includes study of biomass focused economics, rural sociology, and the latest news/findings from research.

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 plans will be analyzed and evaluated for completeness. Safety standards for agriculture identified by the Washington State Administration codes will be covered. (WAC 296-307)

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, troubleshooting 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 agriculture 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. Topics include plant and seed sample identification.

FOR THE MOST CURRENT INFORMATION SEE: www.wwcc.edu
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 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 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 292 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 297 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.

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 100A Nursing Assistant-Part A 4 Credits
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 Level 5. Tuberculosis Screening, and Criminal History Background check, Immunization Documentation.

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 class is both an exploration of potential healthcare-related fields of study and how to succeed in preparing for specific healthcare professional programs. This course reviews educational requirements and availability of programs leading to starting a career as a healthcare professional. 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. Student 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 certification 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.

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 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 healthcare 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 Spanish Medical Interpretation 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, grammar. The deaf culture is explored in relation to the use of ASL for communication. Emphasis 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. Prerequisite: C- or better in ASL& 121 or equivalent course. Formerly COMM 108, American Sign Language II.

**Art**

**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. Prerequisite: ART 101 or instructor permission.

**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.

**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 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 WST 124. Recommended: READ 088 or higher.

ART 127 History of Western Art I [H]  5 Credits
Architecture, sculpture, painting, and crafts are studied for an examination and understanding of style. A study of art of Europe, Egypt, and the Near East from the Prehistoric Period through the Middle Ages. Craftsmanship, and cultural function will be discussed. This course is the first in a three quarter sequence but may be taken out of sequence.

ART 128 History of Western Art II [H]  5 Credits
Study of art in Europe and Early America from the fourteenth through the eighteenth centuries. Architecture, sculpture, painting, and crafts are studied. Special attention is given to the theme of the changing role of the artist. This course is the second in a three quarter sequence but may be taken out of sequence.

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.

ART 132 Painting III [HP]  4 Credits
Advanced 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 131.

ART 133 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 134 Sculpture II [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 133.

ART 151 Printmaking [HP]  4 Credits
Exploration of the relief, silkscreen, and intaglio methods of printmaking. Materials to be purchased. Lab hours required.

ART 152 Printmaking II [HP]  4 Credits
Exploration of the relief, silkscreen, and intaglio methods of printmaking. Lab hours required and materials to be purchased. Prerequisite: ART 151.

ART 153 Printmaking III [HP]  4 Credits
Exploration of the relief, silkscreen, and intaglio methods of printmaking. Lab hours required and materials to be purchased. Prerequisite: ART 152.

ART 160 Ceramics I [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 161 Ceramics II [HP]  5 Credits
This course builds on the fundamentals learned in Ceramics I. The emphasis is on proper 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 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 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 170 Fundamentals of Digital Filmmaking  5 Credits
Designed to introduce students to the history, philosophy, theory and techniques of developing and producing short films that are shot on digital video cameras and edited digitally on computers.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
with professional software. Centers on learning elements of visual storytelling through a spectrum of aesthetic approaches. Students learn sequencing, shooting, and editing skills as they develop and produce their own films. Classes will consist of group discussions, critical sessions and hands on exercises in digital filmmaking. Students are expected to work in groups and engage in analysis of professional video production scenarios. This course does not meet the Humanities requirement for the AA degree.

**ART 195 Introduction to Art**  
2 Credits  
A short course for non-art oriented students in which a variety of art skills are explored and attempted. Students will participate in several short projects in drawing, painting, printmaking, and design.

**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 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 material to be purchased.

**ART 262 Ceramic 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.

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**Astronomy**

**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: Math 74C; 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: MATH 74C; 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: MATH 74C; 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.

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**Automotive Repair Technology**

**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 153, 171 and 181.

AMM 152 Engine Performance II 9 Credits
Introduction to automotive ignition system theory, diagnosis and repair, emission systems theory, diagnosis and repair and onboard 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 theory, diagnosis and repair of automatic drivetrain components used on today's light duty vehicles. Subjects covered in this course are; torque converters, planetary gear sets, hydraulic systems, electronic controls, valve bodies and CVTs. Students will learn to use specialized equipment necessary to diagnose and repair automatic transmissions and transaxles. 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 225.

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, 224, 254, and 255.

AMM 242 Suspension and Alignment II 4 Credits
Advanced automotive alignment theory, diagnosis and repair. The student will learn automotive alignment theory, 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 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, 254, 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. Corequisites: AMM 152, 232, 242, 254.

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.

Biological Sciences

BIOL& 100 Survey of Biology [NS] 5 Credits
This lab science course was developed around central themes in contemporary biology and emphasizes ecology, genetics, evolution and the diversity of life. This course is primarily intended for undecided or non-science majors in fulfillment of the general education lab science requirements. Through units on cells, plants, and animals the characteristics of living organisms and basic life processes will 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.

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.

**BIOLOGICAL SCIENCES**

**BIO 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.

**BIO 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 BIOL& 211, or AGPR 113, 114 or AGRI 215. Recommended: READ 088 or higher.

**BIOL& 212 Majors Animal [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) lab science requirements. Topics include: an 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 microscopy. Formerly BIO 210, Anatomy & Physiology I. Prerequisite: Grade of C or higher in BIOL& 160 or 211. Formerly BIO 210, Anatomy & Physiology I.

**BIOL& 213 Majors Plant [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 systems: endocrine, cardiovascular, respiratory, digestive, and urinary. Laboratory work may include mammalian dissections, study of models, and microscopy. Formerly BIO 211, Anatomy & Physiology II. Prerequisite: Grade of C or higher in BIOL& 251. Concurrent enrollment in BIOL& 253 allowed with instructor permission.

**BIOL& 216 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 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 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: an 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 include: an emphasis on 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& 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) 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 microscopy. Formerly BIO 210, 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 systems: endocrine, cardiovascular, respiratory, digestive, and urinary. Laboratory work may include mammalian dissections, study of models, and microscopy. Formerly BIO 211, Anatomy & Physiology II. Prerequisite: Grade of C or higher in BIOL& 251. Concurrent enrollment in BIOL& 252 allowed with instructor permission.
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 Skillbuilding  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 relation 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 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 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 170 Introduction to Hospitality & Tourism 5 Credits
An introductory course designed to explore aspects of the hospitality/tourism industry and provide information on the nature, scope and significance at the local, regional and international levels. The course introduces topics within hospitality: human resources, customer service, operations, marketing, and planning.

BUS 173 Event Planning and Management 5 Credits
This course provides an in-depth study of event planning and management. Students will learn how to plan, implement, and evaluate events and conferences in terms of budget, time management, site selection, food and beverage, marketing, contracts and ancillary service needs. Course will be delivered with customer service and satisfaction as the goal for every event.

BUS 189 Principles of Management 5 Credits
Modern management is both exciting and challenging today. Through the use of the internet and other related digital applications managers today have at their request the most revolutionary tools since the development of the assembly line and Henry Ford. The course is organized around the four traditional functions of management: planning, organizing, leading and controlling. There will also be contemporary topics discussed such as technology, empowerment, diversity and TQM. Formerly BA 189.

BUS 192 Business Leadership Seminar I 3 Credits
Designed to enhance and prepare students for a cooperative work experience. Gain and apply skills necessary to obtain and retain employment, including; successful job search, resume and cover letter composition, and interviewing techniques. Students will work in a highly interactive environment to obtain hands-on practice and immediate feedback on interviewing and networking practice sessions.

BUS 194 Entrepreneurship Development 5 Credits
An entrepreneur, facing risk and uncertainty, considers resources in new and different ways in hopes of creating value; this is often done through a new business venture. This course will help develop students’ analytical and critical skills. Students will review the steps for opening a business and complete a business plan clearly evaluating and illuminating the opportunity for entrepreneurial enterprise.

BUS 199 Special Topics 1-5 Credits
Study and train to meet established local needs in the business industry, supplemental to courses currently offered. Prerequisite: Instructor permission. Formerly BA 199.

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 MOUS 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 business professional who will use medical terminology in a business 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 with 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. Prerequisite: CARP 285 or instructor permission.

CARP 287 Special Projects  
1-18 Credits  
Project-oriented experiences in the area or applications not covered in the standard carpentry curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

CARP 287 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.

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

CHEM& 105 Chemical Concepts [NS]  5 Credits
This course will investigate key chemical concepts and is intended for non-science majors in fulfillment of the general education non-lab science requirements. Topics will be introduced using one or more of the following themes: chemical advances in civilization, chemical processes in food preparation, chemistry of crime, chemistry of the environment, chemistry of soils and gardening. Formerly CHEM 101, Chemistry. Prerequisites: MATH 065 (course no longer offered) or MATH 74C; 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. Credit cannot be received for both CHEM& 110 and CHEM& 105. This course does not satisfy the chemistry requirement for the nursing degree.

CHEM& 105H Chemical Concepts - Honors [NS]  5 Credits
This course will investigate key chemical concepts and is intended for non-science majors in fulfillment of the general education non-lab science requirements. Topics will be introduced using one or more of the following themes: chemical advances in civilization, chemical processes in food preparation, chemistry of crime, chemistry of the environment, chemistry of soils and gardening. Formerly CHEM 101, Chemistry. Prerequisites: MATH 065 (course no longer offered) or MATH 74C; 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. Credit cannot be received for both CHEM& 110 and CHEM& 105. This course does not satisfy the chemistry requirement for the nursing degree.

CHEM 106 Introduction to Forensic Chemistry [NS]  5 Credits
This course will examine selected topics in forensic sciences and is intended for non-science majors in fulfillment of the general education lab science requirements. Through an understanding of basic chemical principals, this course will investigate the role of science in solving crimes. Topics may include glass analysis, document identification, blood detection and analysis, drug identification, and DNA profiling. The laboratory component will involve the analysis of trace evidence. Techniques utilized may include chromatography, fingerprinting, blood typing, fiber identification, glass analysis, mass spectrometry, and infrared spectroscopy. This course does not satisfy the chemistry requirement for the nursing degree.

CHEM& 110 Chemical Concepts w/Lab [NS]  5 Credits
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: MATH 065 (course no longer offered) or MATH 74C; 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 78E; 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 non-lab science requirements. Topics include atomic structure, bonding, periodicity, stoichiometry, gases, thermodynamics, solution chemistry, acids, bases, and intermolecular forces. Prerequisites: Grade of C- or higher in MATH 78E; 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 (Option I) lab science requirements. Topics include measurements in chemistry, periodic trends, atomic structure, bonding, geometry, and gas laws. Formerly CHEM 121, General Chemistry I. Prerequisites: Grade of C or higher in high school chemistry (one year) or CHEM& 110 or higher; appropriate placement score or grade of C or higher in ENGL 087; appropriate placement score or grade of C or higher in Math 80F; or
permission of the Science Division Chair or designee. This course satisfies the chemistry requirement for the nursing degree.

**CHEM& 162 General Chemistry II 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 AS Degree (Option I) lab science requirements. Topics include the study of molecular polarity and states of matter, solution chemistry, kinetics, chemical equilibria, and acid/base chemistry. Formerly CHEM 122, General Chemistry II. Prerequisite: Grade of C- or higher in CHEM&161. This course satisfies the chemistry requirement for the nursing degree.

**CHEM& 163 General Chemistry III 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 AS Degree (Option I) lab science requirements. Topics include the study of aqueous equilibria, atmospheric chemistry, thermodynamics, electrochemistry, nuclear chemistry, coordination compounds, and organic chemistry. Formerly CHEM 123, General Chemistry III. Prerequisite: Grade of C- or higher in CHEM&162. This course satisfies the chemistry requirement for the nursing degree.

**CHEM 199 Special Topics**  
*1-5 Credits*  
Special Topics in chemistry is a variable credit class to allow students to have the opportunity to engage in independent research or explore special interests and topics. Prerequisite: Instructor permission. This course does not satisfy the chemistry requirement for the nursing degree.

### College Experience

**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 Online 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 110 Learning Strategies for College**  
*1-3 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 116 College Costs, Financing, and Procedures**  
*1 Credit*  
Learn about the costs of college along with financing options and opportunities, the price gaps between two-year and public/private four-year institutions, rising costs of tuition and the importance of submitting the FAFSA in a timely manner. Learn to plan for such costs, how and where to search for diverse funding options, respective deadlines, and application procedures. Become acquainted with numerous options of repayment for federal and private student loans. Prerequisite: Fully enrolled in TRIO program and instructor permission.

**CE 120 Financial Literacy**  
*3-5 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. Prerequisite: Grade of C or better in MATH 40 or placement into MATH 70A.

*FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU*
## Collision Repair Technology

### ABT 161 Auto Body Repair I

1-21 Credits  
Body shop safety, use of common hand tools, power tools, body hand tool operations, and body fasteners will be covered. The study of mild and high strength steel, sheet metal design, and collision damage analysis.

### ABT 162 Auto Body Repair II

1-21 Credits  
Provides job planning, sheet metal repair, and metal finishing operations. Glass replacement, the alignment of doors, hoods, fenders, 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  
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 learn effective learning skills for workplace and educational success. Co-requisite: ABT 191.

### ABT 199 Special Topics

1-10 Credits  
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  
Unibody and frame repair; the replacement of structural components; fundamentals of electricity; reading of wiring diagrams; chassis wiring and repairs; repairing power windows, power seats, and other accessory units will be covered.

### ABT 265 Electrical Mechanical

1-21 Credits  
Repair of suspension and steering systems, brake systems, air conditioning systems, cooling systems, drive trains, fuel intake and exhaust systems, and restraint systems. 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  
Encourages 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.

## Commercial Truck Driving

### 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  
Enter-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, 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 driving jobs and commercial driving license testing. Graduates obtain Class A CDL License with endorsements for doubles and triples, tankers, hazardous material and no air brake restrictions. 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. Co-requisite: TRK 110.
## Communication Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRK 125</td>
<td>Bus Endorsement Training</td>
<td>1 Credit</td>
<td>Laboratory training and experience for entry-level passenger and school bus drivers and Commercial Driver’s License testing. Provides training to gain your passenger (P1) School Bus Endorsement. Prerequisite: Instructor permission.</td>
</tr>
<tr>
<td>TRK 191</td>
<td>Cooperative Work Experience</td>
<td>1-18</td>
<td>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.</td>
</tr>
<tr>
<td>TRK 199</td>
<td>Special Topics</td>
<td>1-10</td>
<td>Study and train to meet established local needs in the commercial truck industry, supplemental to courses currently offered.</td>
</tr>
<tr>
<td>TRK 297</td>
<td>Special Projects</td>
<td>1-18</td>
<td>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.</td>
</tr>
<tr>
<td>CMST 102</td>
<td>Interpersonal Communication</td>
<td>3</td>
<td>Theory and practice of interpersonal communication; understanding self and others while working to improve effective communication in one-on-one interactions. Formerly SPCH 102.</td>
</tr>
<tr>
<td>CMST 119</td>
<td>Digital Media Journalism</td>
<td>5</td>
<td>Introduces students to the skills and values of traditional journalism and provide a foundation for using digital tools and formats for gathering, organizing and presenting news in a rapidly evolving media landscape. Possible new forms of journalism and public affairs communication supported by user-generated content, peer-to-peer interactive, multimedia storytelling, and narrative data will be explored.</td>
</tr>
<tr>
<td>CMST 201</td>
<td>Intercultural Communication</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CMST &amp; 220</td>
<td>Public Speaking [C]</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CMST 230</td>
<td>Digital Communications</td>
<td>5</td>
<td>Discusses how new digital tools help ordinary people share their own identities in compelling and emotionally engaging forms. Critical look at the digital landscape mediating how we communicate with one another including the effects of social networking and 24/7/365 online existences and the personal and societal impacts of this new paradigm. Students will both design and build an online identity and narrate their process throughout the quarter, utilizing and comparing different platforms of digital communication. They will openly interact with one another and the world beyond as a necessary part of the course. Prerequisite: ENGL 087. Recommended: Basic level of comfort with computers and the Internet. This course does not meet the [C] Communications requirement distribution area.</td>
</tr>
<tr>
<td>CS 100</td>
<td>Introduction to Microcomputers</td>
<td>5</td>
<td>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, spread sheeting, email and correct file management. This is the same course as CS 101. Students cannot earn credit for both CS 100 &amp; CS 101. Recommended: Keyboarding skills.</td>
</tr>
<tr>
<td>CS 101</td>
<td>Modular Introduction to Microcomputers</td>
<td>1-5</td>
<td>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, spread sheeting, email and correct file management. This is the same course as CS 100. Students cannot earn credit for both CS 100 &amp; CS 101. Recommended: Keyboarding skills.</td>
</tr>
<tr>
<td>CS 104</td>
<td>Campus Computer Survival</td>
<td>2</td>
<td>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.</td>
</tr>
<tr>
<td>CS 105</td>
<td>Intermediate Computer Concepts</td>
<td>5</td>
<td>Provides computer user with an intermediate understanding of computer hardware, the operating system, software (including word processing, spread sheeting, dataset), file management, terminology, history, usage and ethics. Recommended: CS 100 (course intended for students who need additional training before CS 110).</td>
</tr>
</tbody>
</table>
| CS 110     | Introduction to Computers and Applications           | 5       | 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: Grade of C or higher in MATH 78E. 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 interactive XHTML forms.

**CS 141 Computer Science I JAVA** 5 Credits
Introduction to programming in the Java programming languages. Topics include structured programming concepts, functions, arrays and pointers, and object oriented concepts. Formerly CS& 141. Recommended: CS 121.

**CS 142 Perl Programming** 5 Credits
Perl Specialist CIW curriculum teaches students how to fully utilize the Perl programming language. Students learn the Perl syntax, the basics of using regular expression, how to use Perl data types, and how to access and manipulate files. Students are also introduced to database connectivity and debugging techniques.

**CS 191 Cooperative Work Experience** 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 192 Cooperative Seminar** 1-3 Credits
Explore issues related to their cooperative work experience focusing on effective workplace relationships. Students will learn leadership skills, resume skills, cover letters and interview techniques.

**CS 220 Digital Imaging Foundations** 5 Credits
Exposure to the history and future of global communication and how digital technologies are being used. Students will explore career opportunities in digital communication fields. Students will be introduced to software used to create digital art through the use of software packages such as Photoshop, Illustrator, Flash, InDesign and Dreamweaver.

**CS 221 Introduction to Digital Audio/Video** 5 Credits
Learn video technologies, basic equipment operation, video composition, basic lighting and audio, production planning, and visual storytelling. Format can include group projects or personal projects involving post-production editing. Topics include creation of digital video productions for inclusion in multimedia and Web applications such as QuickTime and creation of video productions using digital non-linear editing technology.

**CS 222 Desktop Publishing InDesign** 5 Credits
Designed to use advanced applications utilizing all components of desktop publishing. Emphasis on creation of student projects including: newsletters, business identity, brochures, and promotional materials. Principles of layout and design will be practiced.

**CS 223 Photoshop** 5 Credits
Develops beginning skills using raster-based images. Learn to apply these skills in developing on-screen, multimedia, and Web applications using imaging manipulating software. Introduces the techniques, technology, and theory of raster (bitmapped) in web, multimedia, digital video, and animation applications. Recommended: CS 220.

**CS 224 Computer Illustration (Illustrator)** 5 Credits
Introduces the techniques, technology, and theory of vector digital images in web, multimedia, digital video, and animation applications. Provides fundamental skills in visual communication, screen design, and typography. Students learn to apply these skills to the development of on-screen, multimedia, and Web applications using programs like Illustrator or similar vector software. Recommended: CS 220.

**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.

**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://www wwcc edu)
<table>
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<tbody>
<tr>
<td>CS 226</td>
<td>Web Design Specialist I</td>
<td>5</td>
<td>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).</td>
</tr>
<tr>
<td>CS 227</td>
<td>Web Design Specialist II</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 228</td>
<td>Website Design Specialist III</td>
<td>5</td>
<td>Designed to give proficiency in designing website utilizing: website templates, forms, rollovers, and basic animations and database-driven pages.</td>
</tr>
<tr>
<td>CS 229</td>
<td>Dynamic Website Design with PHP MySQL</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 230</td>
<td>Visual Basic Programming</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 231</td>
<td>Application Development</td>
<td>5</td>
<td>Study of advanced word processing procedures and techniques using a case-study, project-based approach.</td>
</tr>
<tr>
<td>CS 235</td>
<td>Introduction to Database Design and Theory</td>
<td>5</td>
<td>In-depth study of database theory and concepts including data 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.</td>
</tr>
<tr>
<td>CS 240</td>
<td>Application Integration using VBA</td>
<td>5</td>
<td>Focuses on the functions of MS Office applications, integrating uses with Visual Basic for Applications.</td>
</tr>
<tr>
<td>CS 241</td>
<td>Programming II (JAVA/C++)</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 242</td>
<td>Advanced Software Development</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 245</td>
<td>Advanced Database Development</td>
<td>5</td>
<td>Advanced study of database construction and operation. Topics include filtering, customized menus, and an introduction to programming. Recommended: CS 121.</td>
</tr>
<tr>
<td>CS 246</td>
<td>SQL and Relational Database Programming</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 250</td>
<td>Site Development Associate HTML V</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 260</td>
<td>Unix/Linux Operating Systems</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CS 261</td>
<td>PC Technician Lab</td>
<td>1-10</td>
<td>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 (MSCE) 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.</td>
</tr>
<tr>
<td>CS 265</td>
<td>CCNA 1-5 Credits</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>CS 266</td>
<td>CCNA 2</td>
<td>5</td>
<td>Introduction to the configuration of Cisco routers using the proprietary IOS operating system. This is the second course in the CCNA sequence.</td>
</tr>
<tr>
<td>CS 267</td>
<td>CCNA 3</td>
<td>5</td>
<td>In-depth coverage of the configuration and troubleshooting of Cisco routers in enterprise-wide networks. This is the third course in the CCNA sequence.</td>
</tr>
<tr>
<td>CS 268</td>
<td>CCNA 4</td>
<td>5</td>
<td>The second part of a two-course series on the configuration and troubleshooting of Cisco routers in enterprise-wide networks.</td>
</tr>
</tbody>
</table>

For the most current information see: [WWCC.EDU](http://WWW.WWCC.EDU)
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 third 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 290 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.

CS 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.

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.

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.

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.

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.

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.
CRIMINAL JUSTICE

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.

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.

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.

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 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.

Criminal Justice

CJ& 101 Introduction to Criminal Justice [SS] 5 Credits
Examines the relationships and respective responsibilities of different criminal justice agencies. Studies the movement through the system from initial investigation of the crime to ultimate release from confinement. Recommended: READ 088. Formerly CJ 101, Introduction to Criminal Justice.

CJ& 105 Introduction to Corrections 5 Credits
Review of the corrections field, tracing early American penal systems and philosophy to present day correctional programs. Emphasis on our contemporary penal system, incarceration, classification, various forms of release, and community-based correctional programs. Formerly CJ 105. Recommended: READ 088.

CJ& 106 Juvenile Justice [SS] 5 Credits
The development of criminal justice responses to juvenile deviance and delinquency. Examination of the legal, economic, political, social, and psychological impacts related to juvenile criminality. Formerly CJ 202, Crime and Delinquency. Recommended: READ 088.

CJ& 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.

CJ& 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.

CJ& 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: CJ& 101. Recommended: READ 088.

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

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### Culinary Arts

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA 110</td>
<td>ServSafe</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>CA 111</td>
<td>Storeroom Operations</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>CA 112</td>
<td>Introduction to the Culinary Arts</td>
<td>10</td>
<td>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.</td>
</tr>
<tr>
<td>CA 120</td>
<td>Culinary Arts Methods</td>
<td>9</td>
<td>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.</td>
</tr>
<tr>
<td>CA 121</td>
<td>American Regional Cuisine</td>
<td>4</td>
<td>Practice techniques for appetizers, salads, desserts, braidings, 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.</td>
</tr>
<tr>
<td>CA 122</td>
<td>Food, Farmers, and Culture</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>CA 130</td>
<td>Introduction to Baking</td>
<td>6</td>
<td>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.</td>
</tr>
<tr>
<td>CA 131</td>
<td>Advanced Baking and Pastry</td>
<td>5</td>
<td>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.</td>
</tr>
<tr>
<td>CA 132</td>
<td>Plated Desserts</td>
<td>2</td>
<td>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.</td>
</tr>
<tr>
<td>CA 133</td>
<td>Food and Wine/Beverage</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>CA 191</td>
<td>Cooperative Work Experience I</td>
<td>1-15</td>
<td>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.</td>
</tr>
<tr>
<td>CA 192</td>
<td>Cooperative Seminar I</td>
<td>2</td>
<td>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.</td>
</tr>
<tr>
<td>CA 240</td>
<td>French and Mediterranean Cooking</td>
<td>4</td>
<td>Learn and practice techniques for appetizers, salads, desserts, 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.</td>
</tr>
<tr>
<td>CA 241</td>
<td>Asian Cooking</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>CA 242</td>
<td>Nutritional Cooking</td>
<td>4</td>
<td>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.</td>
</tr>
</tbody>
</table>
CA 243 Food and Beverage Management

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, layout 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, 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.

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

DANCE

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 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 Modern/Contemporary Dance I [PE]

1 Credit

This course introduces students to contemporary modern dance as a physical practice and a performance art. Physical practice will include basic locomotor skills, sequencing of movement, physical problem solving, partnering/weight sharing, improvisation and performance. Aspects of the history and theory of modern dance will provide context for studio activities. Students will learn modern dance technique, as well as create, perform, adapt and critique original phrases and dances.

DANCE 161 Modern/Contemporary Dance II [PE]

1 Credit

This course introduces students to contemporary modern dance as a physical practice and a performance art. Physical practice will include basic locomotor skills, sequencing of movement, physical problem solving, partnering/weight sharing, improvisation and performance. Aspects of the history and theory of modern dance will provide context for studio activities. Students will learn modern dance technique, as well as create, perform, adapt and critique original phrases and dances.

DANCE 164 Dance Choreography [PE]

2 Credits

Emphasis on learning and practicing the fundamentals of rhythm and dance choreography. Students will develop, perform, and produce individual and group pieces for a dance theater production. Previous dance experience required.

DANCE 165 Dance Production I [PE]

2 Credits

Modern dance techniques with rehearsal and performance of student and faculty repertory, with a dance production.

DANCE 168 Dance Production III [PE]

2 Credits

Modern techniques with Modern Jazz Combinations. Previous dance experience required.
DANCE 169 Choreography II [PE] 2 Credits
Modern techniques with Modern Jazz Combinations. Previous dance experience required.

DANCE 170 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 172 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 include Rumba, Tango, Mambo, Samba, Merengue, and Salsa. In addition, basic social dance style, etiquette, dance positions, and leading/following techniques will be learned. No previous experience, special attire or footwear is required.

DANCE 174 Swing Dance II [PE] 1 Credit
Swing dance (commonly known as the jitterbug or the shag) is an energetic couple's style of social dance, made popular by the swing music of the 1940s. No previous experience or partner is needed.

DANCE 177 Advanced Jazz Dance [PE] 2 Credits
This course is designed for the advanced dancer and will cover intensive study of advanced skills, techniques and choreography of various jazz styles.

DANCE 180 Hip Hop I [PE] 1 Credit
Hip hop as a form of dance was born in the 1970s. This class will explore various styles of hip hop routines from today’s trends to old-school favorites. Class will include instruction on basic hip hop moves, focusing on building the technique, strength and flexibility to properly execute beginning level tricks and routines. No previous experience required.

DANCE 181 Hip Hop II [PE] 1 Credit
Hip hop as a form of dance was born in the 1970s. This class will explore various styles of hip hop routines from today’s trends to old school favorites. Class will include instruction on basic hip hop moves, focusing on building the technique, strength, and flexibility to properly execute beginning level tricks and routines. No previous experience required.

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 152 Advanced Mechanics I 1-10 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 153 Advanced Mechanics II 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. Students must be seeking a certificate or degree in Diesel Equipment Mechanics. Prerequisite: Instructor permission.

DT 154 Advanced Mechanics III 1-10 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. Prerequisite: Instructor permission.

DT 155 Advanced Mechanics IV 1-10 Credits
Study of preventive maintenance on medium and heavy duty vehicles. Topics include truck classifications, PM 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.

DT 298 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 299 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.

Drama

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 THEA 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 THEA 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 THEA 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 THEA 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 THEA 299.

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Early Childhood Education

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& 110 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. Recommend: READ 088. Instructor permission required.

ECED& 112 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. Recommend: READ 088

ECED& 139 Admin. Early Learning Program | 3 Credits
Develop administrative skills required to develop, open, operate, manage, and assess early childhood education and
Early Childhood Parenting Education

ECPE 030 Parent/Child Movement and Creative Dance I 1 Credit
Parents will expand their skills and understanding of how babies move, interact, and communicate, and how they can integrate their environment. 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, interact, and communicate, and integrate their environment. 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, interact, and communicate, and integrate their environment. 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 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 birth to age five 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.

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 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 three years-old provide the laboratory experience.

ECPE 072 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 three years-old provide the laboratory experience.

ECPE 100 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 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
Emphasis is given to application of economic principles and concepts in solving economic problems encountered by individuals at the firm or household level up to the national level. College transfer students are encouraged to take ECN& 201 and ECN& 202.

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 ECN& 201 and AGRI 201. Formerly ECN 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 ECN 201, Fundamentals of Macroeconomics.
**Education**

**EDUC 111 Teaching and Learning Lab** 1-3 Credits
Designed for future teachers and those pursing 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 nonprofit 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. Recommended: 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& 202 Intro to Education [SS]** 5 Credits
Explores units on teaching as a profession and the history and philosophy of education. Includes observation of classroom procedures, critical reports, and research, as well as philosophical foundations and theories of education, legal issues, historical foundation, administration and governance, curriculum of schools. Recommended: READ 088. Formerly ED 110, Introduction to Education.

**EDUC& 203 Exceptional Child** 3 Credits
Explore characteristics of children with special needs. Topics include legislation affecting special education as well as causes and classification of handicapping conditions. Strategies to teach all children are practiced. Recommended: READ 088. Student may not earn credit for both EDUC& 203 and ECE 155. Formerly ED 155, Introduction to Exceptional Student.

**Energy Systems**

**EST 100 Refrigeration Basics I** 4 Credits
This course provides students with a basic understanding of the properties and laws of physics which are applicable to the electrical and 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 refrigerant 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 Bioenergy** 2 Credits
Plant Operators and Technicians work for facilities that convert biomass into electricity, heat, transportation fuels, clean water, 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 cogeneration facilities. This course introduces you to a training program which will provide you with a strong skill set in plant and facility operations.

**EST 105 Process Support Systems** 3 Credits
Review key biomass conversion process technologies, i.e. types of bio-chemical and mechanical conversion processes used at first generation and advanced biofuel plants, municipal wastewater treatment plants, industrial food and beverage processors, pulp and paper mills, and cogeneration facilities. Focus on the often universal, critical process support systems (non-electrical) that enable the conversion of different types of biomass into heat and power, transportation fuels, clean water, food and beverage products, and/or high value chemicals and products.

**EST 106 Plant Equipment and Controls** 3 Credits
Develop a good working knowledge of the core equipment used to control and operate conversion facilities, such as first generation and advanced biofuel plants, municipal wastewater treatment plants, industrial food and, beverage processors, pulp and paper mills, and...
cogeneration facilities. Learn to keep operations functional with high degree of efficiency. Add to each student’s Operator Handbook to become familiar with key process, equipment, the principles of process controls, and technical operating procedures. Develop knowledge about equipment’s mechanical integrity requirements - the ranges and thresholds with which the equipment can be operated safely and still function as intended. Participate in scenarios to ID and correct abnormal operating conditions. Engage in safety practice to prevent emergencies: using personal protective equipment (PPE), Emergency Rapid Response and Procedures, Lockout/Tag out, and Process Safety Management (PSM).

EST 108 Materials and Fasteners 4 Credits
Learn to identify electrical materials and their applications. Students will classify, grade and use fasteners, such as bolts, screws and rivets. Proper torque values are explained.

EST 109 Orientation to the Energy Industry 3 Credits
This course is a survey of the Energy Industry looking at different jobs, working conditions, employment structure, and employee/employer relationships. Each student builds a personal job portfolio to include letters of application, resume, references, and job interview techniques.

EST 110 Refrigeration Components 5 Credits
This course covers the mechanical equipment used in the refrigeration and air conditioning industry. Students will be introduced to the proper troubleshooting techniques and practice using those techniques to repair this equipment. The proper application and repair of evaporators, condensers, compressors, expansion devices, and special components will be studied and practiced. Prerequisite: EST 100 or 101; or instructor permission.

EST 115 Industrial Mechanics 5 Credits
This course addresses the needs of the multi-crafted maintenance technician and presents an all-encompassing view of the field of industrial maintenance, which covers a variety of technical skill areas. These include, but are not limited to safety, mechanical installation, fasteners and torque, fluid power, piping systems, power transmission, shaft alignment, vibration analysis, and print reading.

EST 120 Air Conditioning Systems 4 Credits
This course applies psychrometrics to residential and light commercial package and split comfort air conditioner systems. Students will learn to install, maintain, and troubleshoot comfort systems to maximize energy efficiency. Course will emphasize safety, code compliance, electrical and mechanical systems installation, operation, maintenance, troubleshooting and repairs of typical residential and light commercial air conditioning equipment. Prerequisites: EST 100 and 101; or instructor permission.

EST 125 Cooperative Seminar 1 Credit
This is a seminar for students in cooperative training. A review of work ethics and job performance will be covered. Co-requisite: EST 191.

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 150 Electric Motors and Motor Maintenance 5 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 4 Credits
The purpose of this course is to introduce plant operations - for first generation and advanced biofuel plants, municipal wastewater treatment plants, industrial food and beverage processors, pulp and paper mills, and/or cogeneration facilities. The first half of the course focuses on process improvement to help build an understanding that every employee at a plant has the ability and duty to help improve day-to-day operations. The second half of the course focuses on specific tools to improve the total quality of a process, including safety, monitoring, emergency response, and procedure writing - using biodiesel and pulp and paper mill facilities as the vehicles of learning.

EST 202 Bio-Chemical Conversion 5 Credits
The conversion of existing agricultural and forestry products and waste into biofuels or other value-added products is of significant interest today - for first generation and advanced biofuel plants, municipal wastewater treatment plants, industrial food and beverage processors, pulp and paper mills, and/or cogeneration facilities. Converting lignocellulosic biomass, material like wood and grass, into useful fuels and chemicals is an important step in reducing our reliance on petroleum, without competing with the food supply. The bio-chemical conversion approach to lignocellulosic biofuels involves first breaking down the substances that make up biomass into their chemical constituents. Next, microbes are used to ferment useful chemicals that can be separated and used as a fuel or chemical precursor to other valuable products. The first half of this course will focus on the structure of lignocellulosic biomass and methods to break it down. The second half will focus on methods for producing useful products via fermentation and anaerobic digestion.

EST 203 Thermo-Chemical Conversion 5 Credits
In this course, basic concepts on the wide variety of thermochemical conversion topics will be presented. These topics will focus on well established and emerging technologies in combustion, gasification, and pyrolysis, as well as the various reactors associated with each process. The use of biomass, as well as conventional feedstock will be explained, as well as variations in operation that each require. Students are expected to learn the basic chemistry of each reaction, the products from each reaction, and the application of each to industrial processes.

EST 204 Solid Waste Management 3 Credits
EST 204 builds on EST 201 Plant Operations by focusing on operations that collect, transport, sort, and dispose of waste materials. Such operations, including landfills, handle hazardous and non-hazardous residential, commercial, and industrial wastes. These operations function under strict federal and state air, soil, and water pollution control permitting and reporting requirements. Solid waste management operations sort recyclables through material recovery facilities (MRFs), separate organic materials (food waste and yard debris) for composting and/or anaerobic digestion, recover landfill gas and upgrade it to pipeline quality biomethane, and/or combust a portion of their non-organic wastes to produce combined heat and power (cogeneration).

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 120 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, thermistors, transducers, phototells, 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** 4 Credits

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** 4 Credits

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** 4 Credits

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 270 Wind Power Plant Operations and Advanced Mechanical Systems** 5 Credits

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 275 Robotics-Mechatronics** 5 Credits

Robotics and Mechatronics is designed to teach programming, interface and material handling, design, 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 285 Intro to Instrumentation 5 Credits
Electrical safety and advanced control principles are covered in this course with a strong emphasis on input/output calibration, wiring, PID loop control, and testing procedures for pressure, temperature, level and flow controls used in the process and manufacturing industry. This course also covers troubleshooting of industrial control scenarios. Prerequisite: EST 133.

EST 292 Leadership Seminar 2 Credits
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 1-18 Credits
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 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.

ENT 112 Blueprint Reading 2 Credits
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 3 Credits
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 5 Credits
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 123 Computer Aided 3-D Modeling 3 Credits
Introduction to advanced applications of computer aided drafting and design of three-dimensional graphics and engineering drawings using AutoCAD 3D modeling software. Course includes the production of engineering graphics and documents. Prerequisite: ENT 121 or instructor permission.

ENT 131 Engineering Materials 4 Credits
Introduction to the fundamental principles of materials commonly used for engineering projects. Emphasis is on the properties and applications of materials such as mineral aggregates, concrete, timber, steel, aluminum, and plastic materials. Students shall complete ASTM and/or AASHTO laboratory test methods of materials. Formerly CET 242. Pre-or co-requisite: Grade of C- or better in OCSUP 107, MATH& 141, or instructor permission.

ENT 132 Soil Mechanics for Construction 4 Credits
Introduction to the fundamental principles of soil mechanics as it relates to engineering design. Emphasis is on the identification, classification, engineering properties, compaction, aggregate gradations, bearing capacities, and construction consideration of soils. Students shall complete ASTM and/or AASHTO laboratory test methods of soils. Formerly CET 224. Pre- or co-requisite: Grade of C- or better in OCSUP 107, MATH& 141, or instructor permission.

ENT 141 Estimating 3 Credits
Introduction to the fundamental principles of identifying and estimating construction costs of engineering projects. Emphasis is on material quantity take-offs, development of material, labor, equipment, and overhead costs, construction document interpretation, and bidding strategies. Course includes a final project. Formerly CET 100. Pre- or co-requisite: Grade of C- or better in OCSUP 107, MATH& 141, or instructor permission.

ENT 150 Introduction to GIS 3 Credits
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 3 Credits
Instruction in advanced topics of GIS. Emphasis includes geo-spatial analysis, creation and use of geo-databases, geo-coding, geo-referencing, digital elevation models, and Lidar technology using ESRI ArcGIS for Desktop software. Formerly CET 251. Pre-or co-requisite: ENT 161 and ENGR& 111 or instructor permission.

ENT 152 Practical Field Applications of GIS 3 Credits
In this course the student will learn how to process the commonly available types of remote sensing data in ArcGIS for agricultural farm management practice purposes. This includes mapping of the data, soil and crop health analysis, and fertilizer prescriptions. Prerequisites: ENT 150 and ENT 151.

ENT 161 Elementary Surveying 3 Credits
Introduction to the fundamental principles of plane surveying with emphasis on the fundamentals of distance measurement, levels, theodolites, global positioning, legal descriptions, and
ENT 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: ENT 191. Formerly CET 192.

ENT 202 Construction Inspection 3 Credits
Introduction to the fundamental principles of construction inspection for engineering projects. Emphasis is on quality control practices and procedures, inspection methods, the role of the inspector, state and local contract specifications, and field experience. Course includes site visits and oral and written reports. Formerly CET 202.

ENT 212 Stormwater Conveyance Systems 5 Credits
Introduction to the fundamental principles of analysis and design of storm water conveyance systems. Emphasis is on orifices, weirs, pipe flow, open channel flow, the hydrological cycle, surface water runoff analysis, and the design of conveyance systems, culverts, and stormwater outlet protection. Prerequisite: WTM 215 or instructor permission. Formerly CET 166, Hydrology.

ENT 221 Engineering Mechanics - Statics 5 Credits
Instruction in the fundamental principles of 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. Student may not earn credit for both ENT 221 and ENGR& 214. Pre- or co-requisite: Grade of C- or better in OCSUP 107, MATH& 142, or instructor permission.

ENT 222 Engineering Mechanics - Strength 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: ENT 221 or instructor permission. Students may not earn credit for both ENT 222 and ENGR& 225. Formerly CET 222.

ENT 231 Transportation and Highway Engineering 4 Credits
Introduction to fundamental principles of transportation engineering and highway design. Emphasis is on vertical and horizontal roadway curves, mass diagrams, traffic studies, and level of service analysis. Course includes written reports, oral presentations, and a final project. Formerly CET 263. Prerequisite: ENT 162 and ENT 122, or instructor permission.

ENT 232 Pavement Design 3 Credits
Introduction to fundamental principles of pavement design. Emphasis is on asphalt mix design, asphalt pavement roadway sections, concrete pavement roadway sections, and pavement management. Course includes oral and written reports, and site visits. Prerequisite: ENT 132 and ENT 231, or instructor permission. Formerly CET 226.

ENT 281 Engineering Design Fundamentals 5 Credits
Engineering technology students will produce a capstone design project using cumulative training gained from the program of instruction. Emphasis is on the fundamental principles of environmental issues, permits, project prospectus, engineering and surveying, design calculations, construction drawings and specifications, and cost estimates for a typical public works project. Course includes oral and written reports. Formerly CET 221 Prerequisites: ENT 163 and ENT 222.

ENT 292 Leadership 2 Credits
Students explore issues related to leadership 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 CET 299.
ENGR 202 Design of Logic Circuits 5 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& 151 and either CS 121, CS& 131, or CS& 141. Instructor permission required.

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 - 1 Credit
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 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 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 149 Classic Children’s Literature [H] 5 Credits
Examines literary fiction directed to children. Formerly LIT 149.

ENGL 212 African-American Literature [H] 3 Credits
Focuses on the study of major African-American writers. 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 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 by 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 WST 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
Surveys 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 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
ENROLOGY AND VITICULTURE

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 113 Advanced Canopy Management 2 Credits
Designed for the viticulture student or grower who wishes to acquire a better grasp of canopy management: metrics and principles of ideal canopy management. Prerequisite: Completion of EV 102 with a grade of C or higher, or instructor permission.

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.

EV 194 Weather for Viticulturists 2 Credits
Outlines basic principles of weather and specifically the seasonal patterns that affect the Pacific Northwest. Various seasonal weather hazards to viticulture will be examined with respect to their origin along with the steps grape growers can take to mitigate such events: frost, hail, drought, excessive heat, winter cold injury and untimely rain, among others. Various mid- and long-range models offered by the National Weather Service and other meteorological entities that may assist the grape grower in making timely vineyard operations decisions will also be studied.

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. Must be enrolled in the Viticulture program. 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.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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 malolactic fermentations, as well as winery 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 231 Pesticide Licensing for Viticulture 1 Credit
Preparation for the State of Washington Private Applicator's pesticide licensing exam with a special focus on wine grapes. Successful completion of this and the state exam will result in issuance of the Washington State Private Applicator's Pesticide License.

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 Credit
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.

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.

FRR 125 Farrier Short Course 1-21 Credits
Intensive six-week course designed to introduce a beginner to the needs and demands of the farrier profession. This course will give students the knowledge and skills to successfully shoe horses. This course is offered summer quarter only.

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 workplace and educational success. Co-requisite: FRR 191.

FRR 194 Basic Shoewing 1-18 Credits
Introduction to basic horse shoeing and forge work. Includes basic anatomy, basic balance, and basic shoeing.

FRR 195 Intermediate Shoewing 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 Shoewing 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 Shoewing 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 AdvancedForging - 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 Shoewing 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.

Fire Science

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
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 115 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.

FRCH& 121 French I [H] 5 Credits
First quarter of a sequential 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 101, French I.

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. Prerequisite: FRCH& 121 or instructor permission. 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.

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 as 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
Examines 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: MATH 78E; 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
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. Prerequisites: MATH 74C; 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 219 American Government 1-5 Credits
A study of 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 from 1898 to the present. An emphasis is placed on the establishment of our democratic form of government and the Constitution and Bill of Rights. All topics will be viewed through the lens of civic involvement and responsibility. Recommended: READ 088. Formerly GEOL 120, Environmental Earth Science.

GEOG 220 Environmental Geology 1-5 Credits
The study of geologic environments through a systems approach, which emphasizes the interconnections of Earth processes, Earth materials, and human activities. Includes student activities and projects conducted in the laboratory and outdoors. One all-day field trip is required. 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 121, Pacific Northwest Geology.

GEOG 222 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. 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. Formerly GEOL 210, Pacific Northwest Geology.

GEOG 223 Introduction to Climate and Climate Change [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. Prerequisites: MATH 74C; appropriate placement score or grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088.

Geology

GEOL 101 Intro to Physical Geology [NS] 5 Credits
Study of the materials and processes of the earth. Topics include rocks and minerals, geologic time, volcanic activity, plate tectonic theory, earthquakes, earth's interior, and the surface processes controlled by wind, water movement, and gravity. Laboratory exercises involve identification of common rocks and minerals, use of topographic and geologic maps, and knowledge gained through the study of earthquakes. Course also includes one local field trip. 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 101, Physical Geology.

GEOL 103 Historical Geology [NS] 5 Credits
Study of the geological history of the earth; evolution of the earth, oceans, mountain building processes, and life. The principles of stratigraphy, biostratigraphy, geochronology, fossil identification, paleogeographic reconstructions, and plate tectonics are discussed. 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 201, Historical Geology.

GEOL 110 Environmental Geology [NS] 5 Credits
The study of geologic environments through a systems approach, which emphasizes the interconnections of Earth processes, Earth materials, and human activities. Includes student activities and projects conducted in the laboratory and outdoors. One all-day field trip is required. 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 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 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 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 experience, 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 091 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 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.

HIST 105 Roots of World Issues [D, SS] 5 Credits
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.

HIST 120 American Presidency [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 POLS 120.

HIST& 126 World Civilization I [H, SS] 5 Credits
Introduction to world history from a global perspective, spanning the origins of civilization through the classical world and the birth of Islam. Specifically addresses the evolving character of civilization as well as humankind’s search for meaning in the face of historic change. Recommended: READ 088 or higher. Student may not earn credit for both HIST& 126 and 116. Formerly HIST 105, World History.

HIST& 127 World Civilization II [H, SS] 5 Credits
Introduction to world history from a global perspective, from Tang-era China to the late 18th century Europe’s “Age of Revolution”. Specifically tracks the evolution of world civilizations to nation-states, establishing the basic character of the modern world. Recommended: READ 088 or higher. Student may not earn credit for both HIST& 127 and 117. Formerly HIST 107, Early Modern Civilization.

HIST& 128 World Civilization III [H, SS] 5 Credits
Introduction to the history of world cultures from a global perspective, covering the last two centuries of world history, from roughly 1800 to present. Recommended: READ 088 or higher. Student may not earn credit for both HIST& 128 and 118. Formerly HIST 109, Modern Civilization.
HIST 146 US History I [SS]  5 Credits
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. Formerly HIST 201, American History I.

HIST 147 U.S. History II [SS]  5 Credits
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. Formerly HIST 202, American History II.

HIST 148 US History III [SS]  5 Credits
Survey of the significant individuals and events that have shaped the growth and development of the United States and the American civilization 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. Formerly HIST 203, American History III.

HIST 205 American Environmental History [SS]  5 Credits
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.

HIST 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 HIST 211 and POLS 211.

HIST 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 HIST 212 and POLS 212.

HIST& 214 Pacific NW History [SS]  5 Credits
Survey of the growth and development of the Pacific Northwest Region from the early Native American societies to the present. 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. Formerly HIST 210, Northwest History.

HIST 215 Women in US History [D, SS]  5 Credits
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& 215 and WST 215. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly HIST 280, Women in US History. Recommended: READ 088 or higher.

HIST 250 Introduction to Latin America [D, SS]  5 Credits
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.

HIST 255 Traditional East Asian Civilization [SS]  5 Credits
Survey of Chinese and Japanese history and culture from prehistory to present. Recommended: READ 088 or higher.

HIST 256 Modern East Asian Civilization [SS]  5 Credits
Survey of Chinese, Japanese, Korean, and Vietnamese history and culture from 1800 to the present. Recommended: READ 088 or higher.

HIST 262 The Modern Middle East [SS]  5 Credits
Introduction to the political, social, economic, and cultural patterns of development in the Middle East from 1798 to the present. Topics begin with the Reforms of the Ottoman Empire and conclude with the American occupation of Iraq. Recommended: READ 088 or higher.

HIST 299 Special Projects in History 1-5 Credits
A course providing students the opportunity to research an area of history under the supervision of an instructor. Prerequisite: One course in history and instructor permission.

HONR 101 Honors I  2 Credits
Faculty mentors across multiple disciplines will focus on a singular social topic to model the expectations of a cross-discipline honors 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
services, chemical dependency recovery, and motivational and mental health counseling, community support, rehabilitation, crisis intervention, and rehabilitation centers. Focus is on clinical skills in human service professions and how to apply those skills in a variety of human services organizations and with a broad spectrum of clients. 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 in Human Services II 3 Credits
Continuation of HSS 240. 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. Prerequisite: HSS 240. Instructor permission required.

HSS 242 Human Services Practicum Seminar II 2 Credits
Continuation of HSS 241. Students will complete and submit practicum documentation, address legal and ethical issues related to their site, track progress on practicum learning objectives, network with other students, self-evaluate their progress, and discuss trends and practices. Co-requisite: HSS 241. Instructor permission required.
objectives, network with other students, self-evaluate their progress, and discuss trends and best practices. Prerequisite: HSS 142. Co-requisite: HSS 241. Instructor permission required.

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.

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 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.

Industrial First Aid

IFA 022 AHA Heartsaver First Aid .4 Credit
A fundamental training program in emergency care that incorporates CPR and other emergency skills into a single course. Emphasizes utilizing the priorities of care and approach to the patient as demonstrated by professional emergency care providers. The core program provides minimum information and skills for a variety of environments and can be supplemented with additional first aid topics specific to the needs of the course participants. Available on-campus as well as on a contract basis throughout Walla Walla and Columbia counties.

IFA 023 AHA Heartsaver First Aid-Recertification .2 Credit
A review of AHA Heartsaver First Aid that provides the student with CPR training and other emergency skills. Priorities of care are reviewed, and all components of the basic course are demonstrated and practiced. In order to take the recertification course, the basic course must have been taken within the prior two-year period. Students must have AHA Heartsaver First Aid card issued within the last two years to enroll.

John Deere Technology

JD 101 John Deere Fundamentals and Orientation 3 Credits
Introduction to manuals, service advisor information system, engine classifications, and serial numbers. Warranty, work orders, and John Deere recommended service department policies and procedures are explained. Orientation of John Deere product lines and the evolution of these products. The safe operation of shop tools will be demonstrated and a forklift safety and operation test will be included.

JD 102 Forklift Safety Training and Certification 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.
JD 105 John Deere Hydraulics  8 Credits
The principles and application of fluid flow and hydraulic components are discussed. Testing and repair of low-pressure and high-pressure systems and control circuits are explained, demonstrated, and practiced. Offered to second year students only. Formerly JD 205.

JD 115 John Deere Electrical  8 Credits
Provides basic electrical principles and applications of magnetism, electromagnetism, and the safe utilization of electrical test meters. Principles of operation, testing and repair of ignition systems, cranking systems, and charging systems are demonstrated and practiced. Student may not earn credit for both JD 115 and JDAS 115.

JD 120 John Deere Heating and Air Conditioning  4 Credits
Theory, operation, and repair of late model John Deere air conditioning, heating, and ventilation systems are discussed. Recovery, recycling, and recharging of the air conditioning systems are demonstrated and practiced.

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  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. Student may not earn credit in both JD 190 and JDAS 190.

JD 191 Cooperative Work Experience II  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. Student may not earn credit in both JD 191 and JDAS 191.

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 qualities 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
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 Train  8 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 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.

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  3 Credits
Provides proper performance of John Deere planting equipment. Topics include theory, design, principles of operation, proper setup and adjustment of all planting equipment. Student may not earn credit for both JD 225 and JDAS 225.

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 row crop, 4-WD, and combines. Construction, fluid flow, electrical flow, and testing of systems are explained, demonstrated, and practiced.

JD 240 John Deere Advanced Power Training II  4 Credits
Explores principles, function, and application of electronic controlled transmissions as found on row crop, 4-WD, and other agriculture equipment.

JD 290 Cooperative Work Experience III  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.
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 054 Special Topics in Math 1-5 Credits
Specific math needs are met for individual students. Student and instructor determine areas of emphasis.

MATH 067 Applied Math 1-5 Credits
Operations of addition, subtraction, multiplication and division applied to real numbers. Signed number, inequalities, polynomials, fractions, rectangular coordinates, equations, radicals and exponents.

MATH 070A Proportional Reasoning and Applications 2.5 - 5 Credits
Introduces students to beginning problems solving methods. Proportional reasoning and the use of appropriate formulae to model and solve problems is emphasized. Prerequisite: Grade of C- or higher in Math 40, appropriate score on placement exam, or permission of the Mathematics Department.

MATH 072B Pre-Algebra 2.5 - 5 Credits
Explores mathematical concepts that are foundational to success in algebra. Course will investigate properties of equality and examine how they can be used to solve linear equations in one variable and to solve a formula for a given variable. Prerequisite: Grade of C- or higher in Math 70A, appropriate placement score on placement exam, or permission of the Mathematics Department.

MATH 074C Beginning Algebra I - Linear Equations 2.5 - 5 Credits
Introduction to modeling with linear equations in a variety of ways. Using applications, students will interpret two-variable linear equations and systems of equations. Course will demonstrate methods for solving systems of linear equations and methods for generating equations of lines. Prerequisite: Grade of C- or higher in Math 72B, appropriate score on placement exam, or permission of the Mathematics Department.

MATH 076D Beginning Algebra II - Polynomials and Quadratics 2.5 - 5 Credits
Introduces operations on and evaluation of polynomial expressions, expressions with integer exponents, expressions and equations involving square roots, and quadratic equations. Prerequisite: Grade C- or higher in Math 74C, appropriate score on placement exam, or permission of the Mathematics Department.

MATH 078E Intermediate Algebra 2.5 - 5 Credits
Exposes students to the concepts of functions, domain and range, and focuses on exponential and logarithmic functions. Prerequisite: Grade C- or higher in Math 76D, appropriate score on placement exam, or permission of Mathematics Department.

MATH 080F Advanced Topics in Intermediate Algebra 2.5 - 5 Credits
Techniques used to simplify rational and radical expressions and to solve rational and radical equations will be covered. Prerequisite: Grade of C- or higher in Math 78E, appropriate score on the placement exam, or permission of the Mathematics Department.

MATH& 107 Math in Society [NS, Q] 5 Credits
Emphasizes mathematical reasoning, mathematical habits of thought, mathematical decision-making, mathematical communication, and the use of mathematical symbols, techniques and computations. Topics include proportional reasoning, mathematics of personal finance, probability, descriptive statistics, and growth and decay models (linear and exponential). Prerequisite: Grade of C or higher in MATH 078E or permission of the Mathematics Department. Formerly MATH 107, Mathematics: A Practical Experience.

MATH& 115 Finite Mathematics [NS, Q] 5 Credits
Study of 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 078E or permission of the Mathematics Department.

MATH& 131 Mathematics for Elementary Education I [NS] 5 Credits
MATH& 131 is the first 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 205, Math for Elementary School Teachers I. Prerequisite: Appropriate placement score or grade of C or higher in MATH 078E; or permission of Mathematics Department.

MATH& 132 Mathematics for Elementary Education II [NS, Q] 5 Credits
MATH& 132 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 topics in geometry, statistics, and measurement pertaining to mathematics taught at the elementary school level. This course satisfies the quantitative skills required for the AA degree, provided that MATH& 132 has also been completed with a grade of C- or higher. 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& 141 Precalculus I [NS, Q] 5 Credits
The first in a series of two courses designed to provide an in-depth study of functions to prepare students for advanced mathematics courses. Graphical analysis of concepts is emphasized through the use of technology. Topics include working with algebraic expressions, solving equations algebraically and graphically, and a detailed analysis of the algebraic and graphical properties of various functions. Prerequisite: Grade of C or higher in MATH 080F, appropriate score on placement test or permission of the Mathematics Department. Formerly MATH 109, Precalculus I.

MATH& 142 Precalculus II [NS, Q] 5 Credits
The second course of the Precalculus sequence. Graphical analysis of concepts is emphasized through the use of technology. Topics include unit circle and triangle trigonometry, algebraic and graphical analysis of trigonometric and inverse trigonometric functions, applications of trigonometric functions, vectors, parametric equations, polar coordinates, and optional conic sections. Prerequisite: Grade of C or higher in MATH& 141 or permission of the Mathematics Department. Formerly MATH 110, Precalculus II.

MATH& 146 Introduction to Statistics [NS, Q] 5 Credits
Study of both descriptive and inferential statistics. Topics include data presentation, and analysis, measures of central tendency and dispersion, sampling distributions, parameter estimation hypothesis testing, and linear regression. Formerly MATH& 146. Prerequisite: Grade of C or higher in MATH 078E, appropriate score on placement test, or permission of the Mathematics Department.

MATH& 148 Business Calculus [NS, Q] 5 Credits
Introduction to calculus as applied to business and economics as well as the behavioral, social, and life sciences. Topics include functions, exponential and logarithmic function derivatives and their applications, integrals and their applications. Prerequisite: Grade of C- or higher in MATH& 141, appropriate score on placement exam, or permission of the Mathematics Department. Formerly MATH 121, Survey of Calculus.

MATH& 151 Calculus I [NS, Q] 5 Credits
The first in a sequence of four 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. Topics include limits and continuity, derivatives and their applications. Prerequisite: Grade of C- or higher in MATH& 142 or permission of the Mathematics Department. Formerly MATH 124, Calculus with Analytic Geometry I.

MATH& 152 Calculus II [NS, Q] 5 Credits
Continuance of MATH& 151, topics include the definite integral, integration techniques and applications of integration. Prerequisite: Grade of C- or higher in MATH& 151 or permission of the Mathematics Department. Formerly MATH 125, Calculus with Analytic Geometry II.

MATH& 153 Calculus III [NS, Q] 5 Credits
Continuance of MATH& 152, topics include differential equations, infinite sequences and series, parametric curves, vectors, and vector-valued functions. Prerequisite: Grade of C- or higher in MATH& 152 or permission of Mathematics Department. Formerly MATH 126, 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
Introduction to multi-variable calculus. Topics include vector-valued functions, partial derivatives, directional derivatives, multiple integration, vector analysis, line and surface integrals, Green’s and Stokes’ theorems. Prerequisite: Grade C- or higher in MATH& 153 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 72B 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 145 Office Emergencies for Medical Assistants 1 Credit
Recognize emergencies and distinguish between emergency and non-emergency situations. It gives the student the knowledge and theory for appropriate response to office/clinic emergencies. Includes instruction in emergency response guidelines, documentation and emergency recordkeeping, recognizing victims of abuse and neglect, sudden illness, cardiac emergencies, CPR, psychological issues related to emergency response and burnout. Prerequisite: Admission to the Medical Assisting program. Recommended: READ 088 or higher.

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 payor guidelines and collection procedures. Coding topics will include the proper application of CPT, ICD-9-CM and HCPCS coding along with an introduction to ICD-10-CM. Prerequisite: Admission to the Medical Assisting Program.

MEDA 191 Medical Assisting Practicum 1-7 Credits
Opportunity for students to use the skills they have acquired throughout the Medical Assisting program in a medical office or clinic. Co-requisite: MEDA 192.

MEDA 192 Medical Assisting Seminar 2 Credits
This hybrid seminar meets once a week and online for those students enrolled in MEDA 191. Students will discuss the weeks experiential activities in the clinical setting as well as the legal and ethical issues encountered, and will have the opportunity to ask questions and receive input from the instructor. Creation of resumes and job interviewing skills will be introduced. Additionally, students will receive guidance and preparation for participation in post-graduation certification examinations. Prerequisite: Completion of first three quarters of MA program. Co-requisite: MEDA 191.

Music

MUSC 102 Music Fundamentals I 3 Credits
An introduction to basic musical skills for students interested in the piano, reading music, song-writing, and preparing for the study of Music Theory. Formerly MUS 102.

MUSC 103 Music Fundamentals II 3 Credits
An introduction to basic musical skills for students interested in the piano, reading music, song-writing, and preparing for the study of Music Theory. Prerequisite: MUSC 102 or instructor permission. Formerly MUS 103.

MUSC 104 Music Fundamentals III 3 Credits
An introduction to basic musical skills for students interested in the piano, reading music, song-writing, and preparing for the study of Music Theory. Prerequisite: MUSC 103 or instructor permission. Formerly MUS 104.

MUSC& 105 Music Appreciation [D, H] 5 Credits
Emphasizes the development of a broad range of critical listening skills needed to appreciate the abundant variety of the world's music. Includes guided hands-on musical activities, class participation, and active listening to music of many cultures. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly MUS 101, Music Appreciation.

MUSC 110 History of American Music [H] 5 Credits
An audiovisual tour of America's truly original music, jazz, from European and West African roots, to the blues of the Mississippi Delta and the birth of jazz in New Orleans, to the music of Louis Armstrong, Duke Ellington, John Coltrane, Wynton Marsalis and many others. Formerly MUS 110.

MUSC 116 College Voice I [HP] 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUS 116.
MUSC 117 College Voice II [HP] 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUSC 117.

MUSC 118 College Voice III [HP] 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUSC 118.

MUSC 126 Jazz Combo I [HP] 1-3 Credits
Jazz combos give students an opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The combos perform regularly including concerts and professional engagements. Prerequisite: Instructor permission. Formerly MUSC 126.

MUSC 127 Jazz Combo II [HP] 1-3 Credits
Jazz combos give students an opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The combos perform regularly including concerts and professional engagements. Prerequisite: Instructor permission. Formerly MUSC 127.

MUSC 130 Piano Fundamentals/Blues 1-2 Credits
A hands-on approach to America's truly original music, the Blues. Basic piano techniques will be learned in a course piano setting with an emphasis on the improvisatory and universal language of the blues. Formerly MUSC 130.

MUSC 131 Applied Music I 1-2 Credits
Private music lessons with a college-approved instructor. Two college transfer credits are granted for a one-hour lesson per week, and one credit for a half-hour lesson per week. Appropriate practice hours per lesson required. Formerly MUSC 131.

MUSC 132 Applied Music II 1-2 Credits
Private music lessons with a college-approved instructor. Two college transfer credits are granted for a one-hour lesson per week, and one credit for a half-hour lesson per week. Appropriate practice hours per lesson required. Formerly MUSC 132.

MUSC 133 Applied Music III 1-2 Credits
Private music lessons with a college-approved instructor. Two college transfer credits are granted for a one-hour lesson per week, and one credit for a half-hour lesson per week. Appropriate practice hours per lesson required. Formerly MUSC 133.

MUSC& 141 Music Theory I [H] 5 Credits
Basic musical concepts and terminology through analysis, listening and keyboard practice; part writing, composition; ear training and sight singing. Formerly MUSC 106.

MUSC& 142 Music Theory II [H] 5 Credits
Basic musical concepts and terminology through analysis, listening and keyboard practice; part writing, composition; ear training and sight singing. Prerequisite: MUSC& 106 or instructor permission. Formerly MUSC 107.

MUSC& 143 Music Theory III [H] 5 Credits
Basic musical concepts and terminology through analysis, listening and keyboard practice; part writing, composition; ear training and sight singing. Prerequisite: MUSC& 107 or instructor permission. Formerly MUSC 108.

MUSC 151 Walla Walla Symphony/Community Band Chorale I 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Four to five concerts are presented each academic year. Admission to the symphony is open to all who can perform with competency. Formerly MUSC 141.

MUSC 152 Walla Walla Symphony/Community Band Chorale II 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Four to five concerts are presented each academic year. Admission to the symphony is open to all who can perform with competency. Formerly MUSC 142.

MUSC 153 Walla Walla Symphony/Community Band Chorale III 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Four to five concerts are presented each academic year. Admission to the symphony is open to all who can perform with competency. Formerly MUSC 143.

MUSC 161 Vocal Ensemble I [HP] 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUSC 161.

MUSC 162 Vocal Ensemble II [HP] 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUSC 162.

MUSC 163 Vocal Ensemble III [HP] 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUSC 163.

MUSC 216 College Voice IV [HP] 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUSC 216.

MUSC 217 College Voice V [HP] 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUSC 217.

MUSC 218 College Voice VI [HP] 1-2 Credits
Voice training for interested students who can benefit from the study of the fundamentals of singing. Formerly MUSC 218.

MUSC 226 Jazz Combo IV [HP] 1-3 Credits
Jazz combos give students an opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The combos perform regularly including concerts and professional engagements. Prerequisite: Instructor permission. Formerly MUSC 226.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
MUSC 227 Jazz Combo V [HP] 1-3 Credits
Jazz combos provide an opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The combos perform regularly including concerts and professional engagements. Prerequisite: Instructor permission. Formerly MUS 227.

MUSC 228 Jazz Combo VI [HP] 1-3 Credits
Jazz combos provide an opportunity to play jazz in a small group format, concentrating on improvisation in many different styles. The combos perform regularly including concerts and professional engagements. Prerequisite: Instructor permission. Formerly MUS 228.

MUSC 231 Applied Music IV 1-2 Credits
Private music lessons with a college-approved instructor. Two college transfer credits are granted for a one-hour lesson per week, and one credit for a half-hour lesson per week. Appropriate practice hours per lesson required. Formerly MUS 231.

MUSC 232 Applied Music V 1-2 Credits
Private music lessons with a college-approved instructor. Two college transfer credits are granted for a one-hour lesson per week, and one credit for a half-hour lesson per week. Appropriate practice hours per lesson required. Formerly MUS 232.

MUSC 233 Applied Music VI 1-2 Credits
Private music lessons with a college-approved instructor. Two college transfer credits are granted for a one-hour lesson per week, and one credit for a half-hour lesson per week. Appropriate practice hours per lesson required. Formerly MUS 233.

MUSC& 241 Music Theory IV [H] 5 Credits
Fundamental principles of music concepts and terminology through analysis, listening and keyboard practice; part writing, composition, ear training and sight singing. Prerequisite: MUSC& 108 or instructor permission. Formerly MUSC 206.

MUSC& 242 Music Theory V [H] 5 Credits
Fundamental principles of music concepts and terminology through analysis, listening and keyboard practice; part writing, composition, ear training and sight singing. Prerequisite: MUSC& 241 or instructor permission. Formerly MUSC 207.

MUSC& 243 Music Theory VI [H] 5 Credits
Fundamental principles of music concepts and terminology through analysis, listening and keyboard practice; part writing, composition, ear training and sight singing. Prerequisite: MUSC& 242 or instructor permission. Formerly MUSC 208.

MUSC 251 Walla Walla Symphony/Community Band Chorale IV 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Four to five concerts are presented each academic year. Admission to the symphony is open to all who can perform with competency. Formerly MUSC 241.

MUSC 252 Walla Walla Symphony/Community Band Chorale V 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Four to five concerts are presented each academic year. Admission to the symphony is open to all who can perform with competency. Formerly MUSC 242.

MUSC 253 Walla Walla Symphony/Community Band or Walla Walla Symphony Chorale VI 1 Credit
Instrumental or vocal participation in a symphonic organization with rehearsal every Monday evening. Four to five concerts are presented each academic year. Admission to the symphony is open to all who can perform with competency. Formerly MUSC 243.

MUSC 261 Vocal Ensemble IV [HP] 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUSC 261.

MUSC 262 Vocal Ensemble V [HP] 2 Credits
Choral participation providing vocal experience for all interested students who have a background in music and singing. Formerly MUSC 262.

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 MUSC 263.

MUSC 299 Special Projects 1-5 Credits
Provides an opportunity for individual and small group vocal or instrumental preparation and performance. Formerly MUS 299.

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. Prerequisites: 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 in presented. Care specific to the obstetrical patient and adults in the acute care environment is emphasized. Prerequisites: Admission to the Nursing Program; NURS 101 and 111. Co-requisite: NURS 112.
NURS 102 and NURS 112.
Admission to the nursing program; NURS 140. Co-requisites: receive credit for both NURS 142 and PHIL 142. Prerequisite: is a continuation of content from NURS 140. Students may not groups within the context of the healthcare professions. This
explores values, ethics, and legal decision-making frameworks
NURS 142 Ethics and Policy in Healthcare II [H]   1 Credit
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. 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 113 Practicum
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 201 Advanced Nursing Concepts II
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 and 232.
NURS 202 Advanced Nursing Concepts III
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 select 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
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 102 and 112. Co-requisite: NURS 200.
NURS 211 Practicum IV
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 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
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 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. This is a continuation of content from NURS 150. Student may not receive credit for both NURS 151 and PSYC 151. Prerequisite: Admission to the Nursing Program. Co-requisites: NURS 100 and NURS 110.
FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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
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 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.

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 they 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.

OCSUP 103 Job Seeking Skills 3 Credits
Students gain knowledge and skills needed to be effective, successful job applicants. Students increase job seeking skills and qualities 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 perspective employee, and become a more competitive job seeker. Students will learn how networking and informational interviews result in employment opportunities.

OCSUP 105 Introduction to Quantitative Problem Solving for the Trades 5 Credits
An introductory course in problem-solving for vocational and technical programs that uses basic computation (both without and with a calculator), pre-algebra, and introductory algebra and geometry skills. Course includes guided and independent practical problem solving, contextualized small-group classroom activities and open-ended projects. A prescribed problem-solving structure will be followed. Prerequisite: Appropriate placement score.
OCSUP 106 Quantitative Problem Solving for the Trades I 5 Credits
A course in problem solving for vocational and technical programs that uses basic pre-algebra, algebra, and geometry skills. Course includes guided and independent practical problem solving, contextualized small-group classroom activities and open-ended projects. A prescribed problem-solving structure will be followed. Prerequisite: Grade of C- or better in OCSUP 105, or appropriate placement score.

OCSUP 107 Quantitative Problem Solving for the Trades II 5 Credits
A course in problem solving for vocational and technical programs that uses algebra, geometry, and trigonometry. Course includes guided and independent practical problem solving, contextualized small-group classroom activities and open-ended projects. A prescribed problem-solving structure will be followed. Prerequisite: Grade of C- or better in OCSUP 106, or appropriate placement score.

OCSUP 299 Leadership Development 1 Credit
This course covers the various aspects of professionalism. Students complete coursework that focuses on professional growth, success, professional image, and professional organizations. Students explore aspects belonging to a professional growth plan, determine the value of professional development, develop success attributes, hone a professional image, and learn important leadership techniques and skills that are needed to be successful in a professional environment.

Oceanography

OCEA& 101 Introduction to Oceanography w/Lab [NS] 5 Credit
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, practiced, and certified.

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. Prerequisite: TST 156.

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.

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: Grade C or higher in MATH 78E.

**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, Epicureus, 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, Hobbies, 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.

**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-require: NURS 201 and NURS 211.

**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-require: NURS 202 and NURS 212.

**Physical Education and Recreation**

**HPER 101 Tobacco and Fitness I [PE]** 1 Credit
This lecture course will provide students with practical tools associated with tobacco cessation (smoking and chew) and long-term lifestyle change. Topics will include common triggers and coping strategies, along with the value of proper nutrition and exercise in a tobacco-free life. Co-requisite: HPER 101 and HPER 102 must be taken concurrently.

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HPER 102 TobaccNO and Fitness II [PE] 1 Credit
In this course, students will learn how to develop a personalized workout program and will implement this program during exercise sessions throughout the quarter. Co-requisite: HPER 101 and HPER 102 must be taken concurrently.

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.

HPER 105 Jogging [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in the principles of jogging and its relationship to lifetime fitness.

HPER 106 Karate [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in the principles of karate and its relationship to lifetime fitness.

HPER 107 Tone Zone I [PE] 1 Credit
The Tone Zone will introduce students to basic fitness principles, exercise routines, and assessment tools needed to develop lifelong exercise habits. The course will utilize variable resistance strength machines, free weights, stretching routines and various cardiovascular exercises.

HPER 108 Tone Zone II [PE] 1 Credit
The Tone Zone will introduce students to basic fitness principles, exercise routines, and assessment tools needed to develop lifelong exercise habits. This course will utilize variable resistance strength machines, free weights, stretching routines, and various cardiovascular exercises.

HPER 109 Tone Zone III [PE] 1 Credit
The Tone Zone will introduce students to basic fitness principles, exercise routines, and assessment tools needed to develop lifelong exercise habits. The course will utilize variable resistance strength machines, free weights, stretching routines, and various cardiovascular exercises.

HPER 110 Speed Training I [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in speed and agility conditioning on various types of equipment to achieve personal fitness goals.

HPER 111 Cross Training Cardio II [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.

HPER 112 Tone Zone for Corrections and Law Enforcement 1 Credit
A class designed specifically for those in the CLE program. Students will be expected to meet the same requirements listed in HPER 107, 108 & 109 and are required to pass the Corrections and Law Enforcement Physical Standards Testing. Prerequisite: Instructor permission. For students in their final quarter of completion of the CLE certificate program. Must also complete criminal background check and medical release.

HPER 113 Recreational Games [PE] 1 Credit
Sports activity course emphasizing games for various age and skill groups.

HPER 116 Beginning Tennis [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in the principles of tennis and its relationship to lifetime fitness.

HPER 117 Intermediate Tennis [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in the principles of tennis and its relationship to lifetime fitness.

HPER 118 Skiing/Snowboarding I [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 119 Beginning Volleyball [PE] 1 Credit
Emphasizes the rules, skills, and strategies of volleyball.

HPER 120 Beginning Golf [PE] 1 Credit
This course explores the theory, knowledge and practical experience in the principles of golf and its relationship to personal fitness.

HPER 121 Intermediate Golf [PE] 1 Credit
This course explores the theory, knowledge and practical experience in the principles of golf and its relationship to personal fitness.

HPER 122 Weight Training I [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 123 Weight Training II [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 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 125 Bowling [PE] 1 Credit
Sports activities course emphasizing the safety, rules, skills, and strategies of bowling.

HPER 128 Aqua Aerobics [PE] 1 Credit
A cardio workout in the pool with less impact on your joints.

HPER 129 Basic Swimming [PE] 1 Credit
Teaches the basic swimming strokes, water safety skills and proper pre-workout stretching for all swimmers, beginning to advanced.
HPER 130 Lifeguard Training [PE] 1 Credit
Teaches the skills and knowledge needed to prevent and respond to aquatic emergencies. This course prepares the student to recognize and respond quickly and effectively to emergencies and prevent drowning and injuries. Successful completion of this course results in an American Red Cross Lifeguard Training and CPR for the Professional Rescuer certifications.

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 132 Aqua Aerobics II [PE] 1 Credit
A cardio workout in the pool with less impact on your joints.

HPER 133 Aqua Aerobics III [PE] 1 Credit
A cardio workout in the pool with less impact on your joints.

HPER 134 Karate II [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in the principles of karate and its relationship to lifetime fitness.

HPER 136 Basketball [PE] 1 Credit
Sports activities course emphasizing the safety, rules, skills, and strategies of basketball.

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 141 All-Terrain Volleyball [PE] 1 Credit
Sports activities course emphasizing the safety, rules, techniques, skills, and strategies of volleyball as played on various terrains.

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 145 Racquetball I [PE] 1 Credit
Sports activities course emphasizing racquetball fundamentals, strategies, and appropriate conditioning.

HPER 146 Racquetball II [PE] 1 Credit
Sports activity course emphasizing the safety, rules, skills, strategies, and techniques of playing racquetball competitively.

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 154 Speed Training II [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in speed and agility conditioning on various types of equipment to achieve personal fitness goals.

HPER 155 Speed Training III [PE] 1 Credit
This course will explore the theory, knowledge, and practical experience in speed and agility conditioning on various types of equipment to achieve personal fitness goals.

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 practices of yoga. Yoga poses, stress management methods, the lifetime fitness value of yoga, and anatomy of the body will be explored.

HPER 160 Basic Rodeo Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize the skills, strategies, etiquette, and safety of college rodeo.

HPER 161 Intermediate Rodeo Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize the skills, strategies, etiquette, and safety of college rodeo.

HPER 162 Advanced Rodeo Skills and Rules [PE] 2 Credits
Sports activity course emphasizing skills, rules and strategies of college rodeo.
PHYSICAL EDUCATION AND RECREATION

HPER 166 Online Yoga I [PE] 1 Credit
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.

HPER 167 Online Yoga II [PE] 1 Credit
This activity course will emphasize the practice of yoga. Concurrent enrollment in HPER 166 required.

HPER 171 Basketball Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 172 Baseball/Softball Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 173 Volleyball Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 174 Golf Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 176 Soccer Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 177 Baseball/Softball Methods and Materials [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 178 Golf Methods and Materials [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 179 Soccer Methods and Materials [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 180 Basic Fitness I [PE] 1 Credit
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.

HPER 181 Basic Fitness II [PE] 1 Credit
This activity course will emphasize the practice of basic fitness. Concurrent enrollment in HPER 180 is required.

HPER 182 Basketball Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 183 Baseball/Softball Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 184 Golf Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 185 Soccer Skills and Rules [PE] 2 Credits
This high intensity sports activity course will emphasize skills, strategies, safety, methods, and materials in competitive sports.

HPER 186 Basic Fitness II [PE] 1 Credit
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 187 class.

HPER 187 Basic Fitness III [PE] 1 Credit
This activity course will emphasize the practice of basic fitness. Prerequisite: HPER 186.

HPER 189 Basic Fitness IV [PE] 1 Credit
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 190 class.

HPER 190 Basic Fitness V [PE] 1 Credit
This activity course will emphasize the practice of basic fitness. Prerequisite: HPER 188 and 189.

HPER 191 Core Workout [PE] 1 Credit
A beginning dance fitness course. Emphasis will be placed on the center Core of the body, since this is where most athletic skills generate.

HPER 204 Stress Management 3 Credits
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.

HPER 267 Outdoor Recreation 5 Credits
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.

HPER 268 Diversity in Sports [D] 5 Credits
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.

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Physicists and Engineers I.

Co-requisite: MATH& 151. Formerly PHYS 201, Physics for Science and Engineering I.

Grade of C or higher in ENGL 087; or permission of the Science Division Chair or designee. Recommended: READ 088 or higher.

PHYS& 223 Engr Physics III w/Lab [NS] 5 Credits
This is part three of a calculus-based physics sequence intended for physical science and engineering majors. Topics include electricity and magnetism, with selected topics from optics and modern physics as time allows. Lab work required. Prerequisite: PHYS& 222. Co-requisite: MATH& 153. Formerly PHYS 203, Physics for Science and Engineering III.

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& 221 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: MATH& 152. Formerly PHYS 202, Physics for Science and Engineering II.

PHYS& 222 Engr Physics II w/Lab [NS] 5 Credits
This is part two of a calculus-based physics sequence intended for physical science and engineering majors. Topics include mechanical properties of matter, behavior of fluids, harmonic motion and waves, basic thermodynamics, and an introduction to electricity. Lab work required. Prerequisite: PHYS& 221. Co-requisite: MATH& 152. Formerly PHYS 202, Physics for Science and Engineering II.

PHYS& 223 Engr Physics III w/Lab [NS] 5 Credits
This is part three of a calculus-based physics sequence intended for physical science and engineering majors. Topics include electricity and magnetism, with selected topics from optics and modern physics as time allows. Lab work required. Prerequisite: PHYS& 222. Co-requisite: MATH& 153. Formerly PHYS 203, Physics for Science and Engineering III.

PHYS& 110 Phys Non-Sci Majrs w/Lab [NS] 5 Credits
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 matter, principles of thermodynamics, basic electricity and magnetism, and atomic and nuclear structure. Lab work required. Prerequisites: MATH 074; 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& 114 General Phys I w/Lab [NS] 5 Credits
This is part one of an algebra-based physics sequence intended for non-physics science majors. Topics include linear and rotational motion, forces, kinetic and potential energy, momentum, and translational and rotational equilibrium. Lab work required. Prerequisites: MATH 074C; 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& 115 General Phys II w/Lab [NS] 5 Credits
This is part two of an algebra-based physics sequence intended for non-physics 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. Prerequisite: PHYS& 114. Formerly PHYS 122, College Physics II.

PHYS& 116 General Phys III w/Lab [NS] 5 Credits
This is part three of an algebra-based physics sequence intended for non-physics science majors. Topics include electricity and magnetism, optics, and selected topics in modern physics (relativity, structure of the atom, quantum theory, etc.). Lab work required. Prerequisite: PHYS& 115. Formerly PHYS 123, College Physics III.

PHYS& 117 General Phys IV w/Lab [NS] 5 Credits
This is part four of an algebra-based physics sequence intended for non-physics science majors. Topics include electricity and magnetism, optics, and selected topics in modern physics (relativity, structure of the atom, quantum theory, etc.). Lab work required. Prerequisite: PHYS& 116. Formerly PHYS 124, College Physics IV.

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 POLS 211 and HIST 211. Formerly PSCI 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 POLS 212 and HIST 212. Formerly PSCI 212.

PHYS& 202 American Government [SS] 5 Credits
Study of the processes and institutions of national politics in America, with special attention to relations between popular political interests and federal government operations. Course provides an understanding of how our national government works in response to legitimate political needs. Content is provided via: lecture, discussion, videos and current supplementary readings. Recommended: READ 088 or higher. Formerly PSCI 101, American National Government.

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 PSCI 204.

PHYS& 205 U.S. in World Affairs II [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 POLS 211 and HIST 211. Formerly PSCI 211.

PHYS& 221 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: 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 201, Physics for Science and Engineering I.

PHYS& 222 Engr Physics II w/Lab [NS] 5 Credits
This is part two of a calculus-based physics sequence intended for physical science and engineering majors. Topics include
POLS 215 Honors Seminar: Presidential Indiscretions 2 Credits
An examination of Presidential actions and behaviors that look beyond traditional histories. Students will examine public perceptions and reactions to the actions of those in the office of the President. Formerly PSCI 215.

POLS 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. Student may not earn credit for both POLS 222 and AGRI 222. Formerly PSCI 222.

Professional Golf Management

PGM 101 Golf Management I 5 Credits
Introduction to the golf industry, offering an overview of industry practices, trends and traditions. It also serves as an introduction to fundamental golf shop policies and procedures. Topics include taking tee times and booking lessons, enforcing golf course rules, and controlling pace of play.

PGM 102 Golf Management II 5 Credits
Intermediate golf shop operations and tournament administration will be discussed. Topics include: tournament and league promotion, handicap and member services, resolving problems with play and developing contingency plans. Golf course design principles are explored and golf course rating formulas introduced.

PGM 111 Introductory Golf Instruction 3 Credits
The fundamentals of golf instruction will be discussed. Topics include the beginning golfer and developing the golf swing. Key instructional terminology is defined, ball flight laws examined and golf swing principles introduced. Basic lesson tee procedures are also covered.

PGM 112 Intermediate Golf Instruction 3 Credits
The fundamentals of the golf swing and short game techniques of chipping, pitching, putting and bunker play will be covered. Needs of intermediate golfers are addressed. Working with junior golfers and other golfing populations is introduced. Topics include drills and practice routines.

PGM 121 Rules of Golf I 3 Credits
Provides an extensive examination of the Rules of Golf. Topics include use of the Rules book, etiquette and safety, definitions, conforming equipment and player responsibilities. Exact interpretations of Rules questions are detailed in the Decisions book. A brief history of the Rules and changes since prior revision period are also discussed.

PGM 131 Golf Car Fleet Management 3 Credits
A study of golf car fleet management is covered. Topics include planning, selection and acquisition of golf cars, fleet storage and organization, safety and liability issues, and rental policies. Also includes basic golf car maintenance, record keeping, and appreciation for the fleet as a financial investment.

PGM 191 Cooperative Work Experience 1-18 Credits
Opportunity to work at golf facilities while concurrently enrolled in related golf management courses. Satisfactory completion of a comprehensive workbook is required. Wages for students are commensurate with entry-level employees in the industry. Successful progress in the Professional Golf Management program is expected. Prerequisite: Instructor permission. Co-requisite: PGM 192

PGM 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: PGM 191.

PGM 199 Special Topics 1-5 Credits
Study and train to meet established local needs in the professional golf management industry, supplemental to courses currently offered. Prerequisite: Instructor permission.

PGM 201 Golf Management III 5 Credits
Golf shop practices are further examined and golf facility operations expanded. Merchandising techniques, practice ranges, special events and developing tournaments are included. Professional shop services and amenities are addressed. Customer service principles and work ethics are emphasized.

PGM 202 Golf Management IV 5 Credits
Advanced instruction in general management, food and beverage concerns, budgeting for private, public and daily fee golf courses. Employment networking techniques are applied. Annual, seasonal, monthly, and weekly calendars and scheduling introduced. Leadership roles and teambuilding exercises are engaged.

PGM 211 Corrective Golf Lessons 3 Credits
Intermediate golfers with swing habits that are counterproductive to effective ball striking are covered. Corrective measures are explored; drills, training aids and practice plans prescribed. The lesson book and promoting lesson programs, as well as characteristics of successful teachers are studied.

PGM 212 Teaching the Advanced Player 2 Credits
Focuses entirely on advanced players of the game. Elements of success used by peak performers and routines employed by leading golf coaches and instructors are examined in depth. Mental toughness, emotional resilience, course management and short game expertise are highlighted. Fitness, strength, flexibility, and nutrition will be addressed. Focal points are the rigors of tournament golf.

PGM 221 Rules of Golf II 2 Credits
Advanced rules cover golf course set up, defining and marking a golf course, duties of rules officials and referees, serving on tournament committees and administering an officiating staff. Prerequisite: PGM 121.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
PGM 291 Cooperative Work Experience II 1-18 Credits
Opportunity to work at golf facilities while concurrently enrolled in related golf management courses. The satisfactory completion of a comprehensive workbook is required. Wages for students are commensurate with entry-level employees in the industry. Successful progress in the Professional Golf Management program is expected. Prerequisite: Instructor permission. Co-requisite: PGM 292.

PGM 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: PGM 291.

PGM 297 Special Projects 1-18 Credits
Project-oriented experiences in the area or applications not covered in the standard professional golf management curriculum. Prerequisite: Instructor permission, based on evaluation of student’s education and work experience.

PGM 299 Leadership 1 Credit
Relevant information on how to establish a productive team and lead a team effectively will be discussed. The student will learn to handle problems with teams as they arise and evaluate a team's productivity. In this course students will also explore how to create a vision, align key allies, use communication skills to help lead, motivate others to keep going, and harness the power of creative conflict. Prerequisite: Instructor permission.

PSYCHOLOGY

PSYC 100 General Psychology [SS] 5 Credits
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.

PSYC 111 Psychology of Relationships [SS] 3 Credits
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.

PSYC 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, dependency, emotions, physical and mental health issues, and the changing perception of femininity and masculinity. Student may not earn credit for both PSYC 139 and WST 139. Recommended: READ 088 or higher. Formerly PSY 139.

PSYC 140 Navigating Education and Career Pathways 3 Credits
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.

PSYC 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. 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.

PSYC 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 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.

PSYC 160 Psychology of Criminal Behavior [SS] 5 Credits
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.

PSYC & 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 WST 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.

PSYC 196 Psychology of Human Performance 3 Credits
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.
FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU

PSYC& 200 Lifespan Psychology [SS] 5 Credits
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 PSYC 103, Developmental Psychology.

PSYC 205 Social Psychology [D, SS] 5 Credits
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.

PSYC 207 Psychology of Personality [SS] 5 Credits
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.

PSYC 219 Health Psychology [SS] 5 Credits
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.

PSYC& 220 Abnormal Psychology [SS] 5 Credits
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. Recommended: PSYC& 100. Recommended: READ 088 or higher. Formerly PSY 250, Abnormal Psychology.

PSYC 224 Environmental Psychology [SS] 5 Credits
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.

PSYC 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 PSYC 150 and 151 and 250. Student may not receive credit for both PSYC 250 and NURS 250. Prerequisite: Admission to the Nursing Program; PSYC 150 and PSYC 151. Co-Requisite: NURS 200 and NURS 210

PSYC 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 PSYC 150, 151 and 250. Student may not receive credit for both PSYC 251 and NURS 251. Prerequisite: Admission to the Nursing Program; PSYC 150, 151 and 250. Co-Requisite: NURS 201 and NURS 211.

Reading

READ 088 Reading Improvement 5 Credits
This course focuses on developing an understanding of the reading process and appreciation for the importance of reading for pleasure, personal growth, and academic success. Encourages and supports improvement of reading strategies to improve comprehension, critical thinking, and reading efficiency to better meet college reading demands. Prerequisite: Placement by appropriate reading score.

Sociology

SOC& 101 Introduction to Sociology [D, SS] 5 Credits
Introduces the basic principles of social relationships, collective behavior, and human interaction. These principles are applied to the study of culture; race, gender, and class inequality; deviance; law; social institutions; and social change. Formerly SOC 101, Intro to Sociology. Recommended: READ 088 or higher.

SOC& 101H Introduction to Sociology-Honors [D, SS] 5 Credits
Introduces the basic principles of social relationships, collective behavior, and human interaction. These principles are applied to the study of culture; race, gender, and class inequality; deviance; law; social institutions; and social change. Open only to honors students or students with a 3.5 GPA or greater. Prerequisite: Instructor Permission. Formerly SOC 101, Intro to Sociology.

SOC 107 Service Learning Field Experience I 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: Instructor permission.

SOC 108 Service Learning Field Experience II 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 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 108 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, over population, 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.

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.

SOC 205 Racial and Ethnic Relations [D, SS]  5 Credits
Focuses on inter-group 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 WST 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 funded by the Ford Family Foundation. 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 following winter quarter. 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 funded by the Ford Family Foundation. 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 following winter quarter. This course is available to current participants in the Sherwood Trust Community Leadership Program only.

FOR THE MOST CURRENT INFORMATION SEE: WWW.WWCC.EDU
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. To be taken in sequence or with written consent of the instructor. 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.

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. 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 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.

Water Technologies and 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 WGMT 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
Introductory chemistry course for non-science majors. Covers common water quality sampling, testing, and reporting procedures and the science behind them. Explores the importance of accuracy, precision, and chain of custody when completing lab analyses. Recommend: WTM 139, WTM 239, and/or BIOL 130. Formerly NR 190.

WTM 191 Cooperative Work Experience 1-25 Credits
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 WGMT 191.

WTM 199 Special Topics 1-10 Credits
Study and train to meet established local needs in the water management industry, supplemental to courses currently offered. Prerequisite: Instructor permission. Formerly WGMT 199.

WTM 205 Wastewater Treatment Plant Operations 3 Credits
WTM 205 builds on EST 201 Plant Operations by focusing on wastewater (municipal- and industrial-scale treatment plant operations). Many treatment facilities are repurposing themselves as producers of clean water and renewable energy, and now consider their plants to be Renewable Resource Recovery Operations. Students will learn about policies and systems specific to the field of wastewater treatment and become familiar with various municipal and industrial wastewater treatment plants in the Northwest.

WTM 215 Basic Fluid Dynamics of Piping Systems 3 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 types of materials and fittings used in piping systems. The management, maintenance, and alteration of piping systems will also be included.

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: WTM 112 or instructor permission.

WTM 221 Pump Applications 3 Credits
Pump types and characteristics 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 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.

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**WELDING TECHNOLOGY**

**WELD 110 Art Welding** 1-4 Credits
Provides the necessary skills in welding processing and applications for hobby or personal projects. Students may select which process they wish to focus on and may change as desired. Some equipment will be needed depending on the processes to be covered.

**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 145 Basic Welding I** 1-7 Credits
Introduction to welding, cutting, and grinding procedures used for general welding applications. Topics include fuel gas welding, brazing, cutting, shielded metal arc welding, gas metal arc welding, plasma arc cutting, carbon arc gouging, and abrasive grinding.

**WELD 146 Basic Welding II** 1-7 Credits
Provides the experienced welder additional training on student selected welding processes. Prerequisite: WELD 145.

**WELD 147 Basic Welding III** 1-7 Credits
Provides the experienced welder additional training on student selected welding processes. Prerequisite: WELD 146.

**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 procedures 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
Opportunity to work in jobs directly related to the welding industry. This 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
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
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
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
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
Focus 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
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.

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**FOR THE MOST CURRENT INFORMATION SEE:** [WWW.WWCC.EDU](http://WWW.WWCC.EDU)
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 last quarter of AAAS Welding degree.

Women's Studies

WST 124 Women in Art [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. Student may not earn credit for both WST 124 and ART 124. Recommended: READ 088 or higher.

WST 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 mascul用人. Student may not earn credit for both PSYC 139 and WST 139. Recommended: READ 088 or higher. Formerly PSY 139.

WST 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 WST 180. Course taken prior to fall 2010 also accepted for diversity requirement. Formerly WST 113. Prerequisite: Appropriate placement score or grade of C or better in ENGL 097. Recommended: READ 088 or higher.

WST 200 Introduction to Women's Studies [D, 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.

WST 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 WST 215 and HIST & 215. Course taken prior to fall 2010 also accepted for diversity requirement. Recommended: READ 088 or higher. Formerly WST 280.

WST 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 WST 220 and SOC 220. Course taken prior to fall 2010 also accepted for diversity requirement. Recommended: READ 088 or higher.

WST 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. Recommended: READ 088 or higher.

Writing

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.

WRITE 110 Technical Writing 3 Credits
Students learn how to outline material and write technical description, sets of instructions, job application letters/resumes. In addition, they are assigned a semiformal scientific/technical report. Prerequisite: Placement by entrance assessment or C or better in ENGL 097.
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Burt, Jeremiah  
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<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Education/Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bush, Shelly</td>
<td>Program Coordinator, Student Services - Clarkston Campus</td>
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</tr>
<tr>
<td>Bushong, Ross</td>
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<td>Carrara, Dawn</td>
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<td>Casali, Phillip</td>
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<tr>
<td>Casey, Karen J</td>
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<tr>
<td>Chavez, Rolando</td>
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<tr>
<td>Cobb, Sandra</td>
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<tr>
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<td>Combs, Kevin</td>
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<tr>
<td>Cook, Jessica</td>
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<tr>
<td>Cooke Jr, Joseph C</td>
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<tr>
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<tr>
<td>Coulston, Cullen</td>
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<td>Cranston, Holly M</td>
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<tr>
<td>da Silva, Jose E</td>
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<tr>
<td>Dandrea, Susan</td>
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<tr>
<td>Danley, Janet</td>
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<tr>
<td>Delgadillo, Carlos</td>
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<tr>
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<tr>
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<tr>
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<tr>
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<td>Diaz-Alvarado, David</td>
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<td>Dimak, Todd</td>
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<tr>
<td>Donahue, Timothy</td>
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<tr>
<td>Echtkamp, Leslie</td>
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<tr>
<td>Egbert, Sara</td>
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<tr>
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<tr>
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</tbody>
</table>

For the most current information see: www.wwcc.edu
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Interior Design Merchandising Certificate and Computer Application Specialist Certificate, Walla Walla Community College

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EMT-B Certification, Walla Walla Community College

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A.A., Walla Walla Community College; B.A. Central Washington University; M.A. Grand Canyon University

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256
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Campus Maps
The Buildings of Walla Walla Community College

**Campus Loop Buildings**
- A – Dietrich Activity Center (Gym, 510)
- B – Parent Child Center (514)
- C – Women's Center (518)
- D – Main Building (520)
- E – Health Science & Performing Arts (535)
- F – Technology Center (537)
- G – China Pavilion (540)
- J – Prof-Technical Building (550)
- SEA-TECH Skills Center (525)

**Water Center Drive Buildings**
- H – Facilities/Wind Energy Tech. (618)
- K – First Flight Day Care (611)
- L – Diesel Mechanics I (621)
- M – Diesel Mechanics II (623)
- N – Farrier/Grounds Maintenance (625)
- P – John Deere Training Center (629)
- Q – Greenhouse (630)
- R – Water & Environmental Center (640)

**E. Isaacs Buildings**
- S – Pottery Building (2933 E. Isaacs)
- T – Center for Enology & Viticulture (3020 E. Isaacs)
- U – Automotive Technology Center (3060 E. Isaacs)
- V – Craik Building (37 Interchange Rd.)

**North Entrance**

**East Entrance**

**Isaacs Avenue**

**Main Entrance**

**Tausick Way**
### 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

#### 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

#### Upper Level
- North Mezzanine
  - LC Valley Literacy Council
- 201 ITV Classroom
- 222 Library – Jackson Vance

#### South Mezzanine
- Math/Science/Writing Learn Lab

#### 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

<table>
<thead>
<tr>
<th>Number</th>
<th>Office/Department Name</th>
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</thead>
<tbody>
<tr>
<td>124</td>
<td>Linda Lane, Accounting, Business, and Office Technology</td>
</tr>
<tr>
<td>126a</td>
<td>Adjunct Instructors</td>
</tr>
<tr>
<td>126b</td>
<td>Adjunct Instructors</td>
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<tr>
<td>126c</td>
<td>Devon Gustafson, Social Sciences</td>
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<tr>
<td>126d</td>
<td>Lori Umfleet, IT</td>
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<tr>
<td>126e</td>
<td>Debbie Scharnhorst, IT</td>
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<td>130</td>
<td>James Bower, Humanities</td>
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<tr>
<td>132</td>
<td>Sonja Sanders, ABE/GED, Virginia Foote, WorkFirst and BFET</td>
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<tr>
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<td>Sandra Evans, ESL</td>
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<td>133</td>
<td>Paul Boyd, Transitional Studies</td>
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<tr>
<td>146</td>
<td>Tami Mitchel, Medical Assisting</td>
</tr>
<tr>
<td>147</td>
<td>Virginia McConnell, English Composition and Literature</td>
</tr>
<tr>
<td>150</td>
<td>Adjunct Instructors</td>
</tr>
<tr>
<td>152</td>
<td>Cynthia Robinett, Science</td>
</tr>
<tr>
<td>160a</td>
<td>Christopher Mau, Science Lab Manager and Tutor Center Coordinator</td>
</tr>
<tr>
<td>163a</td>
<td>Lori Loseth, Science</td>
</tr>
<tr>
<td>163b</td>
<td>Sara Egbert, Chemistry and Mathematics</td>
</tr>
<tr>
<td>163c</td>
<td>Michael Shively, Mathematics</td>
</tr>
<tr>
<td>172</td>
<td>Phillip Casali and Marco Rohrbach, Facilities and Grounds</td>
</tr>
</tbody>
</table>

#### 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